

LOUDOUN  WATER

Capital Improvement Plan

2026-2035



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Contents

CAPITAL IMPROVEMENT PLAN	1
INTRODUCTION	1
Authority	1
Services	2
MISSION, VISION, AND VALUES.....	3
CAPITAL IMPROVEMENT PLAN – GENERAL	3
Planning Goals	4
Planning Coordination	4
Support to Finance	5
CAPITAL IMPROVEMENT PLAN – PROCESS.....	5
Schedule	5
Prioritization & Criteria	6
CAPITAL IMPROVEMENT PLAN – MAJOR INITIATIVES	7
Milestone Reservoir (Quarry A) - Potomac Water Supply	7
Broad Run Water Reclamation Facility	8
PROJECT LIST – COSTS ARE NET OF OUTSIDE FUNDING	10

CAPITAL IMPROVEMENT PLAN

The Capital Improvement Plan (CIP) is key for planning and budgeting at Loudoun Water. The plan provides a 10-year roadmap for creating, maintaining, upgrading, or replacing immediate and long-term capital and infrastructure needs. The CIP presents Loudoun Water’s strategy related to the expansion, rehabilitation, and acquisition of long-lived facilities and infrastructure. Capital water and wastewater improvements are often complex and require a great deal of planning over many years to define their extent, location, and cost.

INTRODUCTION

Loudoun Water’s mission is to provide high-quality water services to protect public health and the environment. Loudoun Water’s vision and values are the foundation of our approach: dedicated, collaborative, visionary, customer-focused and resilient. This commitment to excellent service and sustainable water is the foundation of our CIP. Loudoun Water is preparing for the future; one of continued county expansion, economic growth, adaptable technologies, and enhanced public health and safety. With sustained regional growth, major investments in water infrastructure, and deployment of advanced operational and informational technologies, Loudoun Water remains a proactive partner and trusted leader in our vibrant and dynamic county.

AUTHORITY

Loudoun Water was created on May 27, 1959 and is a political subdivision of the State, not a department of Loudoun County. This means all Loudoun Water income is received either as user fees from customers, which go towards operating expenses, or as developer fees which are used to pay for capital improvements. Loudoun Water is governed by a Board consisting of nine members, appointed by the Board of Supervisors. The Board members serve four-year terms and can be reappointed by the County. The Board appoints the General Manager, who is responsible for the daily management of Loudoun Water.

Service Area

Loudoun County is a rapidly developing jurisdiction located at the northern tip of the Commonwealth of Virginia approximately 25 miles northwest of Washington, D.C. Loudoun County is approximately 517 square miles, making it one of the largest counties in the region. The County is expected to continue to have one of the highest population and employment growth rates in the entire Washington, D.C. region over the next 20 years.



Most Loudoun Water customers are in the suburban, eastern portion of the county with a service population of over 340,000 residents. Central water, wastewater, and reclaimed water systems serve the suburban portion of the county. The western portion of Loudoun County is more rural, bordered by the Blue Ridge Mountains and the Potomac River, containing small towns and villages surrounded by farmland and open spaces. Loudoun Water operates many community systems spread across the western portion of the county. The community systems are typically communal wells and wastewater collection systems serving small residential subdivisions. Most properties in the rural areas continue to be served through individual well and septic systems managed by the property owners.

SERVICES

Loudoun Water owns and operates multiple water and wastewater treatment facilities. Major Loudoun Water facilities serving the central service area include the 15 mgd (million gallons per day) Broad Run Water Reclamation Facility, the 20 mgd Trap Rock Water Treatment Facility, Goose Creek and Beaverdam Creek Reservoirs, multiple storage tanks, pump stations, and administrative and operations buildings. In addition, Loudoun Water has purchased capacity for wholesale water supply from Fairfax Water and wastewater treatment from DC Water.

Sustainable practices, using a triple-bottom-line approach of balancing financial, environmental, and social impacts, have been a hallmark throughout Loudoun Water’s history and future planning. This sustainable approach is highlighted through initiatives such as ensuring water supply for future generations, promoting the value of water through community education, and offering reclaimed water service to our customers.

Loudoun Water maintains over 1,400 miles of water distribution pipelines, over 1,200 miles of wastewater collection system pipelines and a growing reclaimed non-potable water system. The associated valves, hydrants, storage tanks and pump stations are designed for safe reliable service.

Community water and wastewater systems are freestanding systems where water may be supplied to a rural village or hamlet by its own community well, and wastewater may be treated in a packaged treatment facility. In the western region of Loudoun County, Loudoun Water currently owns and/or operates over 40 small water and wastewater treatment systems. These include systems sponsored by Loudoun County due to health hazard conditions, developer-initiated systems and contract operations throughout the County.



MISSION, VISION, AND VALUES

Loudoun Water is on an exciting path forward to plan for and deliver advanced water and wastewater technologies that will support our growing community for generations to come. As the region undergoes rapid transformation, Loudoun Water’s Capital Improvement Plan aligns with the 2025-2029 Loudoun Water Strategic Plan, and advances the Mission, Vision, and Values.

The dedication, collaboration, vision, focus on customers and our commitment to resilience, are reflected in the projects and programs developed in the planning process.

This common understanding helps to establish a shared vision for organizing, planning, implementing, and managing these programs. The CIP supports Loudoun Water’s Mission and Vision and serves as a solid foundation to support planning and strategies for implementing water supply, water treatment, wastewater treatment, water reclamation, and water conservation initiatives.

CAPITAL IMPROVEMENT PLAN – GENERAL

The Capital Improvement Plan (CIP) is the foundation of the one-year Capital Spending Plan, informs the 5-year Financing Plan and provides a 10-year roadmap for creating, maintaining, upgrading, or replacing immediate and long-term capital and infrastructure needs.

The underlying strategy of the CIP is to plan for facilities necessary for the safe and efficient delivery of water, wastewater and reclaimed water services in accordance with policies, goals and objectives adopted by Loudoun Water. A critical element of a balanced CIP is to preserve and enhance existing facilities as well as provide new assets to respond to community growth and changing service needs. The projects presented in the CIP are developed on a programmatic basis to facilitate alignment with strategic planning and provide input necessary for implementation. The CIP is not a fixed, rigid approach; projects may be deleted, delayed, modified or new projects may be proposed and authorized at any given time.



Vision

Trusted leaders,
excellent service,
sustainable water.

Mission

We provide high-quality water
services to protect public
health and the environment.

Values

Dedicated

We commit to serving our
customers, our partners,
and each other.

Collaborative

We build meaningful
relationships that benefit our
team and community.

Visionary

We look beyond the present
and prepare for the future.

Customer-Focused

We listen to our customers
and continually improve to
meet their needs.

Resilient

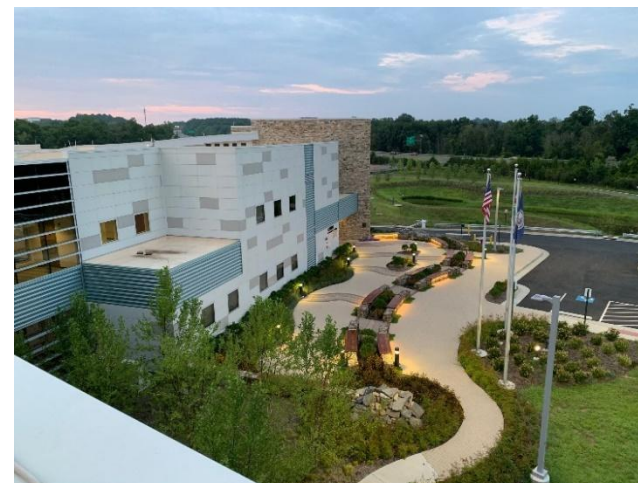
We adapt to challenges with
strength in all circumstances.

PLANNING GOALS

A solid planning platform is the foundation of Loudoun Water’s CIP. The effective use of the CIP process provides Loudoun Water with considerable advanced project identification, planning, evaluation, scope definition, design, public discussion, cost estimating, and financial planning. Loudoun Water seeks to optimize current resources, provide efficient services to its customers, and sustainably manage resources to meet future needs. The capital planning process is consistent with and complementary to the objectives of Loudoun Water through the strategic and business plans.

The capital planning process results in the 10-year CIP and represents considerable work by all divisions to evaluate and recommend capital projects. The projects are developed to ensure regulatory compliance, meet the future growth needs of Loudoun County, and provide reinvestment in existing infrastructure to safely and reliably operate and maintain the system. The mission, vision, and values of Loudoun Water are enveloped in the guiding principles and goals of the CIP:

- Ensure that Loudoun Water’s approved Capital Spending Plan and 10-year CIP are affordable and finances only necessary capital expenditures.
- Enable informed capital investment decisions according to a fair, open and objective process.
- Emphasize the requirement for long-term planning.
- Enhance the linkage between the capital and operating budgets.
- Avoid the need to impose “crisis” rate increases.



PLANNING COORDINATION

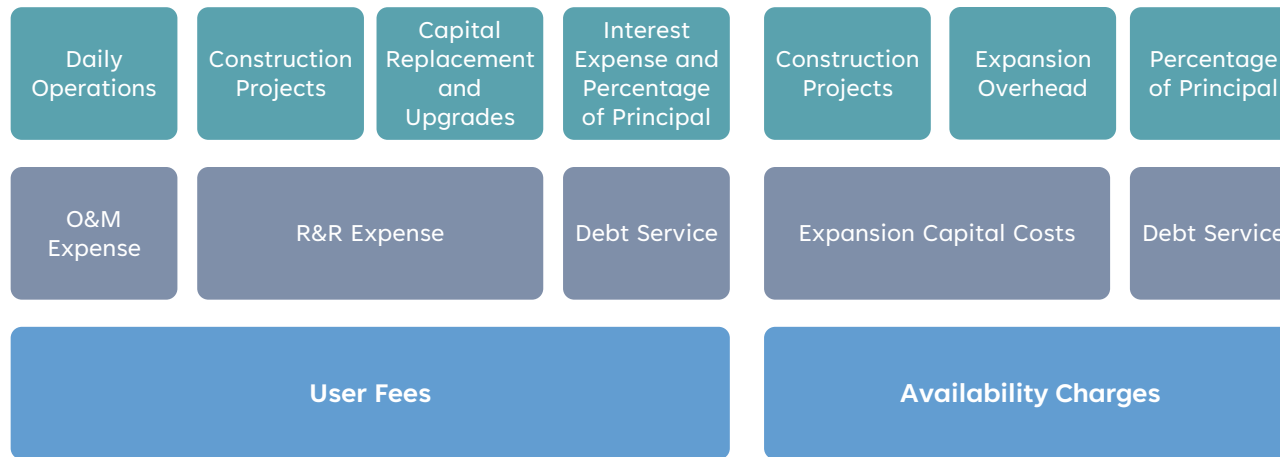
Loudoun Water maintains close coordination with neighboring jurisdictions and active involvement with national, regional, and local organizations and professional societies to keep up to date on industry issues and changing regulations. To facilitate county planning, Loudoun Water serves as a technical resource to Loudoun County on matters related to water and wastewater services.

The goals and policies of the 2019 Loudoun County Comprehensive Plan guide Loudoun Water’s planning efforts. Loudoun Water uses information developed and approved by Loudoun County to project growth and service needs. Comprehensive water, wastewater and reclaimed water master plans are developed and regularly reviewed, updated, and incorporated into Loudoun Water’s daily business. Complementary to these master plans, Loudoun Water also prepares detailed local area facility plans and studies to facilitate and refine capital improvement projects.

SUPPORT TO FINANCE

The 10-year CIP serves as a financial planning tool to identify the needed capital expenditures, to coordinate the financing of improvements and supports Loudoun Water’s Financial Plan. The CIP differs from the Capital Spending Plan (CSP) in that it is not an approval or appropriation of funds for individual projects. Whereas the CSP represents the projects and/or programs for an individual year that the Board has approved and authorized for funding of those projects.

The CIP and Operating Budget are two primary financial forecasts. Although they are developed independently, any operational impacts from CIP planned capital projects are integrated into the annual Operating Budget. Conversely, the programmatic changes in the Operating Budget are adjusted to the Capital Spending Plan. Loudoun Water’s Financial Plan includes a comprehensive review of the user fees and availability fees required to fund capital improvements and other expenses.



CAPITAL IMPROVEMENT PLAN – PROCESS

SCHEDULE

Capital planning is a continual process that is intended to encourage the flow of ideas to allow for more refined planning and formal development each fall. The formal preparation of the Capital Improvement Plan (CIP) begins each year in August and culminates with the Board’s approval of the Annual Budget in December. During this period, staff members formalize project planning by integrating existing design and construction statuses, maintenance records, master planning efforts, asset management, and other necessary planning efforts.

PRIORITIZATION & CRITERIA

Capital planning involves a comprehensive and systematic effort to develop and prioritize immediate and long-term needs. The prioritization process guides funding and resource allocations across all Loudoun Water divisions. Objective evaluation and prioritization through a formalized method is needed when numerous projects compete for limited resources. Loudoun Water created criteria and guidelines to manage this process.

All capital projects are evaluated against common criteria shown in the table below. The evaluation questions provided below are a few examples intended to assist in the application of the scoring criteria and guide decisions. A scoring review committee comprised of a cross-section of Loudoun Water senior management meets on several occasions to provide input on the scoring and to ensure consistency in applying the criteria. Using the project scoring and management input, an assessment of Loudoun Water resources is conducted to verify that the proposed Capital Spending Plan can be implemented. Staff resources are a key constraint to ensure projects are completed with adequate planning, design, and oversight. The result is a prioritized CIP to help focus funding and resources.

Prioritization & Criteria Table

Regulatory or mandated requirements	<ul style="list-style-type: none"> • Does this project address a safety issue or a public health need? • Is this project necessary for compliance with a regulatory requirement? • Is this project necessary to comply with a Loudoun Water Board directive or Board of Supervisors request? • Is this project based on an agreement with another water or wastewater utility? (i.e., Fairfax Water or DC Water)
Level of Service	<ul style="list-style-type: none"> • Does this project increase the overall reliability of a system? • Does this project reduce or eliminate existing or potential shortages? • Does this project increase water quality or reduce overflow potential?
Implication of Deferring the Project	<ul style="list-style-type: none"> • If this project is deferred, will there be an increase in the risk of a permit violation and regulatory non-compliance? • Are there any cost savings in doing the project now? • If this project is deferred, will it negatively impact other projects?
Alignment	<ul style="list-style-type: none"> • Is this project in support of Loudoun Water’s Strategic Plan? • Is this project consistent with the master plans or asset management plans? • Does this project align with regional cooperation goals?
Funding Opportunities	<ul style="list-style-type: none"> • Can this project be funded with non-enterprise (non-Loudoun Water) sources?

CAPITAL IMPROVEMENT PLAN – MAJOR INITIATIVES

MILESTONE RESERVOIR (QUARRY A) - POTOMAC WATER SUPPLY

Through Loudoun Water’s Potomac Water Supply Program, the 20 mgd Trap Rock Water Treatment Facility and the 40 mgd raw water intake and Potomac River Pump Station are fully complete and operational. Loudoun Water is currently providing about 40 percent of Loudoun Water’s daily demand of potable water from these state-of-the-art facilities to our customers.

The development of Milestone Reservoir (formerly referenced as “Quarry A”) for raw water storage is under construction and is the next major component of the Potomac Water Supply Program. The water banking and water supply management of over 1.0 billion gallons of off-river water storage will allow Loudoun Water to suspend withdrawals from the Potomac River during drought or periods of adverse water quality conditions. The development of Milestone Reservoir includes large-diameter raw water transmission mains, a deep shaft pump station, tunneling and other geo-technical improvements.



BROAD RUN WATER RECLAMATION FACILITY

The Broad Run Water Reclamation Facility (WRF) is currently in a multi-phase, multi-year expansion to serve Loudoun Water Central Service Area while meeting the stringent regulatory requirements associated with the Dulles Area Watershed Policy and Chesapeake Bay protection goals.

The current construction work at BRWRF involves: Sitework, site security, and stormwater improvements necessary for the future plant expansion.

Design for the next expansion, Phase 3, of the BRWRF is currently underway to meet continued growth of the Central Service Area. One of the keys is design of a new biosolids treatment process (thermal drying) which will enhance the quality of the finished solids product, increase flexibility of end use, and reduce the total volume of solids hauled. Phase 3 Expansion will increase capacity of the BRWRF to serve the County for many years to come. Design and construction of the Phase 3 Expansion is estimated to take approximately 10-15 years.



CAPITAL IMPROVEMENT PLAN – ORGANIZATION

The Capital Improvement Plan (CIP) presents a comprehensive summary of projects and programs. The preceding outline of the history, process, and criteria is included to provide context and to document the structure of the CIP. The following summary charts and tables are organized to provide an overview of the projects by managing division, priority and funding schedule. Individual project sheets are arranged by managing division in the sections that follow.

The project sheets include full project identification and summary information including:

CIP Project #: Project identifier linked to SAP.

Program: The responsible program.

ADM - Administration

BRW - Broad Run Water Reclamation Facility

COM - Community Systems

FIN - Finance

PWS - Potomac Water Supply

REC - Reclaimed Water

WST - Wastewater

WTR - Water

Project Name: Descriptive name for the project. If applicable, the facility name is used in the title. An **[R]** indicates a project that will be completed by a developer to be reimbursed by LW. **(County)** indicates a project that is funded by and completed at the request of Loudoun County.

Requesting Department: The department that identified the need for the project and is responsible for completing the project documentation form.

Managing Department: The department that will be responsible for executing the project.

Project Manager: An individual who will manage the execution of the project.

Project Description/Project Driver/Additional Comments: As much information as possible to provide project documentation including references to existing plans, connected projects, regulatory issues, management directives or other pertinent information.

Estimate Method: Information on how the estimate was developed; Industry Metrics, Feasibility or Study, Design Phase Estimate, Detailed/Bid Estimate, Firm Price/Quote or Other.

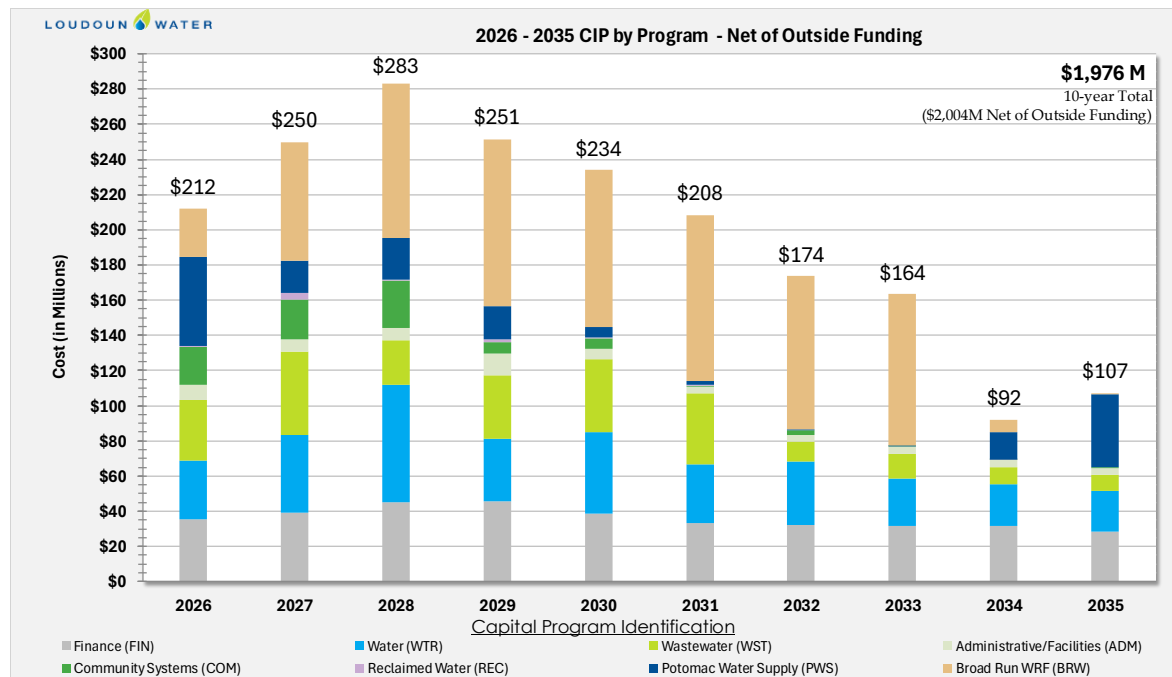
Project Prioritization: All projects are rated based on the best of known information for five criteria (as listed on the sheet). The scoring is reviewed by the committee to adjust as necessary and build consensus regarding the priority of projects.

10-year Capital Expenditures: Projected costs are input for each planning year and assigned to the type of spending: Planning, Design, Construction, Land/Easements, Equip/Other Costs and Reimbursement.

2026 Capital Expenditures: Projected monthly spending for 2026 projects.

PROJECT LIST – COSTS ARE NET OF OUTSIDE FUNDING

Program	Number of Projects	2026	2027	2028	2029	2030	2031-2035	Total
Administration (ADM)	35	\$8,800	\$7,020	\$7,090	\$12,680	\$6,310	\$19,170	\$61,070
Broad Run Water Reclamation Facility (BRW)	20	\$27,590	\$67,800	\$88,140	\$94,910	\$89,300	\$275,250	\$642,990
Community Systems (COM)	21	\$21,180	\$22,910	\$26,600	\$6,260	\$5,970	\$3,800	\$86,720
Finance (FIN)	10	\$35,250	\$39,450	\$45,260	\$45,740	\$38,490	\$157,120	\$361,310
Potomac Water Supply (PWS)	10	\$50,600	\$18,220	\$23,390	\$18,900	\$6,090	\$60,420	\$177,620
Reclaimed Water (REC)	6	\$670	\$3,420	\$730	\$1,440	\$70	\$500	\$6,830
Wastewater (WST)	48	\$34,380	\$47,250	\$25,270	\$35,740	\$41,330	\$85,540	\$269,510
Water (WTR)	63	\$33,720	\$43,910	\$66,860	\$35,700	\$46,450	\$143,190	\$369,830
Total	213	\$212,190	\$249,980	\$283,340	\$251,370	\$234,010	\$744,990	\$1,975,880



2026-2035 CAPITAL IMPROVEMENT PLAN - PROJECT LIST

Project Number	Project Name	Managing Dept*	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
ADM00009	Data Center-Network Hardware Updates	IT BS	120	720	750	1,470
ADM00013	SAP Enhancements	IT BS	120	390	250	640
ADM00015	Computer-AV Equip Upgrades and New	IT BS	280	1,080	1,200	2,280
ADM00016	Vehicles	GEN SERV	850	4,350	4,700	9,050
ADM00017	Equipment-Minor Capital	GEN SERV	600	3,350	3,600	6,950
ADM00020	Supplemental Plan Review	LAND DEV	130	370	250	620
ADM00022	Records Management Solution	IT BS	50	50	0	50
ADM00025	General Security System Upgrades	GEN SERV	1,550	3,650	1,750	5,400
ADM00026	Onsite Water and Sewer Projects	FIN	0	0	0	0
ADM00031	On-Call Modeling Support	PLANNING	30	150	150	300
ADM00048	SCADA - Network Hardware Upgrade	OT	130	480	200	680
ADM00057	Facilities Campus Improvements	GEN SERV	350	1,950	2,700	4,650
ADM00058	SCADA-Instrumentation Improvements	OT	480	930	500	1,430
ADM00061	DCH & O&M HVAC Renewal	GEN SERV	100	950	870	1,820
ADM00064	Facility Fencing Replacement-Upgrades	GEN SERV	150	750	750	1,500
ADM00072	LW Connect-Customer Portal Improvements	COMM	200	390	160	550
ADM00086	Developer Portal	IT BS	130	340	0	340
ADM00087	Ashburn Campus Paving Replacement	GEN SERV	350	1,000	1,000	2,000
ADM00091	Mobile Field App. - Phase 2	IT BS	120	220	0	220
ADM00093	Capital Engineering Services	CAP PROGRAMS	40	200	200	400
ADM00096	Cellular Booster Enhancements	OT	100	100	0	100
ADM00098	Aerial Photo Acquisition	IT BS	60	190	140	330
ADM00099	Project Resources	PSO	50	50	0	50
ADM00100	GIS Enhancements	IT BS	30	60	0	60
ADM00102	OT Switch Modernization Program	OT	200	650	0	650

2026 – 2035 CAPITAL IMPROVEMENT PLAN - PROJECT LIST
 (Costs in \$000's – shown as full project expenditure, no outside funding shown)

Project Number	Project Name	Managing Dept*	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
ADM00104	Project Management Info System (PMIS)	PSO	250	400	0	400
ADM00105	Easement Mapping	IT BS	1,500	1,800	0	1,800
ADM00106	Inventory Application Enhancements	IT BS	0	100	0	100
ADM00107	New Inventory Warehouse Design	CAP PROGRAMS	340	15,840	0	15,840
ADM00109	Water Research Foundation PFAS Study	WTR RES	120	120	0	120
ADM00110	Educational Features On Campus	COMM	20	640	0	640
ADM00113	Compliance Sample Management Solution	IT BS	150	300	0	300
ADM00114	Water Research Foundation Salinity Study	WTR RES	70	150	0	150
ADM00115	Artificial Intel. and Business Intel. Enhancements	IT BS	80	200	0	200
ADM00116	Meter Data Management System Migration	IT BS	240	240	0	240
BRW00023	BRWRF - General Improvements	MNT-PL	500	2,800	3,610	6,410
BRW00032	BRWRF Phase 3 Expansion (Planning & Design)	O-WST	11,990	15,980	0	15,980
BRW00033	BRWRF Roof Replacements	O-WST	750	1,920	0	1,920
BRW00034	Spare Parts BRW	FIN	100	500	500	1,000
BRW00039	BRWRF Regulatory Requirements	O-WST	0	0	0	0
BRW00040	BRWRF Structural Assessment and Repairs	O-WST	350	1,350	0	1,350
BRW00041	BRWRF Membrane Cassette Replacements	MNT-PL	0	0	12,000	12,000
BRW00042	BRWRF Electrical Condition Assessments and Repairs	O-WST	510	2,730	0	2,730
BRW00043	BRWRF Flow EQ and Solids Improvements	O-WST	240	17,120	0	17,120
BRW00045	BRWRF HVAC Condition Assessment and Repairs	O-WST	160	960	0	960
BRW00046	BRWRF Preliminary Treatment Improvements	O-WST	140	3,900	0	3,900
BRW00047	BRWRF Primary Treatment Improvements	O-WST	0	0	8,560	8,560
BRW00048	BRWRF P3 Pkg. 1 Sitework	O-WST	10,140	10,140	0	10,140
BRW00049	BRWRF P3 Pkg. 2 Liquids Solids Expansion	O-WST	0	237,470	203,930	441,400
BRW00050	BRWRF P3 Pkg. 3 20 MGD Expansion	O-WST	0	31,100	46,650	77,750
BRW00051	BRWRF P3 Pkg. 4 30 MGD Expansion	O-WST	0	0	0	0

2026 – 2035 CAPITAL IMPROVEMENT PLAN - PROJECT LIST
 (Costs in \$000's – shown as full project expenditure, no outside funding shown)

Project Number	Project Name	Managing Dept*	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
BRW00052	BRWRF Building L, M, O Expansion	O-WST	1,640	38,980	0	38,980
BRW00053	Regional Biosolids Facility	O-WST	140	140	0	140
BRW00054	BRW OT Drive and Instrument Improvements	OT	500	600	0	600
BRW00055	BRW Valve Replacement Program	MNT-PL	430	2,050	0	2,050
COM00046	Creighton WWTP Connect to Central	PLANNING	0	0	50	50
COM00049	Comm. System - General Improvements	O-COMSYS	120	520	500	1,020
COM00060	ComSys Ammonia Removal Evaluation	O-WST	0	12,350	2,450	14,800
COM00061	Paeonian Springs Water & Sewer (County)	CAP PROGRAMS	1,200	2,400	0	2,400
COM00062	Rokeby WTP Generator Upgrades	CAP PROGRAMS	0	0	650	650
COM00063	Waterford Water System (County)	CAP PROGRAMS	500	800	0	800
COM00069	Spare Parts COM	FIN	20	100	100	200
COM00070	Howardsville WWTP (County)	CAP PROGRAMS	290	1,840	0	1,840
COM00071	Willisville WWTP Improvements	O-WST	100	100	0	100
COM00072	St Louis Water Study (County)	PLANNING	60	150	0	150
COM00074	Lucketts ES WWTP Upgrades (County)	O-Remote Fac	250	750	0	750
COM00076	ComSys Ammonia Removal PDB	O-WST	20,020	60,020	0	60,020
COM00078	Rokeby to Central (Water)	PLANNING	0	0	50	50
COM00079	Beacon Hill New Water Production Well	CAP PROGRAMS	320	4,780	0	4,780
COM00081	Selma WTP Membrane Replacement	O-COMSYS	0	110	0	110
COM00083	Comm Sys Radio to Fiber Migration	CAP PROGRAMS	140	3,220	0	3,220
COM00084	Selma Water Distribution PRV Remote Monitoring	O-WST	120	260	0	260
COM00085	Selma Source Water Iron & Manganese Evaluation	O-WST	100	640	0	640
COM00086	Willisville Electrical & OT Upgrades	O-WST	140	660	0	660
COM00087	Beacon Hill Well C Electrical Upgrades	O-WST	50	110	0	110
COM00088	St. Louis WWPS New Structure	O-WST	50	50	0	50
FIN00001	Debt Service	FIN	9,220	52,180	46,560	98,740

2026 – 2035 CAPITAL IMPROVEMENT PLAN - PROJECT LIST
 (Costs in \$000's – shown as full project expenditure, no outside funding shown)

Project Number	Project Name	Managing Dept*	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
FIN00002	DC Water Capital Improvements	FIN	17,700	107,700	57,000	164,700
FIN00003	Reimbursement to Developers - Water [R]	LAND DEV	400	1,600	1,500	3,100
FIN00004	Reimbursement to Developers - Sewer [R]	LAND DEV	150	550	500	1,050
FIN00005	Capital Proj - Construction-in-Process	FIN	6,760	37,360	47,680	85,040
FIN00008	Fairfax Water-Trans. Capacity-Fox Mill/Centerville	FIN	210	1,050	1,050	2,100
FIN00009	FC UOSA - Conveyance-Treatment Capacity	FIN	330	650	400	1,050
FIN00011	Record Drawings and GIS Data Program	IT BS	380	1,920	1,930	3,850
FIN00014	Capital Imp Projects Legal Support	FIN	100	500	500	1,000
FIN00015	Reimbursement to Developers - Reclaimed [R]	LAND DEV	0	680	0	680
PWS00006	PWS - Quarry A, Milestone Reservoir	CAP PROGRAMS	48,880	69,430	0	69,430
PWS00007	TRWTF - Phase II (32 MGD) Expansion	CAP PROGRAMS	2,630	40,500	0	40,500
PWS00009	PRWPS - General Improvements	O-WTR	300	1,050	850	1,900
PWS00012	TRWTF - General Improvements	O-WTR	360	960	500	1,460
PWS00016	Spare Parts PWS	FIN	50	250	250	500
PWS00017	TRWTF Standby Generator	CAP PROGRAMS	270	270	0	270
PWS00018	Goose Creek RWPS - Switchgear	CAP PROGRAMS	780	780	0	780
PWS00019	TRWTF - Phase III (40 MGD) Expansion	CAP PROGRAMS	0	7,580	58,820	66,400
PWS00020	TRWTF - Dewatering	CAP PROGRAMS	180	180	0	180
PWS00021	Goose Creek RWPS Upgrade Study	CAP PROGRAMS	100	100	0	100
REC00010	Equinix Property Reclaimed Main	CAP PROGRAMS	190	2,140	0	2,140
REC00011	Beaumeade Circle Gap Closures	CAP PROGRAMS	20	280	0	280
REC00018	Reclaimed Distribution Storage Tank	CAP PROGRAMS	0	1,300	0	1,300
REC00019	RWPS Surge Tank	O-WST	0	1,250	0	1,250
REC00020	Reclaimed System Master Plan	PLANNING	0	250	500	750
REC00021	Reclaimed Water Relocation (LC Pkwy)	CAP PROGRAMS	460	1,110	0	1,110
WST00001	Wastewater System Planning Studies	PLANNING	0	300	900	1,200

2026 – 2035 CAPITAL IMPROVEMENT PLAN - PROJECT LIST
 (Costs in \$000's – shown as full project expenditure, no outside funding shown)

Project Number	Project Name	Managing Dept*	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
WST00005	Upper Foley SPS Odor Control System	O-Remote Fac	0	0	420	420
WST00013	W-WW Needs Assessment Studies (County)	PLANNING	0	460	540	1,000
WST00022	Sys Capacity Upgrades - Sewer Mains	PLANNING	0	0	12,100	12,100
WST00023	Sys Capacity Upgrades - Pump Stations	PLANNING	0	0	12,200	12,200
WST00024	Russell Br SPS JLMA East, S2A-E & S2B-E	CAP PROGRAMS	7,670	11,930	0	11,930
WST00032	Grinder Pump Replacement Program	MNT-LINE	100	500	500	1,000
WST00033	Elklick Run SPS Phase 3 Upgrades	CAP PROGRAMS	250	11,100	950	12,050
WST00038	Sewer Meter Vault Replacements	O-WST	330	1,250	0	1,250
WST00039	UBRI Manhole Improvements	CAP PROGRAMS	1,640	2,800	0	2,800
WST00040	Waxpool SPS General Improvements	O-WST	120	340	900	1,240
WST00050	Wastewater Facility General Improvements	O-Remote Fac	290	1,250	1,360	2,610
WST00055	Grinder Pump Control Panel Replacement	ASSET MNG	60	300	300	600
WST00057	JLMA East, S4-E (GCIP to Crosstrail Blvd) [R]	LAND DEV	9,160	17,710	1,750	19,460
WST00058	JLMA West, S2 & S3A (Sycolin to RT 267) [R]	LAND DEV	9,360	12,160	0	12,160
WST00062	Spare Parts WST	FIN	50	250	250	500
WST00066	Digital Dulles 24" Sanitary Sewer Outfall [R]	LAND DEV	0	8,000	5,000	13,000
WST00068	JLMA East Forcemain (Phase 2)	CAP PROGRAMS	170	2,070	0	2,070
WST00069	JLMA West, S3B-W (Shreve South) [R]	LAND DEV	0	3,500	1,200	4,700
WST00070	JLMA West SPS, S1A-W & S1B-W [R]	LAND DEV	0	13,470	1,310	14,780
WST00071	JLMA West, S-4-W NLS SPS Upgrades	CAP PROGRAMS	550	23,640	24,000	47,640
WST00072	Sewer Replacement Shep/Blkwd/Caragana	CAP PROGRAMS	580	1,320	0	1,320
WST00073	Wastewater Infrastructure R&R	ASSET MNG	100	3,920	5,650	9,570
WST00074	Cabin Branch Lateral Lining Project	CAP PROGRAMS	1,000	7,000	0	7,000
WST00075	Connect Dulles Trade SPS to Gravity Sewer	CAP PROGRAMS	0	0	3,720	3,720
WST00078	Red Cedar 2 SPS Improvements	O-WST	70	3,420	0	3,420
WST00080	Western CSA AFP	PLANNING	150	450	200	650

2026 – 2035 CAPITAL IMPROVEMENT PLAN - PROJECT LIST
 (Costs in \$000's – shown as full project expenditure, no outside funding shown)

Project Number	Project Name	Managing Dept*	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
WST00081	WW Collection Sys Master Plan	PLANNING	400	400	0	400
WST00082	Courtland WWPS Generator Replacement	CAP PROGRAMS	150	150	0	150
WST00083	Grinder Chamber Replacement Program	MNT-LINE	30	320	330	650
WST00084	Large Diameter Sewer Rehabilitation	CAP PROGRAMS	210	2,220	0	2,220
WST00086	Sanitary Sewer Lining Phase 3	CAP PROGRAMS	60	60	0	60
WST00087	Belmont Innovation Campus Gravity Outfall [R]	LAND DEV	0	230	0	230
WST00088	Elklick Upper Foley FM Corrosion Control Upgrades	CAP PROGRAMS	300	3,310	0	3,310
WST00090	JLMA East Sewer PS (Phase 2)	CAP PROGRAMS	160	4,410	0	4,410
WST00092	JLMA Downstream Sewer Capacity Upgrades	CAP PROGRAMS	160	14,750	0	14,750
WST00093	NLSSPS Secondary Forcemain	CAP PROGRAMS	40	9,920	0	9,920
WST00094	Russell Branch SPS Area Infrastructure [R]	LAND DEV	0	6,000	0	6,000
WST00095	Russell Branch SPS Capacity Upgrade	CAP PROGRAMS	0	650	12,500	13,150
WST00096	Small Diam. Sewer Replacement - Sterling Ph 1	CAP PROGRAMS	300	1,600	0	1,600
WST00097	Central Sewer CIPP Lining Phase 4	CAP PROGRAMS	350	350	0	350
WST00098	Claude Moore Trunk Main Upgrade	CAP PROGRAMS	100	10,530	0	10,530
WST00099	Electrical & Lightning Protection - Wastewater Sites	OT	100	100	0	100
WST00100	Horsepen Run Sewer Vault Meter	CAP PROGRAMS	200	1,200	0	1,200
WST00101	Loudoun County Support (County)	PLANNING	100	1,000	0	1,000
WST00102	MWAA Alignment Study	PLANNING	60	60	0	60
WST00103	Sanitary Sewer CIPP Lining Phase 5	CAP PROGRAMS	0	400	0	400
WST00104	Waxpool SPS Emergency Storage	CAP PROGRAMS	110	630	0	630
WTR00001	Water System Planning Studies	PLANNING	0	700	1,250	1,950
WTR00005	Rt 7-Rt 28 24in Main	CAP PROGRAMS	0	0	1,300	1,300
WTR00011	Rt7 36in Main	CAP PROGRAMS	0	0	2,200	2,200
WTR00020	Rt 50 - 30in Parallel Main	CAP PROGRAMS	0	21,000	0	21,000
WTR00025	Dulles North Permanent Pump Station	CAP PROGRAMS	0	0	12,500	12,500

2026 – 2035 CAPITAL IMPROVEMENT PLAN - PROJECT LIST
 (Costs in \$000's – shown as full project expenditure, no outside funding shown)

Project Number	Project Name	Managing Dept*	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
WTR00046	Goose Creek Reservoir Dredging	CAP PROGRAMS	200	1,600	23,000	24,600
WTR00056	Transmission - Hydraulic Surge Analysis	PLANNING	0	300	0	300
WTR00062	Former COF Properties VRP Enrollment	WTR RES	50	50	0	50
WTR00082	Dulles North IWBPS Improvements	CAP PROGRAMS	0	500	3,000	3,500
WTR00086	Rt 659-Belmont 36in Main Upsize	CAP PROGRAMS	1,020	23,150	0	23,150
WTR00087	Rt 50-Fleetwood 24in Main	CAP PROGRAMS	0	100	2,850	2,950
WTR00091	Water Distribution Looping-Gap Closures	PLANNING	0	740	3,520	4,260
WTR00104	Rt 50-Hiddenwood Lane 24in Main [R]	LAND DEV	0	350	0	350
WTR00107	W Beech-Concord-Colonial Pipe Replacement	CAP PROGRAMS	640	3,610	0	3,610
WTR00108	Hall Road 16in Gap Closure	CAP PROGRAMS	90	1,120	0	1,120
WTR00112	Landfill Booster Station Improvements	CAP PROGRAMS	0	220	450	670
WTR00119	Pipeline Corrosion Control Program	O-PROGRAMS	200	1,000	1,000	2,000
WTR00120	TTM Technologies Meter Vault Replacement	CAP PROGRAMS	50	280	0	280
WTR00124	Sterling Standpipe Improvements	O-WST	200	1,700	0	1,700
WTR00126	Acoustic Listening Devices	ASSET MNG	100	260	100	360
WTR00127	Goose Creek Dam Improvements	CAP PROGRAMS	170	1,380	0	1,380
WTR00130	Water Facility General Improvements	O-Remote Fac	110	570	620	1,190
WTR00138	Broad Run Farms Waterline Ext. (County)	CAP PROGRAMS	3,780	16,050	0	16,050
WTR00143	Waterside - Old Ox Rd 16" Watermain [R]	CAP PROGRAMS	0	0	500	500
WTR00145	30" Water Ruritan Rd to Rt 28 Crossing	CAP PROGRAMS	320	4,300	0	4,300
WTR00151	Dulles South WBS Upgrade	CAP PROGRAMS	150	150	0	150
WTR00152	Brambleton 600 WBS Upgrade	CAP PROGRAMS	290	4,900	0	4,900
WTR00153	MV VFD Vibration Mon Upgrade	O-WTR	650	650	0	650
WTR00154	JLMA/TPA - Water (Phase 2)	CAP PROGRAMS	0	4,400	0	4,400
WTR00155	JLMA East, W1, W2 & W3-E [R]	LAND DEV	15,000	29,640	1,760	31,400
WTR00157	Meter Crock Rehabilitation	FIELD SERV	500	2,100	500	2,600

2026 – 2035 CAPITAL IMPROVEMENT PLAN - PROJECT LIST
 (Costs in \$000's – shown as full project expenditure, no outside funding shown)

Project Number	Project Name	Managing Dept*	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
WTR00158	Mt. Sterling WBPS [R]	CAP PROGRAMS	80	2,080	2,500	4,580
WTR00160	Beaumeade PRV Vault Rehabilitation	O-Remote Fac	0	50	150	200
WTR00161	Russell Branch Broad Run Crossing Water Main	PLANNING	0	0	5,600	5,600
WTR00162	LCParkway-Lockridge 16-inch water [R]	LAND DEV	0	1,200	0	1,200
WTR00163	Spare Parts WTR	FIN	50	250	250	500
WTR00164	JLMA West, W2A & W7 (Sycolin to RT 267) [R]	LAND DEV	7,190	8,190	0	8,190
WTR00165	JLMA West, W2B-W Shreve South [R]	LAND DEV	0	2,700	900	3,600
WTR00169	Dulles West Blvd 16-inch Watermain [R]	LAND DEV	0	3,000	0	3,000
WTR00172	JLMA West, W1A-W [R]	LAND DEV	500	1,100	0	1,100
WTR00174	Willard Road 30-in Watermain Extension [R]	LAND DEV	0	2,000	0	2,000
WTR00176	Water Infrastructure R&R	ASSET MNG	0	16,000	77,500	93,500
WTR00177	Beaverdam Dam Improvements	O-WTR	50	250	250	500
WTR00178	Woodstone 1 & 2 Improvements	CAP PROGRAMS	130	1,520	0	1,520
WTR00179	Brambleton Tank 1 Rehabilitation	O-WST	1,950	1,950	0	1,950
WTR00180	Oakdale, Lindenwood & W Ash Pipe Replacement	CAP PROGRAMS	690	3,740	0	3,740
WTR00181	Valve Replacements and Misc. Improvements	CAP PROGRAMS	870	2,260	0	2,260
WTR00184	Water Storage Tank Process Upgrades	O-WST	80	680	0	680
WTR00185	16" WM Innovation Ave to Old Ox	CAP PROGRAMS	100	350	0	350
WTR00188	Dulles South Storage Tanks Modifications	O-WST	120	3,500	0	3,500
WTR00189	Sterling Park Water Main Replacement	CAP PROGRAMS	300	18,800	0	18,800
WTR00190	Water System Master Plan	PLANNING	250	250	600	850
WTR00192	Brambleton Tank 2 Upgrades	O-WST	390	3,060	0	3,060
WTR00193	Central System Electrical Shock Mitigation	ASSET MNG	200	370	0	370
WTR00194	Evergreen Mills 16" Waterline - JLMA GF [R]	LAND DEV	0	2,780	0	2,780
WTR00195	Evergreen Mills 16" Waterline - JLMA VCS [R]	LAND DEV	0	3,380	0	3,380
WTR00196	Rt50 to Dulles West Blvd 24-inch Gap [R]	LAND DEV	0	2,000	0	2,000

2026 – 2035 CAPITAL IMPROVEMENT PLAN - PROJECT LIST
 (Costs in \$000's – shown as full project expenditure, no outside funding shown)

Project Number	Project Name	Managing Dept*	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
WTR00197	Sterling Park Section 2 Water Main Replacement	CAP PROGRAMS	80	16,250	350	16,600
WTR00198	W1B-West 24-inch Extension to Shreve Mill Road [R]	LAND DEV	800	800	0	800
WTR00199	JLMA W-4-E East/West Interconnection [R]	LAND DEV	0	5,700	0	5,700
WTR00201	Water Main Replacement Sterling Phase 3	CAP PROGRAMS	0	15,460	540	16,000
WTR00202	Water Main Replacement Lipscomb, Austen	CAP PROGRAMS	50	2,100	0	2,100
WTR00203	Electrical & Lightning Protection - Water Sites	OT	100	100	0	100
Total Projects	213		\$221,510	\$1,258,500	\$745,530	\$2,004,030

***Managing Department**

ASSET MNG	Asset Management	LAND DEV	Land Development	OT	Operations Technology
CAP PROGRAMS	Capital Programs	MNT-LINE	Maintenance – Line	O-WST	Operations - Wastewater
COMM	Communications	MNT-PL	Maintenance - Plant	O-WTR	Operations – Water
FIN	Finance	O-COMSYS	O&M Community Systems	PLANNING	Planning
GEN SERV	General Services	O-PROGRAMS	O&M Programs	PSO	Project Support Office
IT BS	Information Tech / Business Solutions	O-Remote Fac	O&M Remote Facilities	WTR RES	Water Resources

ADMINISTRATION & FACILITIES (ADM)

2026-2035 CIP Section Index ~ ADM

Project Number	Project Name	Managing Division	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
ADM00009	Data Center-Network Hardware Updates	IT BS	120	720	750	1,470
ADM00013	SAP Enhancements	IT BS	120	390	250	640
ADM00015	Computer-AV Equip Upgrades and New	IT BS	280	1,080	1,200	2,280
ADM00016	Vehicles	GEN SERV	850	4,350	4,700	9,050
ADM00017	Equipment-Minor Capital	GEN SERV	600	3,350	3,600	6,950
ADM00020	Supplemental Plan Review	LAND DEV	130	370	250	620
ADM00022	Records Management Solution	IT BS	50	50	0	50
ADM00025	General Security System Upgrades	GEN SERV	1,550	3,650	1,750	5,400
ADM00026	Onsite Water and Sewer Projects	FIN	0	0	0	0
ADM00031	On-Call Modeling Support	PLANNING	30	150	150	300
ADM00048	SCADA - Network Hardware Upgrade	OT	130	480	200	680
ADM00057	Facilities Campus Improvements	GEN SERV	350	1,950	2,700	4,650
ADM00058	SCADA-Instrumentation Improvements	OT	480	930	500	1,430
ADM00061	DCH & O&M HVAC Renewal	GEN SERV	100	950	870	1,820
ADM00064	Facility Fencing Replacement-Upgrades	GEN SERV	150	750	750	1,500
ADM00072	LW Connect-Customer Portal Improvements	COMM	200	390	160	550
ADM00086	Developer Portal	IT BS	130	340	0	340
ADM00087	Ashburn Campus Paving Replacement	GEN SERV	350	1,000	1,000	2,000
ADM00091	Mobile Field App. - Phase 2	IT BS	120	220	0	220
ADM00093	Capital Engineering Services	CAP PROGRAMS	40	200	200	400
ADM00096	Cellular Booster Enhancements	OT	100	100	0	100
ADM00098	Aerial Photo Acquisition	IT BS	60	190	140	330
ADM00099	Project Resources	PSO	50	50	0	50
ADM00100	GIS Enhancements	IT BS	30	60	0	60
ADM00102	OT Switch Modernization Program	OT	200	650	0	650
ADM00104	Project Management Info System (PMIS)	PSO	250	400	0	400
ADM00105	Easement Mapping	IT BS	1,500	1,800	0	1,800
ADM00106	Inventory Application Enhancements	IT BS	0	100	0	100
ADM00107	New Inventory Warehouse Design	CAP PROGRAMS	340	15,840	0	15,840

Project Number	Project Name	Managing Division	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
ADM00109	Water Research Foundation PFAS Study	WTR RES	120	120	0	120
ADM00110	Educational Features On Campus	COMM	20	640	0	640
ADM00113	Compliance Sample Management Solution	IT BS	150	300	0	300
ADM00114	Water Research Foundation Salinity Study	WTR RES	70	150	0	150
ADM00115	Artificial Intel. and Business Intel. Enhancements	IT BS	80	200	0	200
ADM00116	Meter Data Management System Migration	IT BS	240	240	0	240
Total	35 projects		\$8,990	\$42,160	\$19,170	\$61,330

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project includes the replacement of IT equipment and back-office software including servers, network appliances, routers, switches, firewalls, databases, operating systems, and Network/Operations solutions when these items reach end-of-life. Replacements enhance performance, manageability and reliability of data center/network infrastructure.

Project Driver

The driver for this project is the need to refresh technology in order to continue to meet service level expectations as well as evolving business demands and technology requirements. Also needed to mitigate evolving security threats.

Additional Comments

2026 purchases will include backup solution refresh (50K), email filtering replacement (20k), SDWan (30K), other EOL infrastructure (20K).

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	120	150	150	150	150	150	150	150	150	150	1,470
Subtotal	120	150	150	150	150	150	150	150	150	150	1,470
Outside Funding											
Net Cost	120	150	150	150	150	150	150	150	150	150	1,470

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		50			50			20				120

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project includes continued enhancements to our enterprise SAP software to augment capabilities and ensure that the solution continues to remain current and support our evolving business processes. Specific allocations include forms software to automate business processes, new SAP Fiori interfaces, and additional reports, interfaces, enhancements, forms, and workflows.

Project Driver

This project is needed to ensure that our core business system, SAP, remains up-to-date, secure, and capable of supporting our evolving business processes.

Additional Comments

In 2026 this project includes \$120k that will primarily be for post SAP S/HANA go-live improvements and enhancements.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.3	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	120	120	50	50	50	50	50	50	50	50	640
Subtotal	120	120	50	50	50	50	50	50	50	50	640
Outside Funding											
Net Cost	120	120	50	50	50	50	50	50	50	50	640

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		50			50			20				120

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

This project provides for new and replacement IT user equipment, primarily focused on desktops, laptops, monitors, phones, and AV equipment.

Project Driver

The driver for this project is the need to refresh technology in order to meet evolving business demands and technology requirements, as well as mitigate evolving security threats.

Additional Comments

In 2026 this project includes annual laptop and monitor replacements (\$180k), in addition to AV equipment refresh (\$100k).

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	280	200	200	200	200	300	200	200	300	200	2,280
Subtotal	280	200	200	200	200	300	200	200	300	200	2,280
Outside Funding											
Net Cost	280	200	200	200	200	300	200	200	300	200	2,280

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
		100		50		30		100				280

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project represents the dollar value of new vehicles requested for 2026. Amounts after 2025 are based on Loudoun Water's vehicle replacement program and historic trends. Vehicles are requested during the annual budget preparation process and are identified as new or replacement.

Project Driver

New vehicles to accommodate additional staff or replacement vehicles based on criteria identified in Loudoun Water's vehicle replacement program.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.15	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	850	850	850	850	950	950	950	950	950	900	9,050
Subtotal	850	850	850	850	950	950	950	950	950	900	9,050
Outside Funding											
Net Cost	850	850	850	850	950	950	950	950	950	900	9,050

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
		100	100	200	200	100	100	50				850



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

This project is for the purchase of new machinery and equipment requested for 2026. Some of the larger items being purchased are a new dump truck and boat.

Project Driver

Both new and replacement items, such as furniture, machinery, and equipment, fall into this category required to operate and maintain new and existing facilities.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.55	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	600	600	700	700	750	750	700	700	700	750	6,950
Subtotal	600	600	700	700	750	750	700	700	700	750	6,950
Outside Funding											
Net Cost	600	600	700	700	750	750	700	700	700	750	6,950

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
50	50	50	50	50	50	50	50	50	50	50	50	600

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Supplemental Plan Review
 CIP Project #: ADM00020
 Program: ADM Administrative/Facilities

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Kirby, Matthew
 Sheet Completed by: Kirby, Matthew



Project Description

This project includes supplemental, consulting engineering services in support of Land Development, such as plan review, drafting/editing standard Engineering Design Manual details in AutoCAD, miscellaneous plats and exhibits, etc. through the use of an on-call (basic ordering agreement) consultant. Specifically, it includes supplemental review for Tuscarora SPS design.

Project Driver

These supplemental professional services are needed due to the highly variable and unpredictable Land Development plan review workload and in order to meet the development industry's demands and County mandated time-frames (Fast Track). This allows Land Development to balance workload and land development staff resourcing, since the workload for LD is unpredictable and this mechanism allows LD to meet review deadlines in the event of a large influx of plans or internal staff changes.

Additional Comments

This also allows other departments outside of Land Development to utilize small, specialized on-call task orders (such as Utility Protection - utilized for blasting guidance efforts, etc.) that engineering does not have the expertise in-house.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.5	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	130	90	50	50	50	50	50	50	50	50	620
Subtotal	130	90	50	50	50	50	50	50	50	50	620
Outside Funding											
Net Cost	130	90	50	50	50	50	50	50	50	50	620

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
15	12	15	12	13	10	10	8	8	10	10	10	133



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project entails improving the governance of records and documents, as well as the enhancement or replacement of Loudoun Water's existing Record/Document Management system with a solution that fits Loudoun Water's business and performance requirements. Work in 2026 will focus on decommissioning Trim (Content Manager/Kapish).

Project Driver

The Strategic Plan indicates our adoption of SharePoint as our consolidated records management solution. Decommissioning Trim and migrating content to SharePoint is the last step of this multi-year journey.

Additional Comments

Funds are programmed for 2026 to cover expenses related to purchase of migration software and consulting services to help with content migration.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.15	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	50										50
Subtotal	50										50
Outside Funding											
Net Cost	50										50

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
		30				20						50

2026 - 2034 Loudoun Water Capital Improvement Plan

Project Name: General Security System Upgrades
 CIP Project #: ADM00025
 Program: ADM Administrative/Facilities

Requesting Dept: GEN SERV
 Managing Dept.: GEN SERV
 Project Manager: McDonald, Lenny
 Sheet Completed by: McDonald, Lenny



Project Description

This project assesses Loudoun Water's security program, including physical, hard and soft security measures, as well as related policies and procedures. The Security Master Plan guides the scheduling and implementation of the security program. The construction phase will execute upgrades. With the construction nearly complete and optimization of the system to begin, the results of the full scale physical penetration test received in early 2025 are helping guide further system optimization, efficiency, culture and planning.

Project Driver

Security technology deployed at Loudoun Water (LW) facilities was nearing the end of its service life as replacement parts were unavailable and software upgrades were needed. A comprehensive security study, performed by a consultant in 2015, recommended a new electronic security network for the safety of LW employees, security of drinking water assets for customers and critical infrastructure protection.

Additional Comments

2017-2020 built out for main campus and primary assets. 2020-2023 installed Access Control, Video Surveillance systems for the Central & Community Systems. 2024-2027 build out of all remote site installs, BRWRF Plant Buildings Access Control. Next phase pending study completion in 2028. 2029-2035 Build out if new manufacturer is chosen or enterprise level replacement/upgrades of existing manufacturer are called for.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.75	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning			150								150
Design											
Construction	1,550	700	550	350	350	350	350	350	350	350	5,250
Land/Easements											
Equip/Other											
Subtotal	1,550	700	700	350	350	350	350	350	350	350	5,400
Outside Funding											
Net Cost	1,550	700	700	350	350	350	350	350	350	350	5,400

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
70	47	75	114	159	200	221	211	176	130	88	59	1,550

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

ADM00026 is a placeholder to allow accounting of and transfer of Loudoun Water labor and expenses related to capital projects. No funding amount applied for non-specific capital project work or closed projects. Labor charged here, but captured in FIN.00005.

Project Driver

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	1	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.2	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal											
Outside Funding											
Net Cost											

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: On-Call Modeling Support
 CIP Project #: ADM00031
 Program: ADM Administrative/Facilities

Requesting Dept: PLANNING
 Managing Dept.: PLANNING
 Project Manager: Geldert, Darrin
 Sheet Completed by: Geldert, Darrin

Project Description

This project includes supplemental consulting engineering services; includes on-call water modeling support for VDH certifications (regulatory requirement) and periodic model updates to support development and capital projects.

Project Driver

Planning anticipates having the need to supplement capabilities to meet short term demands. This includes on-call water modeling support.

Additional Comments

Land Development team may use this directly.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.3	(100%)

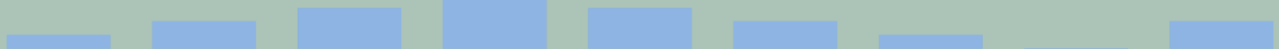
Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	30	30	30	30	30	30	30	30	30	30	300
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal	30	30	30	30	30	30	30	30	30	30	300
Outside Funding											
Net Cost	30	30	30	30	30	30	30	30	30	30	300

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
1	1	1	2	3	4	5	4	3	2	1	3	30



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: SCADA - Network Hardware Upgrade
 CIP Project #: ADM00048
 Program: ADM Administrative/Facilities

Requesting Dept: OT
 Managing Dept.: OT
 Project Manager: Krapf, Andy
 Sheet Completed by: Krapf, Andy



Project Description

This project provides for the replacement and/or upgrade of OT related equipment including servers, network appliances, routers, switches, firewalls, communications, and associated software when the equipment is no longer under warranty or is end-of-life.

Project Driver

The driver for this project is the need to refresh technology in order to continue to meet service level expectations as well as evolving business demands and technology requirements. Outlying years show baseline enhancements as currently understood.

Additional Comments

This is a commodity purchase. Hardware in future years will include servers, possible modifications to communications infrastructure, network cabinets, and cyber security appliances. Replacement cycle is 3 years for workstations, 5 years for servers, and 5-8 years for other networked devices.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	130	120	130		100		100		100		680
Subtotal	130	120	130		100		100		100		680
Outside Funding											
Net Cost	130	120	130		100		100		100		680

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
		25		50				50				125

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Facilities Campus Improvements
 CIP Project #: ADM00057
 Program: ADM Administrative/Facilities

Requesting Dept: GEN SERV
 Managing Dept.: GEN SERV
 Project Manager: Clark, Austin
 Sheet Completed by: Clark, Austin

Project Description

This project upgrades the buildings and grounds at the Ashburn Campus and Trap Rock Administration Building, including the grounds of DCH, O&M, BRWRF (Lab, Maintenance, & Operations) and TRWTF.

Project Driver

The existing buildings and campus must be maintained in a satisfactory condition to support business activities.

Additional Comments

The upgrades included in this project are DCH office painting, DCH brick and block tuckpointing, BRWRF exterior caulking and point up, O&M Facilities equipment shed upgrades and DCH kitchenette renovations.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.6	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	350	350	350	450	450	500	550	550	550	550	4,650
Land/Easements											
Equip/Other											
Subtotal	350	350	350	450	450	500	550	550	550	550	4,650
Outside Funding											
Net Cost	350	350	350	450	450	500	550	550	550	550	4,650

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
	50	60	60	40	10	10	20	50	30	15	5	350



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: SCADA-Instrumentation Improvements
 CIP Project #: ADM00058
 Program: ADM Administrative/Facilities

Requesting Dept: OT
 Managing Dept.: OT
 Project Manager: Krapf, Andy
 Sheet Completed by: Krapf, Andy



Project Description

This project includes replacement of existing instrumentation and SCADA hardware as required. Specific items include obsolete sensors, drives, communication hardware, PLC processors and network cards, and computer hardware. Also including hardware to construct a dedicated PLC development system for support of current and future projects.

Project Driver

Manufacturers regularly update their process control technology. In order for Loudoun Water to remain free of obsolete or vulnerable equipment, it must be refreshed on a timely basis. Most process related technology is updated around 10 - 12 year cycles.

Additional Comments

Currently there are 25 remote facilities that will require PLC upgrades due to current controllers being phased out by manufacturer. These sites include most sewer pump stations, water tanks, and water booster stations. Additionally, other analytical equipment will be upgraded as the current product lines are no longer being manufactured by the vendor.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	480	150	100	100	100	100	100	100	100	100	1,430
Subtotal	480	150	100	100	100	100	100	100	100	100	1,430
Outside Funding											
Net Cost	480	150	100	100	100	100	100	100	100	100	1,430

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	80	100	40	120		100		40				480



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **DCH & O&M HVAC Renewal**
 CIP Project #: **ADM00061**
 Program: **ADM Administrative/Facilities**

Requesting Dept: **GEN SERV**
 Managing Dept.: **GEN SERV**
 Project Manager: **Clark, Austin**
 Sheet Completed by: **Clark, Austin**

Project Description

This project includes the capital cost associated with replacing HVAC units and controls within the DCH and O&M facilities.

Project Driver

As existing HVAC equipment approaches the end of its useful life, replacement is more cost effective than repairing. This project will cover all HVAC unit replacements at both DCH and O&M.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.55	(100%)

Estimate Method: **Firm Price/Quote**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	100	200	250	250	150	150	180	180	180	180	1,820
Land/Easements											
Equip/Other											
Subtotal	100	200	250	250	150	150	180	180	180	180	1,820
Outside Funding											
Net Cost	100	200	250	250	150	150	180	180	180	180	1,820

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
		19	37	33	11							100



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **Facility Fencing Replacement-Upgrades**
 CIP Project #: **ADM00064**
 Program: **ADM Administrative/Facilities**

Requesting Dept: **GEN SERV**
 Managing Dept.: **GEN SERV**
 Project Manager: **McDonald, Lenny**
 Sheet Completed by: **McDonald, Lenny**

Project Description

This project will fund replacement and upgrade of fencing and gates at select facilities on Loudoun Water Main Campuses, Central System Facilities and Community Systems. The upgrades will be based on the current Loudoun Water standards for fencing and gates.

Project Driver

Fencing and gates at select facilities do not meet the current Loudoun Water standards for safety, prevention of unauthorized access and anti-vandalism.

Additional Comments

FY26 CIP projects will replace fencing at Elk Lick SPS and install new fencing at well sites for Community Systems. Gate replacements include all remote sites that have received access control upgrades through CIP ADM 25. Updated cost includes upgrades to the existing fencing at Comm Sys sites, Lucketts site and other capital fencing needed. 2027-35 spending will accomplish planned replacement/upgrade of fencing determined to be substandard or in poor condition.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.5	(100%)

Estimate Method: **Firm Price/Quote**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	150	150	150	150	150	150	150	150	150	150	1,500
Land/Easements											
Equip/Other											
Subtotal	150	150	150	150	150	150	150	150	150	150	1,500
Outside Funding											
Net Cost	150	150	150	150	150	150	150	150	150	150	1,500

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
12	9	14	20	23	23	19	13	8	5	3	1	150

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: **LW Connect-Customer Portal Improvements**
 CIP Project #: **ADM00072**
 Program: **ADM Administrative/Facilities**

Requesting Dept: **COMM**
 Managing Dept.: **COMM**
 Project Manager: **Crosby, Sue**
 Sheet Completed by: **Beardslee, Mike**



Project Description

This project includes continued enhancements & improvements to Loudoun Water's online customer portal. These improvements generally include capabilities for customers to see additional meter and cost information, changes to presentation and layout to improve usability (including usability on mobile devices), improved and automated business process functionality, and security improvements to ensure the integrity of our customer's data.

Project Driver

Our customer portal was implemented in 2015 and is critical to our interactions with our customers. Our customers expect a fully functional online experience, and they expect their data to remain secure. This project provides for continued improvements to our customer portal to ensure it remains up-to-date and useful for our customers.

Additional Comments

Allocation in 2026 is for a major LWConnect portal upgrade, plus new functionality for move-in/move-out and backoffice functionality.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.95	(100%)

Estimate Method: **Industry Metrics**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	200	100	50	20	20	20	20	80	20	20	550
Subtotal	200	100	50	20	20	20	20	80	20	20	550
Outside Funding											
Net Cost	200	100	50	20	20	20	20	80	20	20	550

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		40		40		40	40			40		200

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

The Developer Portal project will create an interactive portal for use by the external Land Development (LD) community. Developers will be able to review project information and interact with Loudoun Water, including request documentation, provide notification to Loudoun Water during the LD process, and pay invoices online. The portal will provide additional interactive functionality for our development stakeholders.

Project Driver

Currently, the Loudoun Water website is used to manage all the Land Development processes; however, there are limitations in terms of its capabilities. The developer portal will streamline the process of interacting with SAP and Developers, saving time and effort for both internal staff and external stakeholders.

Additional Comments

In 2026, IT will evaluate the use of an application with inquiry forms capability for supporting Land Development processes, as well as the use of LWConnect for additional developer portal functionality.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.95	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	130	130	80								340
Subtotal	130	130	80								340
Outside Funding											
Net Cost	130	130	80								340

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
			50				50			30		130

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **Ashburn Campus Paving Replacement**
 CIP Project #: **ADM00087**
 Program: **ADM Administrative/Facilities**

Requesting Dept: **GEN SERV**
 Managing Dept.: **GEN SERV**
 Project Manager: **Clark, Austin**
 Sheet Completed by: **Clark, Austin**

Project Description

This project consists of milling and paving lots and roadways on the Ashburn campus, including BRWRF.

Project Driver

Regular maintenance, including sealing, is provided annually for all lots and roadways as needed. However, to keep the Ashburn campus in good operating condition, the asphalt must be replaced, and other areas must be paved over the next 10 years.

Additional Comments

2026 will see milling & paving interior roadways within the BRWRF fence from Building 20 to Building 40. Additionally, excavating, installing road base, and final paving of the gravel parking areas along Loudoun Water Way within the BRWRF fence.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	1	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.45	(100%)

Estimate Method: **Firm Price/Quote**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction	350	300	150	100	100	100	300	350	150	100	2,000
Land/Easements											
Equip/Other											
Subtotal	350	300	150	100	100	100	300	350	150	100	2,000
Outside Funding											
Net Cost	350	300	150	100	100	100	300	350	150	100	2,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
				11	75	189	75					350

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project is for the implementation of additional mobile field applications to support our field workers. Loudoun Water has over 100 field workers and plant operators that require access to a variety of information sources, databases, and applications in order to perform their job functions. Field tasks include responding to work orders to fix facilities, visiting customers and meters, inspecting new construction, and controlling w/ww operations.

Project Driver

Currently some work tasks are mobilized and automated using mobile devices and a mobile work order management system/platform. However, some work activities, such as easement mowing, still require the use of spreadsheets and manual data capturing methods to manage information.

Additional Comments

In 2026, investments will be made for a variety of minor enhancements to mobile work processes.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.75	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	120	100									220
Subtotal	120	100									220
Outside Funding											
Net Cost	120	100									220

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
		40			40			40				120

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

ADM00093 is a placeholder project to allow for miscellaneous, small, on-call engineering efforts related to capital projects.

Project Driver

Small tasks to be assigned as needed.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.9	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design	40	40	40	40	40	40	40	40	40	40	400
Construction											
Land/Easements											
Equip/Other											
Subtotal	40	40	40	40	40	40	40	40	40	40	400
Outside Funding											
Net Cost	40	40	40	40	40	40	40	40	40	40	400

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
4	2	3	4	4	5	5	4	4	3	2		40



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Cellular Booster Enhancements
 CIP Project #: ADM00096
 Program: ADM Administrative/Facilities

Requesting Dept: IT BS
 Managing Dept.: OT
 Project Manager: _Operations Technology
 Sheet Completed by: Beardslee, Mike

Project Description

A third party vendor has installed cellular phone signal booster systems in several Loudoun Water buildings at DCH, O&M, BRWRF, and Trap Rock. We will be continuing to enhance our system to support FirstNet public safety bands and also adding new locations identified as safety concerns by various business leaders at all locations.

Project Driver

Boosting cellular signals improves our ability to communicate from inside our buildings. A lack of cellular signal inside of a building is a potential emergency/safely issue. Cellular signals are periodically tested and improved for increased performance.

Additional Comments

This has been a multi-year/ongoing project. Targeted improvements in 2026 include additional boosters at remote sites (tanks), as well as enhancements to BRWRF buildings.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.2	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	100										100
Subtotal	100										100
Outside Funding											
Net Cost	100										100

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
			50			50						100

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Aerial Photo Acquisition
 CIP Project #: ADM00098
 Program: ADM Administrative/Facilities

Requesting Dept: IT BS
 Managing Dept.: IT BS
 Project Manager: Lees, Craig
 Sheet Completed by: Lees, Craig



Project Description

The purpose of this project is to secure necessary funding for the procurement of high-resolution aerial photography. We will load this imagery into our GIS for the company to use to support daily decision making. To contain costs, the imagery is focused on the Central System and a few Community Systems. We are able to access lower resolution imagery from the County and State free of charge, but this project will be used to fund an upgrade.

Project Driver

We purchased high-resolution imagery in 2017, 2020, 2022 and 2024 and have proven its business value to support our asset management program.

Additional Comments

2027 will include an evaluation of alternate imagery acquisition strategies beyond what the Commonwealth has to offer. 2028 will acquire the new imagery. This project has the endorsement of the GIS Steering Committee.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	4	(10%)
Total score	2.6	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	60		60		70		70		70		330
Subtotal	60		60		70		70		70		330
Outside Funding											
Net Cost	60		60		70		70		70		330

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
										60		60

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project is a placeholder for Project Resources (formerly PSO). The scope of work has changed, and work tasks are mostly expected to be completed internally and include the identification and development of PM resources.

Project Driver

Based on PM and leadership feedback after determination that the direction of PSO was not adding the value expected. PM needs were identified and the focus shifted to developing basic PM resource materials that assist with day-to-day project activities, productivity and improved success.

Additional Comments

The project will promote operational excellence as identified from the Loudoun Water's Strategic Plan.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	1	(20%)
4. Alignment	1	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.25	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	50										50
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal	50										50
Outside Funding											
Net Cost	50										50

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
								50				50

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

This project includes investments to upgrade and enhance our enterprise ESRI GIS mapping technologies, and investments in our SAP-integrated Spatialitics Asset Mapper (SAM) mapping tool.

Project Driver

This project is needed to ensure our mapping technologies are current and compatible with our enterprise applications and are able to support our evolving business requirements.

Additional Comments

In 2026, this project includes an enhancement on SAM and an upgrade of the GIS system to utilize Kubernetes container orchestration technology.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.25	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	30	30									60
Subtotal	30	30									60
Outside Funding											
Net Cost	30	30									60

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
						30						30

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

This project will include design and phased construction to modernize the complex and extensive process control and building automation networks at TRWTF and BRWRF. Planned improvements will allow Loudoun Water to leverage security practices and future proofing concepts such as high-speed fiber infrastructure, Software Defined Networking, Zero Trust, etc.

Project Driver

Current switch infrastructure at TRWTF is based on obsolete 2015 technology. The BRWRF Building Automation network switch infrastructure is also obsolete and no longer supported by the vendor. Other switches at BRWRF are considered mature in their lifecycle and will be very old by the time they are scheduled for replacement. After the planned upgrades, advanced network security features will be readily deployable.

Additional Comments

Construction and implementation phasing is proposed as Phase 1 -TRWTF; Phase 2 - BRWRF Building Automation; Phase 3 - BRWRF Process Control; Phase 4 - Advanced Features (informed by the design). Pending the Consultant design, advanced features could be implemented early.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	200	150	150	150							650
Subtotal	200	150	150	150							650
Outside Funding											
Net Cost	200	150	150	150							650

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
				100			100					200

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Project Management Info System (PMIS)
 CIP Project #: ADM00104
 Program: ADM Administrative/Facilities

Requesting Dept: PSO
 Managing Dept.: PSO
 Project Manager: TBD
 Sheet Completed by: Beardslee, Mike



Project Description

Development and implementation of a PMIS designed to collect, store, analyze project-related information including cost, schedule, documentation, scope, resources, contract info and project status reporting. Draft PMIS requirements were identified, RFI was issued in 2024 and Arcadis was awarded using a PWCSA contract rider. Project has been on-hold since May 2024 and is scheduled to move forward in the Fall of 2025.

Project Driver

After internal discussions and analysis, there was agreement that a custom PMIS would provide value and streamline project management activities across the organization by having project data in a single, centralized location.

Additional Comments

The project will promote operational excellence as identified in the Loudoun Water Strategic Plan.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.5	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	250	150									400
Subtotal	250	150									400
Outside Funding											
Net Cost	250	150									400

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
		20	30	30	30	30	20	30	30	30		250

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

The purpose of this project is to identify and map all easements, leases and license agreements (ELLA) where Loudoun Water is a signatory and develop a business process for managing future ELLA. A digital copy of all ELLA will be obtained from the County, and our records and the geographic area representing the ELLA will be digitized in GIS. Polygons will hyperlink to the underlying deed/plat.

Project Driver

This project is needed because we do not currently have a complete list of all our ELLAs, leading to confusion, mistakes and missed opportunities. Multiple business processes are negatively impacted by having an incomplete inventory.

Additional Comments

2026 funding will be used primarily to support the historical ELLA research and subsequent GIS data creation. 2027 funds are programmed to support the creation of easement maintenance polygons which will be derived from the easement polygons and used to support a digital/mobile workflow for routine easement maintenance (bushhogging).

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.9	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	1,500	300									1,800
Subtotal	1,500	300									1,800
Outside Funding											
Net Cost	1,500	300									1,800

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
100	100	100	100	100	200	100	200	100	200	100	100	1,500

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Inventory Application Enhancements
 CIP Project #: ADM00106
 Program: ADM Administrative/Facilities

Requesting Dept: O-PROGRAMS
 Managing Dept.: IT BS
 Project Manager: Peterson, Lori
 Sheet Completed by: Peterson, Lori



Project Description

This project is for the implementation of future upgrades to our warehouse/inventory application, "Innovative inventory," which is used to track and manage the inventory in our warehouse locations. This application was deployed in 2018 and upgraded in 2024.

Project Driver

This application requires continued updates to remain compatible with SAP S4HANA. It is expected that our software technology will move to the cloud in 2027 at a cost of \$100k to Loudoun Water.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.1	(100%)

Estimate Method: Design Phase Estimate

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other		100									100
Subtotal		100									100
Outside Funding											
Net Cost		100									100

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: New Inventory Warehouse Design
 CIP Project #: ADM00107
 Program: ADM Administrative/Facilities

Requesting Dept: O-PROGRAMS
 Managing Dept.: CAP PROGRAMS
 Project Manager: Parkinson, Paul
 Sheet Completed by: Parkinson, Paul

Project Description

Site selection, planning, design, and construction of a new inventory warehouse building.

Project Driver

O&M Warehouse, which was built in 2008 to support Line Maintenance, has reached >85% capacity. Pallets often block aisles or receiving/shipping until staff can find alternative storage locations, creating a safety issue. Materials are now stored in additional locations & field staff are starting to be impacted by having to go to multiple locations for unplanned materials. As the BRWRF expansion progresses, storage will become increasingly limited.

Additional Comments

ADM00036 evaluated O&M, Trap Rock, and Selma/Raspberry storage. Projections indicate that by 2030, inventory will increase by ~27% more units shipped & a growth of over 500% in SKUs, not including the BRWRF expansion. Recommended single consolidated facility is approximately 65K sq ft as a flow through facility where products would be received on one side and ship out on the opposite side.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.4	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	90										90
Design	250	1,480	20								1,750
Construction			2,480	8,920	2,600						14,000
Land/Easements											
Equip/Other											
Subtotal	340	1,480	2,500	8,920	2,600						15,840
Outside Funding											
Net Cost	340	1,480	2,500	8,920	2,600						15,840

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
50	27	13					53	31	37	54	75	340

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Water Research Foundation PFAS Study
 CIP Project #: ADM00109
 Program: ADM Administrative/Facilities

Requesting Dept: WTR RES
 Managing Dept.: WTR RES
 Project Manager: Schmitz, Bradley
 Sheet Completed by: Schmitz, Bradley



Project Description

Loudoun Water is Principal Investigator for the Water Research Foundation's project "Understanding the Factors Affecting PFAS Variability in the Potomac River Watershed." The collaboration with DWSP utility, MWCOG, universities, and consultants will measure PFAS levels throughout the Potomac River and determine factors (environmental, laboratory, sources) that contribute to PFAS variability.

Project Driver

The EPA's new regulations for PFAS compounds in drinking water have the potential to pose significant challenges to source water protection, treatment technology, process optimization, compliance monitoring, etc. However, a significant knowledge gap exists on 'how' PFAS data is interpreted and compared due to numerous factors that influence results. This project aims to address this knowledge gap and how the results can influence decision making, planning, and operations.

Additional Comments

This project is funded entirely by the Water Research Foundation. Loudoun Water is contracted by WRF for \$300,000 to perform the project. Loudoun Water is using these funds to subcontract sample collection, processing, and analysis.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	5	(10%)
Total score	4.55	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	120										120
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal	120										120
Outside Funding	120										120
Net Cost											

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
20	20	20	20	15	15	10						120



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Educational Features On Campus
 CIP Project #: ADM00110
 Program: ADM Administrative/Facilities

Requesting Dept: COMM
 Managing Dept.: COMM
 Project Manager: Crosby, Sue
 Sheet Completed by: Crosby, Sue

Project Description

The Aquary exhibit, located onsite at the Loudoun Water campus, was built in 2008. The exhibits and signage are showing their age, with faded images and text, and some technology reaching end-of-life. We have an opportunity to create updated content in a new, modern, more hands-on exhibit. The Aquary is the foundation of our entire educational program at LW and deserves a facelift.

Project Driver

Aging exhibits, new LW content - Trap Rock, Milestone Reservoir, quarries, Reservoir Park.

Additional Comments

With the interpretive areas at Reservoir Park completed in fall of 2024, complementary educational program at the Aquary would align with our outreach and engagement goals.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	1	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.8	(100%)

Estimate Method: Other

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	20										20
Design		240									240
Construction			300	80							380
Land/Easements											
Equip/Other											
Subtotal	20	240	300	80							640
Outside Funding											
Net Cost	20	240	300	80							640

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
					20							20

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Compliance Sample Management Solution
 CIP Project #: ADM00113
 Program: ADM Administrative/Facilities

Requesting Dept: WQ-LAB
 Managing Dept.: IT BS
 Project Manager: Cogswell, Catherine
 Sheet Completed by: Lees, Craig



Project Description

This project provides funding to upgrade our laboratory software. We plan to conduct an assessment of the industry and compare them with our requirements to identify a modern Laboratory Information Management Solution (LIMS). Once identified, implementation will proceed. Next, a new compliance database solution will be developed and implemented. Finally, a process and operational assessment will be conducted to identify opportunities to automate, optimize and streamline.

Project Driver

Our LIMS has a design flaw that creates a security risk. While we have temporarily 'patched' the problem, there is no permanent fix and one is desired. This project will modernize our LIMS and associated business processes.

Additional Comments

Funds are programmed in 2026 for purchase and implementation of a new solution. 2027 funds are for the replacement of the compliance database and process optimization.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.75	(100%)

Estimate Method: Other

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	150	150									300
Subtotal	150	150									300
Outside Funding											
Net Cost	150	150									300

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
				50			50			50		150

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Water Research Foundation Salinity Study
 CIP Project #: ADM00114
 Program: ADM Administrative/Facilities

Requesting Dept: WTR RES
 Managing Dept.: WTR RES
 Project Manager: Davis, Christina
 Sheet Completed by: Davis, Christina



Project Description

Loudoun Water is Principal Investigator for the Water Research Foundation's project, "Assessing Changing Salinity in Water Sources." This collaboration includes other utilities, consultants, universities, and government organizations like Maryland Dept of Env. Loudoun Water will lead the research team to gather salinity data in Potomac River, build a salinity model, and perform a case study analysis.

Project Driver

Freshwater salinization is impacting the region's primary source for drinking water (Potomac River). Salinity models and assessments have been created for the Occoquan Reservoir; however, the same evaluation has yet to be created for the Potomac River. The overall goal is to synthesize knowledge of salinity impacts on the river so that the region can consider effective solutions and management strategies for this challenge.

Additional Comments

This project is funded almost entirely by the Water Research Foundation. Loudoun Water will contract with the project team and provide cost share via contributions from staff salaries/time.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	4	(10%)
Total score	3.5	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	70	70	10								150
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal	70	70	10								150
Outside Funding	70	70									140
Net Cost			10								10

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
3	3	4	5	5	6	6	7	7	8	8	8	70



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Artificial Intel. and Business Intel. Enhancements
 CIP Project #: ADM00115
 Program: ADM Administrative/Facilities

Requesting Dept: IT BS
 Managing Dept.: IT BS
 Project Manager: Song, Yiman
 Sheet Completed by: Beardslee, Mike

Project Description

This project entails the creation and adoption of artificial intelligence (AI) technologies and capabilities to serve various business needs across the organization. AI technology platforms and business use cases will be identified in 2026, and the development of solutions will take place in 2026 and the following years. This project also entails the continued enhancement of our business intelligence platform, which goes hand-in-hand with our AI strategy.

Project Driver

The driver for this project is the rapid advancement of AI capabilities and the opportunities it presents to improve efficiency throughout the organization.

Additional Comments

In 2025, Loudoun Water established an AI "Center of Excellence" to support this initiative.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.5	(100%)

Estimate Method: Other

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Dev. Reimbursement											
Equip/Other	80	40	40	40							200
Subtotal	80	40	40	40							200
Outside Funding											
Net Cost	80	40	40	40							200

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
				40				40				80

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Meter Data Management System Migration
 CIP Project #: ADM00116
 Program: ADM Administrative/Facilities

Requesting Dept: FIELD SERV
 Managing Dept.: IT BS
 Project Manager: Lees, Craig
 Sheet Completed by: Beardslee, Mike



Project Description

This project entails the replacement of our current Meter Data Management System. This change aligns with our overall strategy to migrate our business systems to Software as a Service (SaaS) solutions to achieve operational efficiency, and it also consolidates our metering technology on the new platform, facilitating the adoption of additional functionality and ease of data integration.

Project Driver

The driver for this project is the need to move off of an aging technology platform and move to a platform that consolidates our technology architecture.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.75	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Dev. Reimbursement											
Equip/Other	240										240
Subtotal	240										240
Outside Funding											
Net Cost	240										240

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	120		30		30		30		30			240



BROAD RUN WATER RECLAMATION FACILITY (BRW)

2026-2035 CIP Section Index ~ BRW

Project Number	Project Name	Managing Division	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
BRW00023	BRWRF - General Improvements	MNT-PL	500	2,800	3,610	6,410
BRW00032	BRWRF Phase 3 Expansion (Planning & Design)	O-WST	11,990	15,980	0	15,980
BRW00033	BRWRF Roof Replacements	O-WST	750	1,920	0	1,920
BRW00034	Spare Parts BRW	FIN	100	500	500	1,000
BRW00039	BRWRF Regulatory Requirements	O-WST	0	0	0	0
BRW00040	BRWRF Structural Assessment and Repairs	O-WST	350	1,350	0	1,350
BRW00041	BRWRF Membrane Cassette Replacements	MNT-PL	0	0	12,000	12,000
BRW00042	BRWRF Electrical Condition Assessments and Repairs	O-WST	510	2,730	0	2,730
BRW00043	BRWRF Flow EQ and Solids Improvements	O-WST	240	17,120	0	17,120
BRW00045	BRWRF HVAC Condition Assessment and Repairs	O-WST	160	960	0	960
BRW00046	BRWRF Preliminary Treatment Improvements	O-WST	140	3,900	0	3,900
BRW00047	BRWRF Primary Treatment Improvements	O-WST	0	0	8,560	8,560
BRW00048	BRWRF P3 Pkg. 1 Sitework	O-WST	10,140	10,140	0	10,140
BRW00049	BRWRF P3 Pkg. 2 Liquids Solids Expansion	O-WST	0	237,470	203,930	441,400
BRW00050	BRWRF P3 Pkg. 3 20 MGD Expansion	O-WST	0	31,100	46,650	77,750
BRW00051	BRWRF P3 Pkg. 4 30 MGD Expansion	O-WST	0	0	0	0
BRW00052	BRWRF Building L, M, O Expansion	O-WST	1,640	38,980	0	38,980
BRW00053	Regional Biosolids Facility	O-WST	140	140	0	140
BRW00054	BRW OT Drive and Instrument Improvements	OT	500	600	0	600
BRW00055	BRW Valve Replacement Program	MNT-PL	430	2,050	0	2,050
Total	20 projects		\$27,590	\$367,740	\$275,250	\$642,990

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: **BRWRF - General Improvements**
 CIP Project #: **BRW00023**
 Program: **BRW Broad Run WRF**

Requesting Dept: **MNT-PL**
 Managing Dept.: **MNT-PL**
 Project Manager: **Fugaro, Nick**
 Sheet Completed by: **Fugaro, Nick**



Project Description

This project includes design, construction and materials for miscellaneous improvements and major R&R at the BRWRF.

Project Driver

Replacement of materials and equipment due to normal exhaustion and wear as required to extend the life of the asset.

Additional Comments

Regular review of Asset Management data is used to update and inform replacement schedules.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.5	(100%)

Estimate Method: **N/A**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	500	530	560	590	620	650	680	720	760	800	6,410
Land/Easements											
Equip/Other											
Subtotal	500	530	560	590	620	650	680	720	760	800	6,410
Outside Funding											
Net Cost	500	530	560	590	620	650	680	720	760	800	6,410

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
38	30	47	66	78	77	63	44	27	16	9	5	500



2026 - 2034 Loudoun Water Capital Improvement Plan

Project Name: **BRWRF Phase 3 Expansion (Planning & Design)**
 CIP Project #: **BRW00032**
 Program: **BRW Broad Run WRF**

Requesting Dept: **O-WST**
 Managing Dept.: **O-WST**
 Project Manager: **Zaepfel, Rick**
 Sheet Completed by: **Zaepfel, Rick**



Project Description

This Program includes planning and design efforts to expand the capacity of the BRWRF from 15 MGD to 30 MGD. A new biosolids treatment process (thermal drying) will be provided to enhance the quality of the finished solids product, increase flexibility of end use, and reduce the total volume of solids produced.

Project Driver

Additional capacity is required to treat increasing flows and loads due to increased wet weather through climate change, strengthening of wastewater due to water use efficiency, and continued development in the County. It is also necessary to provide additional capacity for unanticipated changes in wastewater flows to ensure that Loudoun Water is positioned to serve the community in the future.

Additional Comments

Please note that BRW00032 now includes only the BRWRF Phase 3 design expenditures for the 2026-2035 CIP. All construction expenditures (including CA Services) for Packages 1-4 are now found in BRW00048, 49, 50, and 51 respectively.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.85	(100%)

Estimate Method: **Design Phase Estimate**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design	11,990	3,820	170								15,980
Construction											
Land/Easements											
Equip/Other											
Subtotal	11,990	3,820	170								15,980
Outside Funding											
Net Cost	11,990	3,820	170								15,980

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
1,027	1,104	1,241	1,358	1,374	1,386	1,532	783	613	593	518	456	11,985

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **BRWRF Roof Replacements**
 CIP Project #: **BRW00033**
 Program: **BRW Broad Run WRF**

Requesting Dept: **O-WST**
 Managing Dept.: **O-WST**
 Project Manager: **Zaepfel, Rick**
 Sheet Completed by: **Zaepfel, Rick**

Project Description

This project includes the ongoing efforts to continue with roof replacements through the Broad Run Water Reclamation Facility.

Project Driver

These roofs have shown signs of excessive deterioration, resulting in numerous leaks. These roofs are nearing their end-of-life cycle and are out of warranty. Replacement is needed in order to keep the building system in proper functioning condition.

Additional Comments

After a recent roofing inspection it was determined that the roofs for Building 30, 31, and 81 will need to be replaced. Currently, we anticipate these roofs will need to be replaced starting 2026 with the design starting in late 2026.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.8	(100%)

Estimate Method: **Industry Metrics**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	150	60									210
Construction	600	650	460								1,710
Land/Easements											
Equip/Other											
Subtotal	750	710	460								1,920
Outside Funding											
Net Cost	750	710	460								1,920

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
22	19	34	55	84	110	121	110	84	55	34	19	747

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Spare Parts BRW
 CIP Project #: BRW00034
 Program: BRW Broad Run WRF

Requesting Dept: O-WST
 Managing Dept.: FIN
 Project Manager: Dehler, Sally
 Sheet Completed by: Dehler, Sally

Project Description

Place holder for SAP tracking of Spare equipment. Enables O&M to track which spares are purchased and Finance to track when spares are put in service to kick off depreciation.

Project Driver

Required financial tool.

Additional Comments

Spare equipment is any equipment >\$20,000 with a useful life of more than 1 year that will not be placed in service when received but rather held until needed. This includes both new equipment and existing equipment that is sent out for rebuild/repair that will be held until needed once it is received back.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	1	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.2	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	100	100	100	100	100	100	100	100	100	100	1,000
Subtotal	100	100	100	100	100	100	100	100	100	100	1,000
Outside Funding											
Net Cost	100	100	100	100	100	100	100	100	100	100	1,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		25			25			25			25	100

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project includes planning, design and construction of new unit processes at the BRWRF to achieve expected future regulatory requirements related to nutrient removal and PFAS. It is assumed that Ozone and Biologically Activated Filters (BAF) will be required to meet liquids stream nutrient removal limits, and Gasification/Pyrolysis will be required to treat PFAS in biosolids.

Project Driver

As flows increase to BRWRF, the fixed Wasteload Allocation (WLA) will require that Loudoun Water treat to increasingly stringent limits. Regulations regarding PFAS removal from biosolids are also expected.

Additional Comments

LW is working with regulators to determine the future WLA for BRWRF and the outcome of this coordination will determine needs for liquids stream nutrient removal. LW is tracking PFAS regulations and the technologies that have potential to reduce/remove PFAS. Costs are expected to extend beyond 2035.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.1	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal											
Outside Funding											
Net Cost											

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **BRWRF Structural Assessment and Repairs**
 CIP Project #: **BRW00040**
 Program: **BRW Broad Run WRF**

Requesting Dept: **O-WST**
 Managing Dept.: **O-WST**
 Project Manager: **Brobst-Whitcomb, Noelle**
 Sheet Completed by: **Brobst-Whitcomb, Noelle**

Project Description

This work will include inspection, rehabilitation, and coating of existing structures at BRWRF.

Project Driver

Recent work inside tanks has shown significant concrete deterioration. Repair and coating of these structures will extend the useful life of the assets.

Additional Comments

2026 includes having a condition assessment performed on existing structures and will commence on structural repairs. Additionally, this project will coordinate with the Preliminary and Primary Treatment R&R.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3	(100%)

Estimate Method: **Industry Metrics**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	150	50	50	50	50						350
Construction	200	200	200	200	200						1,000
Land/Easements											
Equip/Other											
Subtotal	350	250	250	250	250						1,350
Outside Funding											
Net Cost	350	250	250	250	250						1,350

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
5	18	54	54	19	27	20	30	37	37	30	19	350



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **BRWRF Membrane Cassette Replacements**
 CIP Project #: **BRW00041**
 Program: **BRW Broad Run WRF**

Requesting Dept: **O-WST**
 Managing Dept.: **MNT-PL**
 Project Manager: **Fugaro, Nick**
 Sheet Completed by: **Fugaro, Nick**

Project Description

This project includes the replacement of membrane filtration cassettes at BRWRF.

Project Driver

After the completion of the BRWRF Phase 2 Expansion, all 12 membrane filtration trains were upgraded. The expected useful life of the new membrane cassettes is approximately 10-12 yrs.

Additional Comments

2033 commences replacement of membrane cassettes for Membrane Trains 1-5.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.85	(100%)

Estimate Method: **Industry Metrics**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction								6,000	6,000		12,000
Land/Easements											
Equip/Other											
Subtotal								6,000	6,000		12,000
Outside Funding											
Net Cost								6,000	6,000		12,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **BRWRF Electrical Condition Assessments and Re**
 CIP Project #: **BRW00042**
 Program: **BRW Broad Run WRF**

Requesting Dept: **MNT-PL**
 Managing Dept.: **O-WST**
 Project Manager: **Brobst-Whitcomb, Noelle**
 Sheet Completed by: **Brobst-Whitcomb, Noelle**

Project Description

This project will include performing condition assessments, design, and construction for the necessary upgrades to the electrical system at BRWRF.

Project Driver

Several pieces of major electrical equipment at Broad Run Water Reclamation Facility are beginning to show signs for repair and replacement.

Additional Comments

This project will start condition assessments of the existing emergency generators and site transformers.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3	(100%)

Estimate Method: **N/A**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design	60	60	60	60	60						300
Construction	450	450	630	450	450						2,430
Land/Easements											
Equip/Other											
Subtotal	510	510	690	510	510						2,730
Outside Funding											
Net Cost	510	510	690	510	510						2,730

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
11	29	34	15	29	52	77	89	77	52	29	16	510

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: **BRWRF Flow EQ and Solids Improvements**
 CIP Project #: **BRW00043**
 Program: **BRW Broad Run WRF**

Requesting Dept: **O-WST**
 Managing Dept.: **O-WST**
 Project Manager: **Kaberline, Jen**
 Sheet Completed by: **Kaberline, Jen**



Project Description

Project includes 1) flow monitoring and modification of existing equalization piping and valves to effectively manage peak flows to the Potomac Interceptor, 2) installation of a foam and scum buster system in the anaerobic digesters to maximize the usable volume in the digesters, and 3) a structural inspection and repairs as needed to the interior of the digesters. Miscellaneous rehab and reinvestment in Flow EQ and Solids areas will be addressed.

Project Driver

Peak hour flows to the Potomac Interceptor are increasing. This project will automate peak flow shaving to the Potomac Interceptor to ensure that Loudoun Water stays within contractual limits for peak hour flows. This project will also maximize the effective capacity of the anaerobic digesters through installation of equipment that will reduce foam that accumulates in the digesters.

Additional Comments

Structural inspection of the anaerobic digesters and spot repairs as needed have been added to the scope of this project. This is necessary given the age of the digesters and the need to operate all four digesters within the next five years to accommodate increasing flows to BRWRF.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.8	(100%)

Estimate Method: **Firm Price/Quote**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	240										240
Construction		9,200	7,680								16,880
Land/Easements											
Equip/Other											
Subtotal	240	9,200	7,680								17,120
Outside Funding											
Net Cost	240	9,200	7,680								17,120

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
65	55	55	45	20								240



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: **BRWRF HVAC Condition Assessment and Repairs**
 CIP Project #: **BRW00045**
 Program: **BRW Broad Run WRF**

Requesting Dept: **MNT-PL**
 Managing Dept.: **O-WST**
 Project Manager: **Brobst-Whitcomb, Noelle**
 Sheet Completed by: **Brobst-Whitcomb, Noelle**



Project Description

This work will include condition assessments, design, and construction of existing HVAC equipment at BRWRF.

Project Driver

The existing chiller system that serves Building L, M, and O is nearing the end of its useful life, as the replacement equipment and parts for the system are being discontinued within the next several years.

Additional Comments

2026 include costs for initial site condition assessments and kick-off of design.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3	(100%)

Estimate Method: **N/A**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	100	100	100	100	100						500
Construction	60	100	100	100	100						460
Land/Easements											
Equip/Other											
Subtotal	160	200	200	200	200						960
Outside Funding											
Net Cost	160	200	200	200	200						960

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
3	8	23	35	23	11	3	4	7	11	15	16	159

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: **BRWRF Preliminary Treatment Improvements**
 CIP Project #: **BRW00046**
 Program: **BRW Broad Run WRF**

Requesting Dept: **O-WST**
 Managing Dept.: **O-WST**
 Project Manager: **Kaberline, Jen**
 Sheet Completed by: **Kaberline, Jen**



Project Description

Project includes replacing the existing coarse screens, modifying the connections between the screens and washer/compactors to accommodate the new cleaning system, and replacing the screenings conveyors.

Project Driver

The existing screens are approximately 17 years of age, and the washing system that is integral to the screen is not functioning properly. This causes carryover of inert material which ultimately ends up in the digesters, causing clogging in the heat exchangers and mixing system. The coarse screens are critical to protecting downstream equipment.

Additional Comments

Structural inspection and repairs included under BRW00040 will be done in conjunction with the mechanical equipment replacement work.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method: **Design Phase Estimate**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	140	130									270
Construction		730	2,900								3,630
Land/Easements											
Equip/Other											
Subtotal	140	860	2,900								3,900
Outside Funding											
Net Cost	140	860	2,900								3,900

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
					13	14	15	16	24	25	28	135

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **BRWRF Primary Treatment Improvements**
 CIP Project #: **BRW00047**
 Program: **BRW Broad Run WRF**

Requesting Dept: **O-WST**
 Managing Dept.: **O-WST**
 Project Manager: **Kaberline, Jen**
 Sheet Completed by: **Kaberline, Jen**

Project Description

Project includes retrofit of two Primary Clarifiers that are original to BRWRF with new mechanical equipment.

Project Driver

Equipment age and condition.

Additional Comments

Project is tied to BRW00040.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method: **Design Phase Estimate**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design						450	110				560
Construction							1,920	6,080			8,000
Land/Easements											
Equip/Other											
Subtotal						450	2,030	6,080			8,560
Outside Funding											
Net Cost						450	2,030	6,080			8,560

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **BRWRF P3 Pkg. 1 Sitework**
 CIP Project #: **BRW00048**
 Program: **BRW Broad Run WRF**

Requesting Dept: **O-WST**
 Managing Dept.: **O-WST**
 Project Manager: **Brobst-Whitcomb, Noelle**
 Sheet Completed by: **Zaepfel, Rick**

Project Description

This project includes the first Phase 3 construction package to expand the capacity of the BRWRF from 15 MGD to 30 MGD. This construction package will include the sitework, site security, and stormwater improvements necessary for the future plant expansion.

Project Driver

Additional capacity is required to treat increasing flows and loads due to increased wet weather through climate change, strengthening of wastewater due to water efficiency, and continued development in the County. It is also necessary to provide additional capacity for unanticipated changes in wastewater flows to ensure that Loudoun Water is positioned to serve the community in the future.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.85	(100%)

Estimate Method: **Design Phase Estimate**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	10,140										10,140
Land/Easements											
Equip/Other											
Subtotal	10,140										10,140
Outside Funding											
Net Cost	10,140										10,140

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
1,015	1,238	1,403	1,465	1,403	1,238	1,015	784	578				10,139



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **BRWRF P3 Pkg. 2 Liquids Solids Expansion**
 CIP Project #: **BRW00049**
 Program: **BRW Broad Run WRF**

Requesting Dept: **O-WST**
 Managing Dept.: **O-WST**
 Project Manager: **Zaepfel, Rick**
 Sheet Completed by: **Zaepfel, Rick**

Project Description

This project includes the second Phase 3 construction package to expand the capacity of the BRWRF from 15 MGD to 30 MGD. This construction package will include new liquids and solids facilities to handle increased nutrient loads and produce Class A Biosolids, increasing key processes to a capacity greater than 15 MGD.

Project Driver

Additional capacity is required to treat increasing flows and loads due to increased wet weather through climate change, strengthening of wastewater due to water efficiency, and continued development in the county. It is also necessary to provide additional capacity for unanticipated changes in wastewater flows to ensure that Loudoun Water is positioned to serve the community in the future.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.85	(100%)

Estimate Method: **Design Phase Estimate**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction		48,970	58,800	66,080	63,620	73,710	68,800	61,420			441,400
Land/Easements											
Equip/Other											
Subtotal		48,970	58,800	66,080	63,620	73,710	68,800	61,420			441,400
Outside Funding											
Net Cost		48,970	58,800	66,080	63,620	73,710	68,800	61,420			441,400

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **BRWRF P3 Pkg. 3 20 MGD Expansion**
 CIP Project #: **BRW00050**
 Program: **BRW Broad Run WRF**

Requesting Dept: **O-WST**
 Managing Dept.: **O-WST**
 Project Manager: **Zaepfel, Rick**
 Sheet Completed by: **Zaepfel, Rick**

Project Description

This project includes the third Phase 3 construction package to expand the capacity of the BRWRF from 15 MGD to 30 MGD. This construction package will include the expansion facilities and addition of equipment within existing facilities to provide treatment capacity up to 20 MGD.

Project Driver

Additional capacity is required to treat increasing flows and loads due to increased wet weather through climate change, strengthening of wastewater due to water efficiency, and continued development in the County. It is also necessary to provide additional capacity for unanticipated changes in wastewater flows to ensure that Loudoun Water is positioned to serve the community in the future.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.85	(100%)

Estimate Method: **Design Phase Estimate**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction				11,660	19,440	19,440	15,550	11,660			77,750
Land/Easements											
Equip/Other											
Subtotal				11,660	19,440	19,440	15,550	11,660			77,750
Outside Funding											
Net Cost				11,660	19,440	19,440	15,550	11,660			77,750

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project includes the fourth and final Phase 3 construction package to expand the capacity of the BRWRF from 15 MGD to 30 MGD. This construction package will include the expansion of new and existing facilities and new tertiary treatment and disinfection to provide a treatment capacity up to 30 MGD.

Project Driver

Additional capacity is required to treat increasing flows and loads due to increased wet weather through climate change, strengthening of wastewater due to water efficiency, and continued development in the County. It is also necessary to provide additional capacity for unanticipated changes in wastewater flows to ensure that Loudoun Water is positioned to serve the community in the future.

Additional Comments

Although spending is not shown in the 2026 - 2035 10-Year CIP, the anticipated construction cost of the Package 4 Project is around \$500M.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.85	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal											
Outside Funding											
Net Cost											

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: BRWRF Building L, M, O Expansion
 CIP Project #: BRW00052
 Program: BRW Broad Run WRF

Requesting Dept: O-WST
 Managing Dept.: O-WST
 Project Manager: Collazo, Ivan
 Sheet Completed by: Collazo, Ivan

Project Description

This project includes the expansion and refurbishment of the BRWRF Administration Buildings (Lab, Maintenance, and Operations) to accommodate future Operations and Maintenance needs. A separate Lab Building will be constructed to accommodate future Lab needs.

Project Driver

Provide additional workspace needs based on the growth and expansion of the Broad Run Water Reclamation Facility and the staffing study performed in 2024 and a PER conducted in 2025.

Additional Comments

2026 will include the issuance of an RFP for the selection of an architectural firm to start design of the LMO expansions and renovations later in the year.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.75	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	1,640	1,740									3,380
Construction			15,520	15,520	4,560						35,600
Land/Easements											
Equip/Other											
Subtotal	1,640	1,740	15,520	15,520	4,560						38,980
Outside Funding											
Net Cost	1,640	1,740	15,520	15,520	4,560						38,980

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
						114	96	169	280	423	557	1,639

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

This project is a regional collaboration between Loudoun Water, AlexRenew, Fauquier County, Prince William Water, and UOSA to study long-term regional alternatives to address emerging contaminants of concern affecting the land application of biosolids.

Project Driver

The regulatory landscape, on both a federal and state level, has provided a large level of uncertainty as to the future of land application of biosolids due to emerging contaminants of concern with limited scientific understanding and pressures for aggressive regulation.

Additional Comments

The initial phase of this study will evaluate alternatives for regional management of biosolids including advanced processing technologies, a siting study, evaluation of funding options, and governance structures for a new regional entity.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.65	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	140										140
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal	140										140
Outside Funding											
Net Cost	140										140

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
26	25	25	23	21	20							140

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: BRW OT Drive and Instrument Improvements
 CIP Project #: BRW00054
 Program: BRW Broad Run WRF

Requesting Dept: OT
 Managing Dept.: OT
 Project Manager: _Operations Technology
 Sheet Completed by: Krapf, Andy



Project Description

Broad Run WRF has an extensive installation base of advanced process control devices, including variable frequency drives (VFDs), flowmeters, and various analytical equipment. This project provides funding for the replacement of equipment/systems that are original to commissioning in 2007. Many of these are obsolete and can longer be repaired or replaced with the same equipment.

Project Driver

Industrial equipment, such as VFDs and instrumentation, typically has a 15-20 year lifecycle. Originally installed devices now have 18 years of use and are starting to experience failures, necessitating a proactive replacement strategy. These devices typically have a 6-15 week lead times and can typically be replaced by LW personnel or utilizing mechanical contractors.

Additional Comments

In 2024 and 2025, it was noted that numerous devices were experiencing increased failure rates. Because there are multiple devices in similar chemistry or operational situations, we are approaching replacements proactively in order to minimize potential outages or operational disruptions.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.85	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Dev. Reimbursement											
Equip/Other	500	100									600
Subtotal	500	100									600
Outside Funding											
Net Cost	500	100									600

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		150		150		100		100				500

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **BRW Valve Replacement Program**
 CIP Project #: **BRW00055**
 Program: **BRW Broad Run WRF**

Requesting Dept: **MNT-PL**
 Managing Dept.: **MNT-PL**
 Project Manager: **Fugaro, Nick**
 Sheet Completed by: **Fugaro, Nick**

Project Description

This project includes design, construction, and materials for replacements of large diameter valves and actuators.

Project Driver

Replacement of materials and equipment due to normal exhaustion and wear is required to extend the life of the asset.

Additional Comments

Regular review of Asset Management data is used to update and inform replacement schedules.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.5	(100%)

Estimate Method: **Other**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction	430	810	810								2,050
Dev. Reimbursement											
Equip/Other											
Subtotal	430	810	810								2,050
Outside Funding											
Net Cost	430	810	810								2,050

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
33	25	40	56	67	66	54	38	24	14	8	5	430



COMMUNITY SYSTEMS (COM)

2026-2035 CIP Section Index ~ COM

Project Number	Project Name	Managing Division	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
COM00046	Creighton WWTP Connect to Central	PLANNING	0	0	50	50
COM00049	Comm. System - General Improvements	O-COMSYS	120	520	500	1,020
COM00060	ComSys Ammonia Removal Evaluation	O-WST	0	12,350	2,450	14,800
COM00061	Paeonian Springs Water & Sewer (County)	CAP PROGRAMS	1,200	2,400	0	2,400
COM00062	Rokeby WTP Generator Upgrades	CAP PROGRAMS	0	0	650	650
COM00063	Waterford Water System (County)	CAP PROGRAMS	500	800	0	800
COM00069	Spare Parts COM	FIN	20	100	100	200
COM00070	Howardsville WWTP (County)	CAP PROGRAMS	290	1,840	0	1,840
COM00071	Willisville WWTP Improvements	O-WST	100	100	0	100
COM00072	St Louis Water Study (County)	PLANNING	60	150	0	150
COM00074	Lucketts ES WWTP Upgrades (County)	O-Remote Fac	250	750	0	750
COM00076	ComSys Ammonia Removal PDB	O-WST	20,020	60,020	0	60,020
COM00078	Rokeby to Central (Water)	PLANNING	0	0	50	50
COM00079	Beacon Hill New Water Production Well	CAP PROGRAMS	320	4,780	0	4,780
COM00081	Selma WTP Membrane Replacement	O-COMSYS	0	110	0	110
COM00083	Comm Sys Radio to Fiber Migration	CAP PROGRAMS	140	3,220	0	3,220
COM00084	Selma Water Distribution PRV Remote Monitoring	O-WST	120	260	0	260
COM00085	Selma Source Water Iron & Manganese Evaluation	O-WST	100	640	0	640
COM00086	Willisville Electrical & OT Upgrades	O-WST	140	660	0	660
COM00087	Beacon Hill Well C Electrical Upgrades	O-WST	50	110	0	110
COM00088	St. Louis WWPS New Structure	O-WST	50	50	0	50
Total	21 projects		\$23,480	\$88,860	\$3,800	\$92,660

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project includes a feasibility study to identify facilities, issues and costs associated with connecting the Creighton Farms wastewater treatment facility to the central wastewater collection system. Design and construction of required improvements to follow if recommended.

Project Driver

Loudoun Water is reviewing options for alternative configurations for wastewater service; connecting the facility to the central wastewater system is assumed to be a more economical option in the long term.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.35	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning										50	50
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal										50	50
Outside Funding											
Net Cost										50	50

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project includes design, construction and materials for miscellaneous improvements and repair & replacement projects at various community system facilities.

Project Driver

As systems age, upgrades are required to replace equipment at the end of its service life and to allow maintenance on discontinued or no longer supported equipment.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.5	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	120	100	100	100	100	100	100	100	100	100	1,020
Subtotal	120	100	100	100	100	100	100	100	100	100	1,020
Outside Funding											
Net Cost	120	100	100	100	100	100	100	100	100	100	1,020

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
10	10	10	10	10	10	10	10	10	10	10	10	120

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **ComSys Ammonia Removal Evaluation**
 CIP Project #: **COM00060**
 Program: **COM Community Systems**

Requesting Dept: **O-Remote Fac**
 Managing Dept.: **O-WST**
 Project Manager: **TBD**
 Sheet Completed by: **Downes, Kinsey**

Project Description

This project provides upgrades to the Aldie and Raspberry Fall WWTPs to meet more stringent, forthcoming ammonia effluent standards.

Project Driver

DEQ is planning to issue ammonia removal regulations for surface water discharge plants with a capacity less than 0.5 MGD starting with the 2023 permit renewal cycle. Improvements are required at five of Loudoun Water's Community WWTPs. Aldie and Raspberry Falls permit renewals will occur on a similar schedule and are grouped as this single project for efficient delivery.

Additional Comments

This project combines prior COM00037, COM00053, COM00055 and COM00057 to design and construct upgrades based on permit renewal dates and assuming a minimal grace period from DEQ. Waterford, St. Louis and Elysian Heights WWTPs will be required to comply with the ammonia removal regulations within a similar time period, and the work was grouped to a single project to be delivered via Progressive Design Build COM00076.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.9	(100%)

Estimate Method: **Industry Metrics**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning		200									200
Design			350	350	250						950
Construction				5,600	5,600	350	2,100				13,650
Land/Easements											
Equip/Other											
Subtotal		200	350	5,950	5,850	350	2,100				14,800
Outside Funding											
Net Cost		200	350	5,950	5,850	350	2,100				14,800

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Paeonian Springs Water & Sewer (County)
 CIP Project #: COM00061
 Program: COM Community Systems

Requesting Dept: CAP PROGRAMS
 Managing Dept.: CAP PROGRAMS
 Project Manager: Poudel, Amulya
 Sheet Completed by: Poudel, Amulya



Project Description

Design and construction of a new community water and sewer system for the Paeonian Springs area. The project will create a new service area and construct infrastructure to provide water and wastewater to the area. This is a Loudoun County-initiated project, and Loudoun Water is supporting the County in accordance with the agreement between the County W/WW program and Loudoun Water.

Project Driver

The feasibility study recommended a public water and wastewater system in the Paeonian Springs area to address public health concerns and community viability concerns due to water quality issues and on-site sewer disposal issues. In 2024, the County BOS approved proceeding with the design phase of the project.

Additional Comments

The County will reimburse design costs, construction costs, and Loudoun Water staff efforts. Related projects - COM00051 (Feasibility Study completed 2019 and subsequent Tech Memos in 2023) and COM00063. Loudoun County allocated ARPA funds to the project.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	5	(10%)
Total score	3.35	(100%)

Estimate Method: Feasibility or Study

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	1,200	1,200									2,400
Construction											
Land/Easements											
Equip/Other											
Subtotal	1,200	1,200									2,400
Outside Funding	1,200	1,200									2,400
Net Cost											

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
100	100	100	100	100	100	100	100	100	100	100	100	1,200

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Rokeby WTP Generator Upgrades
 CIP Project #: COM00062
 Program: COM Community Systems

Requesting Dept: O-COMSYS
 Managing Dept.: CAP PROGRAMS
 Project Manager: TBD
 Sheet Completed by: Downes, Kinsey

Project Description

This project is the replacement of the existing emergency generator at Rokeby WTP with a unit capable of powering the entire facility.

Project Driver

The existing emergency generator is not sized to operate the entire WTP. During an emergency, staff must decide what components to power. For example, they have to decide between powering the local well or distribution system booster pump.

Additional Comments

Project schedule will be revisited to incorporate findings from COM00065 ComSys Water Master Plan. Project costs reflect a larger electrical and controls upgrade.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	1	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.65	(100%)

Estimate Method: Feasibility or Study

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design						150					150
Construction							250	250			500
Land/Easements											
Equip/Other											
Subtotal						150	250	250			650
Outside Funding											
Net Cost						150	250	250			650

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Waterford Water System (County)
 CIP Project #: COM00063
 Program: COM Community Systems

Requesting Dept: CAP PROGRAMS
 Managing Dept.: CAP PROGRAMS
 Project Manager: Poudel, Amulya
 Sheet Completed by: Poudel, Amulya



Project Description

Design and construction of a new community water and sewer system for the Village of Waterford. The project will create a new service area and construct infrastructure to provide water and wastewater to the area. This is a Loudoun County-initiated project, and Loudoun Water is supporting the County in accordance with the agreement between the County W/WW program and Loudoun Water.

Project Driver

The feasibility study confirmed the need for a public water system in the Village of Waterford to address public health concerns and community viability concerns due to groundwater yield/quality issues. In 2024, the County BOS approved proceeding with the design phase of the project and funded the design phase of the project.

Additional Comments

The County will reimburse design costs, construction costs, and Loudoun Water staff efforts. Related project - COM00051 (Feasibility Study completed 2022) and COM00063. The County BOS directed staff to explore the feasibility of joint systems that can serve the water and wastewater needs of both Paeonian Springs and Waterford.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	5	(10%)
Total score	3.35	(100%)

Estimate Method: Feasibility or Study

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design	500	300									800
Construction											
Land/Easements											
Equip/Other											
Subtotal	500	300									800
Outside Funding	500	300									800
Net Cost											

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
50	50	50	50	25	25	50	50	50	50	25	25	500

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Spare Parts COM
 CIP Project #: COM00069
 Program: COM Community Systems

Requesting Dept: COMM
 Managing Dept.: FIN
 Project Manager: Dehler, Sally
 Sheet Completed by: Dehler, Sally

Project Description

Placeholder for SAP tracking of Spare Equipment. Enables O&M to track which spares are purchased and Finance to track when spares are put in service to kick off depreciation.

Project Driver

Required financial tool.

Additional Comments

Spare equipment is any equipment >\$20,000 with a useful life of more than 1 year that will not be placed in service when received but rather held until needed. This includes both new equipment and existing equipment that is sent out for rebuild/repair that will be held until needed once it is received back.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	1	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.2	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	20	20	20	20	20	20	20	20	20	20	200
Subtotal	20	20	20	20	20	20	20	20	20	20	200
Outside Funding											
Net Cost	20	20	20	20	20	20	20	20	20	20	200

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
					10						10	20

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project includes the evaluation, design and construction of the Howardsville WWTP and drainfield disposal system. This project follows construction of the collection system in 2022.

Project Driver

Loudoun County identified Howardsville as a community at risk and in need of a community wastewater treatment solution in the County's capital needs assessment.

Additional Comments

This project is 100% reimbursed by Loudoun County funds. Loudoun Water is working with the County to provide a suitable solution.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	5	(10%)
Total score	4.5	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	240										240
Construction	50	1,550									1,600
Land/Easements											
Equip/Other											
Subtotal	290	1,550									1,840
Outside Funding	290	1,550									1,840
Net Cost											

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
32	40	43	40	32	23	16	10				48	284



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Willisville WWTP Improvements
 CIP Project #: COM00071
 Program: COM Community Systems

Requesting Dept: O-COMSYS
 Managing Dept.: O-WST
 Project Manager: Pyles, Carly
 Sheet Completed by: Pyles, Carly



Project Description

Project will design and construct new treatment tankage and processes equipment. Equipment will be sized to increase facility resiliency to varying influent flows and loads. Process enhancements include: equalization tank(s) with time dosing of the septic, Fixed Activated Sludge Treatment (FAST) tanks, and recirculation of treated effluent from the dripfield pump tank to the new EQ tank.

Project Driver

Variable flows and loads require upgrades to increase the reliability of the Willisville WWTP and maintain level-of-service standards. Upgrades are required to meet effluent permit limits of total Nitrogen and BOD5.

Additional Comments

Design completed in FY2024. Construction began in 4Q2025.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction	100										100
Land/Easements											
Equip/Other											
Subtotal	100										100
Outside Funding											
Net Cost	100										100

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
100												100

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

Planning for the design and construction of a new water distribution and treatment solution for the community of St Louis.

Project Driver

Loudoun Water is assisting Loudoun County as a part of the County's needs assessment program.

Additional Comments

This project is initially funded by Loudoun Water and reimbursed by Loudoun County. This may lead to a construction project in future years.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	5	(10%)
Total score	3.35	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	60	90									150
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal	60	90									150
Outside Funding	60	90									150
Net Cost											

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
						10	10	10	10	10	10	60



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Lucketts ES WWTP Upgrades (County)
 CIP Project #: COM00074
 Program: COM Community Systems

Requesting Dept: O-Remote Fac
 Managing Dept.: O-Remote Fac
 Project Manager: Stanekzai, Mariam
 Sheet Completed by: Stanekzai, Mariam



Project Description

Evaluation of an existing WWTP and its associated collection system. Planned improvements include increasing WWTP capacity to match permitted capacity, site security upgrades, and buffering requirements.

Project Driver

Loudoun Water is assisting Loudoun County to determine if the Lucketts ES WWTP and collection system should be owned and operated by Loudoun Water due to the number and type of service connections.

Additional Comments

This project is initially funded by Loudoun Water and reimbursed by Loudoun County. Project costs were derived from Lucketts Elementary School Wastewater Treatment Facility Evaluation TM1 (April 2023).

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	5	(10%)
Total score	3.7	(100%)

Estimate Method: Feasibility or Study

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	50										50
Construction	200	500									700
Land/Easements											
Equip/Other											
Subtotal	250	500									750
Outside Funding	250	500									750
Net Cost											

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
25	25							50	50	50	50	250

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: ComSys Ammonia Removal PDB
 CIP Project #: COM00076
 Program: COM Community Systems

Requesting Dept: O-COMSYS
 Managing Dept.: O-WST
 Project Manager: TBD
 Sheet Completed by: Downes, Kinsey



Project Description

This project provides upgrades to the Elysian Heights, Waterford, and St. Louis WWTPs to meet pending ammonia removal regulations. The project will be delivered via Progressive Design Build (PDB).

Project Driver

This project is required for regulatory compliance with pending ammonia removal standards for small WWTPs (less than 0.5 mgd capacity) that discharge to surface waters. Standards will start with 2023 permit renewal cycles, with a five year compliance schedule expected from the time of permit renewal.

Additional Comments

Improvements to Raspberry Falls and Aldie WWTPs for regulatory compliance with ammonia removal standards will be delivered under COM00060.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.9	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	20										20
Construction	20,000	20,000	20,000								60,000
Land/Easements											
Equip/Other											
Subtotal	20,020	20,000	20,000								60,020
Outside Funding											
Net Cost	20,020	20,000	20,000								60,020

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
20				2,000	2,000	2,000	2,000	3,000	3,000	3,000	3,000	20,020



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

Planning level evaluation for connecting the Rokeby Water System to Loudoun Water's Central System.

Project Driver

Rokeby is adjacent to the Landfill Service District and the closest community system to our Central distribution system. There would be an operational benefit connecting it to the Central System and eliminating a Community System, as well as cost savings and improved reliability.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	1	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.9	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning										50	50
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal										50	50
Outside Funding											
Net Cost										50	50

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Beacon Hill New Water Production Well
 CIP Project #: COM00079
 Program: COM Community Systems

Requesting Dept: O-Remote Fac
 Managing Dept.: CAP PROGRAMS
 Project Manager: Hollida, Jaron
 Sheet Completed by: Hollida, Jaron



Project Description

This project includes the permitting, development, and system upgrades required to connect a new groundwater well to the system.

Project Driver

Source water resiliency.

Additional Comments

Project was identified through the Groundwater Monitoring Program and COM00077 - Source Water Review.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.15	(100%)

Estimate Method: Feasibility or Study

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	320	100									420
Construction		350	3,820	190							4,360
Land/Easements											
Equip/Other											
Subtotal	320	450	3,820	190							4,780
Outside Funding											
Net Cost	320	450	3,820	190							4,780

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
13	6	9	13	18	24	31	37	42	43	42	37	315

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

Selma WTP membrane modules have a life expectancy of 7-10 years. This project is the replacement of the existing modules to keep the system compliant.

Project Driver

Process R&R to keep the facility operational.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other			110								110
Subtotal			110								110
Outside Funding											
Net Cost			110								110

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Comm Sys Radio to Fiber Migration
 CIP Project #: COM00083
 Program: COM Community Systems

Requesting Dept: OT
 Managing Dept.: CAP PROGRAMS
 Project Manager: Tenzin, Jigme
 Sheet Completed by: Tenzin, Jigme



Project Description

Replace existing spread spectrum radio systems between water treatment plants at Selma, Rokeby, and Raspberry and their associated wells. Project includes all conduit, fiber, handholes, and other associated items. Completion of this project will increase reliability, allowing for monitoring by security systems and improving overall cybersecurity of the facilities.

Project Driver

These sites utilize outdated spread spectrum radio technology that is both slow and susceptible to interference. Spread spectrum radios are no longer supported by the manufacturer, requiring a redesign of the communications capabilities at these facilities. It is not as secure as a dedicated fiber network. Replacing these radio systems is inline with the work that was previously completed at Beacon Hill in 2019.

Additional Comments

Selma Water has approximately 20,000 linear feet, Rokeby is about 11,150 linear feet, and Raspberry about 2,000 linear feet. Fiber would be encased in 2" conduit and terminated at both ends within termination enclosures. One special condition at Rokeby is the need to go under the creek to reach one of the wells. Cost estimation based on similar worked completed Beacon Hill in 2019 with a 5% cost escalation.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.65	(100%)

Estimate Method: Other

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design	140										140
Construction		1,500	1,580								3,080
Land/Easements											
Equip/Other											
Subtotal	140	1,500	1,580								3,220
Outside Funding											
Net Cost	140	1,500	1,580								3,220

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
19	10	14	17	19	19	17	14	11				140

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Selma Water Distribution PRV Remote Monitorir
 CIP Project #: COM00084
 Program: COM Community Systems

Requesting Dept: O-Remote Fac
 Managing Dept.: O-WST
 Project Manager: TBD
 Sheet Completed by: Downes, Kinsey



Project Description

This project is the infrastructure upgrades needed to remotely monitor the existing PRV vaults.

Project Driver

Remote monitoring allows offsite staff to understand how the system performs and provides the opportunity for advanced alarm conditions.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.8	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design	100										100
Construction	20	140									160
Land/Easements											
Equip/Other											
Subtotal	120	140									260
Outside Funding											
Net Cost	120	140									260

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
20	20	20	20	20						10	10	120



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Selma Source Water Iron & Manganese Evaluatio
 CIP Project #: COM00085
 Program: COM Community Systems

Requesting Dept: O-Remote Fac
 Managing Dept.: O-WST
 Project Manager: TBD
 Sheet Completed by: Downes, Kinsey



Project Description

Reviewing the current approach and recommending alternatives for treating iron & manganese before the membrane filtration process.

Project Driver

Elevated iron and manganese concentrations and its associated chemical treatment process has the potential to shorten the useful life of hollow fiber membranes. The driver of this project is better understand how we can protect the membrane treatment system.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.8	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	40										40
Design	60	40									100
Construction		250	250								500
Land/Easements											
Equip/Other											
Subtotal	100	290	250								640
Outside Funding											
Net Cost	100	290	250								640

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
20	20					10	10	10	10	10	10	100

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Willisville Electrical & OT Upgrades
 CIP Project #: COM00086
 Program: COM Community Systems

Requesting Dept: O-Remote Fac
 Managing Dept.: O-WST
 Project Manager: Pyles, Carly
 Sheet Completed by: Pyles, Carly



Project Description

This project is the design and construction of electrical and instrumentation upgrades intended to replace components that have reached the end of their useful life.

Project Driver

Replacement and consolidation of aging components.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.55	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	90										90
Design	50	70									120
Construction		80	370								450
Land/Easements											
Equip/Other											
Subtotal	140	150	370								660
Outside Funding											
Net Cost	140	150	370								660

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
7	10	19	24	19	11				10	14	25	139

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **Beacon Hill Well C Electrical Upgrades**
 CIP Project #: **COM00087**
 Program: **COM Community Systems**

Requesting Dept: **O-Remote Fac**
 Managing Dept.: **O-WST**
 Project Manager: **TBD**
 Sheet Completed by: **Downes, Kinsey**

Project Description

This project will convert Well C from a constant speed electrical starter to a variable frequency speed drive.

Project Driver

Well C has experienced a decrease in flow rate due to mechanical fatigue, well characteristics, and changing groundwater levels. Having the well on a VFD will allow for increased flow control and better source management.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.8	(100%)

Estimate Method: **N/A**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	50										50
Construction		60									60
Dev. Reimbursement											
Equip/Other											
Subtotal	50	60									110
Outside Funding											
Net Cost	50	60									110

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		20	15	15								50



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: St. Louis WWPS New Structure
 CIP Project #: COM00088
 Program: COM Community Systems

Requesting Dept: O-Remote Fac
 Managing Dept.: O-WST
 Project Manager: TBD
 Sheet Completed by: Downes, Kinsey



Project Description

The current panel support system is outdated and needs to be replaced. Considerations shall be made regarding electrical code, physical security, and level of service.

Project Driver

Aging infrastructure requires review and replacement to ensure alignment with Loudoun Water standards.

Additional Comments

A gap analysis will be conducted to determine the best solution for this remote site.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.8	(100%)

Estimate Method: Benchmark Data

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	50										50
Design											
Construction											
Dev. Reimbursement											
Equip/Other											
Subtotal	50										50
Outside Funding											
Net Cost	50										50

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
					10	10	10	10	10			50

FINANCE (FIN)

2026-2035 CIP Section Index ~ FIN

Project Number	Project Name	Managing Division	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
FIN00001	Debt Service	FIN	9,220	52,180	46,560	98,740
FIN00002	DC Water Capital Improvements	FIN	17,700	107,700	57,000	164,700
FIN00003	Reimbursement to Developers - Water [R]	LAND DEV	400	1,600	1,500	3,100
FIN00004	Reimbursement to Developers - Sewer [R]	LAND DEV	150	550	500	1,050
FIN00005	Capital Proj - Construction-in-Process	FIN	6,760	37,360	47,680	85,040
FIN00008	Fairfax Water-Trans. Capacity-Fox Mill/Centerville	FIN	210	1,050	1,050	2,100
FIN00009	FC UOSA - Conveyance-Treatment Capacity	FIN	330	650	400	1,050
FIN00011	Record Drawings and GIS Data Program	IT BS	380	1,920	1,930	3,850
FIN00014	Capital Imp Projects Legal Support	FIN	100	500	500	1,000
FIN00015	Reimbursement to Developers - Reclaimed [R]	LAND DEV	0	680	0	680
Total	10 projects		\$35,250	\$204,190	\$157,120	\$361,310

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project represents the principal on revenue bonds that is allocated to new (future) customers.

Project Driver

Loudoun Water's service area continues to experience high-paced residential and commercial growth, driving the need for expansion of the systems. Funding of CIP projects needed to accommodate the growth requires Loudoun Water to issue additional debt (revenue bonds). These bonds are secured by the revenues generated from future connections to the systems.

Additional Comments

For 2026, the allocation is 70% of the principal. Existing customers continue to pay 100% of the interest on debt and 30% of principal. Loudoun Water anticipates the issuance of \$70M in revenue bonds in 2028 per the 5-year plan of finance updated 8/25. \$2.3M x 70% is added in starting in 2028 to account for this additional debt.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	5	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.6	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	9,220	10,840	11,290	11,730	9,100	9,450	9,770	10,130	10,440	6,770	98,740
Subtotal	9,220	10,840	11,290	11,730	9,100	9,450	9,770	10,130	10,440	6,770	98,740
Outside Funding											
Net Cost	9,220	10,840	11,290	11,730	9,100	9,450	9,770	10,130	10,440	6,770	98,740

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
768	768	768	768	768	768	768	768	769	769	769	769	9,220

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: DC Water Capital Improvements
 CIP Project #: FIN00002
 Program: FIN Finance

Requesting Dept: FIN
 Managing Dept.: FIN
 Project Manager: Carnes, Brian
 Sheet Completed by: Dehler, Sally

Project Description

This project includes Loudoun Water's contribution to DC Water for capital improvements planned at DC Water's Blue Plain's AWWTP, along the Potomac Interceptor (PI) sewer, and at other Multi-Jurisdictional Use Facilities (MJUFs). The contribution from Loudoun Water in turn funds planning, design and construction of related capital projects at the DC Water facilities as identified in their CIP.

Project Driver

Loudoun Water purchased 13.8 MGD capacity at the Blue Plains AWWTP which is conveyed through the Potomac Interceptor (PI) sewer. The contribution is based on Loudoun Water's proportional share of capacity purchased at Blue Plains AWWTP, in the PI, and in other MJUFs. Loudoun Water's long-term plan is to continue using the capacity purchased from DC Water.

Additional Comments

DC Water has numerous projects planned that include a cost share by Loudoun Water based on its proportion of capacity in DC Water's system. Projections for 2026-2032 are based on DC Water's latest 10 year projections.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	5	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.6	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	17,700	20,000	25,000	25,000	20,000	14,000	12,000	11,000	10,000	10,000	164,700
Subtotal	17,700	20,000	25,000	25,000	20,000	14,000	12,000	11,000	10,000	10,000	164,700
Outside Funding											
Net Cost	17,700	20,000	25,000	25,000	20,000	14,000	12,000	11,000	10,000	10,000	164,700

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	4,425			4,425			4,424			4,424		17,698

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Reimbursement to Developers - Water [R]
 CIP Project #: FIN00003
 Program: FIN Finance

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Tran, Huy
 Sheet Completed by: Tran, Huy

Project Description

This project funds reimbursements to developers for the design and construction of water extensions that are beyond the scope of the local facilities needed to serve the individual development. Reimbursement applies for water mains to certain incidental system enhancements, such as stubs for future connections and requested upsizing of pipes.

Project Driver

The reimbursement program enables the implementation of the water system master plan, while keeping Loudoun Water's capital construction contracts from the critical path of land development projects. The schedules and magnitude of the work are driven by the progress of land development projects. There are some cost savings inherent to having developers put in infrastructure while the site is not developed.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.1	(100%)

Estimate Method: Other

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	400	300	300	300	300	300	300	300	300	300	3,100
Subtotal	400	300	300	300	300	300	300	300	300	300	3,100
Outside Funding											
Net Cost	400	300	300	300	300	300	300	300	300	300	3,100

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	400											400

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Reimbursement to Developers - Sewer [R]
 CIP Project #: FIN00004
 Program: FIN Finance

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Tran, Huy
 Sheet Completed by: Tran, Huy

Project Description

This project funds reimbursements to developers for the design and construction of water extensions that are beyond the scope of the local facilities needed to serve the individual development. Reimbursement applies for mains of 16-inch and larger diameters (over 10 year period), to certain incidental system enhancements, such as stubs for future connections and requested upsizing of pipes.

Project Driver

The reimbursement program enables the implementation of the wastewater system master plan, while keeping Loudoun Water's capital construction contracts from the critical path of land development projects. The schedules and magnitude of the work are driven by the progress of land development projects. There are some cost savings inherent to having developers put in infrastructure while the site is not developed.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.1	(100%)

Estimate Method: Other

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	150	100	100	100	100	100	100	100	100	100	1,050
Subtotal	150	100	100	100	100	100	100	100	100	100	1,050
Outside Funding											
Net Cost	150	100	100	100	100	100	100	100	100	100	1,050

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	150											150

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project includes the portion of the personnel budget allocated to capital projects. Generally, a percentage of personnel expenses for engineering, construction inspection, community relations and information technology are included. Labor costs realized on a capital project are charged to that project and are eventually recorded in the total cost of the asset.

Project Driver

Loudoun Water's service area continues to experience high-paced residential and commercial growth driving the need for expansion of the systems. Funding of capital improvement projects is needed to expand the systems to accommodate the growth.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	5	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.6	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	6,760	7,100	7,450	7,830	8,220	8,630	9,060	9,510	9,990	10,490	85,040
Subtotal	6,760	7,100	7,450	7,830	8,220	8,630	9,060	9,510	9,990	10,490	85,040
Outside Funding											
Net Cost	6,760	7,100	7,450	7,830	8,220	8,630	9,060	9,510	9,990	10,490	85,040

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
550	550	550	550	600	550	550	550	600	600	550	560	6,760

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project includes Loudoun Water's contribution to Fairfax Water for 15 MGD purchased transmission capacity from the Corbalis Water Treatment Plant (WTP). Capacity purchased is in Fairfax Water's transmission system from Corbalis WTP to the Fox Mill Road Pumping Station and in the Fox Mill-Centerville WM (to intersection of Route 28/50). The contribution in-turn funds planning, design and construction of related capital projects in Fairfax Water's CIP.

Project Driver

In 1989, Loudoun Water entered into Water Service Agreement No. 2 with Fairfax Water for the purchase of 15 MGD of transmission capacity from the Corbalis WTP. The contribution is based on Loudoun Water's proportional share of capacity purchased and continues through June 2040.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	5	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.6	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	210	210	210	210	210	210	210	210	210	210	2,100
Subtotal	210	210	210	210	210	210	210	210	210	210	2,100
Outside Funding											
Net Cost	210	210	210	210	210	210	210	210	210	210	2,100

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
17	17	18	17	18	18	18	17	18	17	17	18	210

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **FC UOSA - Conveyance-Treatment Capacity**
 CIP Project #: **FIN00009**
 Program: **FIN Finance**

Requesting Dept: **FIN**
 Managing Dept.: **FIN**
 Project Manager: **Carnes, Brian**
 Sheet Completed by: **Dehler, Sally**

Project Description

This project includes Loudoun Water's contribution to Fairfax County for 1 MGD purchased conveyance capacity in the Fairfax County sewer system (including 1 MGD of treatment capacity at the UOSA wastewater treatment plant). The contribution in turn funds planning, design and construction of related capital projects as identified in Fairfax County's CIP.

Project Driver

In 2002, Loudoun Water entered into a sewer service agreement with Fairfax County for conveyance (and treatment) capacity in the Fairfax County sewer system. The agreement requires Loudoun Water to pay a proportionate share of treatment facility and sewer system upgrades that are considered over and above normal and customary repairs.

Additional Comments

For CIP planning purposes, Fairfax County provides to Loudoun Water an estimate of capital expenditures over a 10-year period.

In late 2026, Loudoun Water expects to be invoiced for rehab work on the Champs Branch (\$160K) and Sand Branch (\$88K) flumes. Estimates are based on 70% design.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	5	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.6	(100%)

Estimate Method: **Firm Price/Quote**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	330	80	80	80	80	80	80	80	80	80	1,050
Subtotal	330	80	80	80	80	80	80	80	80	80	1,050
Outside Funding											
Net Cost	330	80	80	80	80	80	80	80	80	80	1,050

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
		82			83			83			82	330

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Record Drawings and GIS Data Program
 CIP Project #: FIN00011
 Program: FIN Finance

Requesting Dept: LAND DEV
 Managing Dept.: IT BS
 Project Manager: Blee, Brendan
 Sheet Completed by: Lees, Craig



Project Description

Loudoun Water hires BOA consultants to produce record drawings and capture geographic information systems (GIS) data for its potable water, reclaimed water, and wastewater systems. This includes projects built by developers and our Capital Programs projects. This CIP task enables Loudoun Water to pay the BOA consultants for their monthly efforts to field survey newly constructed assets, creation of as-builts, and creation of digital data for inclusion in our GIS.

Project Driver

This is Loudoun Water's established process for capturing information (as-builts and GIS data) about the location and characteristics of newly constructed water, reclaimed water, and wastewater assets to support subsequent management of the systems.

Additional Comments

Fees are collected from developers to help offset some of the costs associated with this program, but other projects are not able to be captured - such as from Capital Projects, VDOT, Loudoun County, and Loudoun County Public Schools.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.7	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	380	390	380	390	380	390	380	390	380	390	3,850
Subtotal	380	390	380	390	380	390	380	390	380	390	3,850
Outside Funding											
Net Cost	380	390	380	390	380	390	380	390	380	390	3,850

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
30	32	32	32	32	32	32	32	32	32	32	30	380

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Capital Imp Projects Legal Support
 CIP Project #: FIN00014
 Program: FIN Finance

Requesting Dept: FIN
 Managing Dept.: FIN
 Project Manager: Carnes, Brian
 Sheet Completed by: Dehler, Sally

Project Description

This project includes the portion of all legal support services allocated to capital projects. Generally, legal support is provided in all phases (planning, design and construction) of capital projects. Legal support fees realized on a capital project are charged to that project (not this number) and are eventually recorded in the total cost of the asset.

Project Driver

Loudoun Water's service area continues to experience high-paced residential and commercial growth driving the need for expansion of the systems. Funding of legal support for capital improvement projects is needed to expand the systems to accommodate the growth.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	1	(20%)
4. Alignment	1	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	100	100	100	100	100	100	100	100	100	100	1,000
Subtotal	100	100	100	100	100	100	100	100	100	100	1,000
Outside Funding											
Net Cost	100	100	100	100	100	100	100	100	100	100	1,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		25			25			25			25	100

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Reimbursement to Developers - Reclaimed [R]
 CIP Project #: FIN00015
 Program: FIN Finance

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Tran, Huy
 Sheet Completed by: Tran, Huy



Project Description

This project funds reimbursements to developers for the design and construction of reclaimed water extensions that are beyond the scope of the local facilities needed to serve the individual development. Reimbursement applies to mains 16-inch and larger diameters (over 10 year period), to certain incidental system enhancements, such as stubs for future connections and requested upsizing of pipes.

Project Driver

The reimbursement program enables growth in the reclaimed water distribution system, while keeping Loudoun Water's capital construction contracts from the critical path of land development projects. Upsizing the reclaimed water main associated with this project positions Loudoun Water to improve levels of service in Data Center Alley.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.1	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other		330	350								680
Subtotal		330	350								680
Outside Funding											
Net Cost		330	350								680

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

POTOMAC WATER SUPPLY (PWS)

2026-2035 CIP Section Index ~ PWS

Project Number	Project Name	Managing Division	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
PWS00006	PWS - Quarry A, Milestone Reservoir	CAP PROGRAMS	48,880	69,430	0	69,430
PWS00007	TRWTF - Phase II (32 MGD) Expansion	CAP PROGRAMS	2,630	40,500	0	40,500
PWS00009	PRWPS - General Improvements	O-WTR	300	1,050	850	1,900
PWS00012	TRWTF - General Improvements	O-WTR	360	960	500	1,460
PWS00016	Spare Parts PWS	FIN	50	250	250	500
PWS00017	TRWTF Standby Generator	CAP PROGRAMS	270	270	0	270
PWS00018	Goose Creek RWPS - Switchgear	CAP PROGRAMS	780	780	0	780
PWS00019	TRWTF - Phase III (40 MGD) Expansion	CAP PROGRAMS	0	7,580	58,820	66,400
PWS00020	TRWTF - Dewatering	CAP PROGRAMS	180	180	0	180
PWS00021	Goose Creek RWPS Upgrade Study	CAP PROGRAMS	100	100	0	100
Total	10 projects		\$53,550	\$121,100	\$60,420	\$181,520

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: PWS - Quarry A, Milestone Reservoir
 CIP Project #: PWS00006
 Program: PWS Potomac Water Supply

Requesting Dept: CAP PROGRAMS
 Managing Dept.: CAP PROGRAMS
 Project Manager: Flores, Sam
 Sheet Completed by: Flores, Sam



Project Description

This project includes the design and construction to convert a rock quarry "Quarry A" to a water reservoir "Milestone Reservoir" and the associated raw water pump station and transmission mains. Milestone Reservoir will provide approximately 1.3 billion gallons of reservoir storage. The project will be delivered via Construction Management at Risk (CMAR).

Project Driver

Loudoun Water's service area continues to experience high-paced residential and commercial growth, increasing the overall system's water demand. Loudoun Water's master planning process identified the need for additional water supply, system resiliency and treatment capacity. Milestone Reservoir adds additional raw water storage to support Phase I of the PWSP.

Additional Comments

Loudoun Water has been awarded a Pre-Disaster Mitigation grant from FEMA. Award is 12.65% of the construction value up to \$10 million.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	2	(10%)
Total score	3.7	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction	48,880	17,800	2,750								69,430
Land/Easements											
Equip/Other											
Subtotal	48,880	17,800	2,750								69,430
Outside Funding	2,950	900	50								3,900
Net Cost	45,930	16,900	2,700								65,530

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
3,553	4,637	5,497	4,588	4,761	5,257	5,093	4,384	2,989	3,615	2,082	2,424	48,880



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: TRWTF - Phase II (32 MGD) Expansion
 CIP Project #: PWS00007
 Program: PWS Potomac Water Supply

Requesting Dept: O-WTR
 Managing Dept.: CAP PROGRAMS
 Project Manager: Osiecki, Matt
 Sheet Completed by: Osiecki, Matt

Project Description

This project includes the design and construction of Phase II of the water treatment plant (Trap Rock) for the Potomac Water Supply Program (PWSP). Phase II will increase treatment capacity from 20 mgd to 32.8 mgd, and will focus on increased pump and disinfection capacity. The work will include new chemical storage facilities, UV, ozone and pump upgrades as well as miscellaneous operational improvements.

Project Driver

Loudoun Water's service area continues to experience high-paced residential and commercial growth, increasing the overall system's water demand. Master planning identified the need for additional water treatment capacity. Phase II of the PWSP adds treatment capacity to meet increased demand and provide reliability and redundancy for Loudoun Water customers.

Additional Comments

Loudoun Water has added an interim step to increase TRWTF to 32 MGD, the future upgrade to 40 mgd may be needed in the 10 year planning horizon and is accounted for in a separate sheet. The goal is to have the 32 MGD increase by the time the Milestone quarry comes online. The 32 MGD expansion will add the equipment needed to increase capacity. Dewatering upgrades will be tracked under PWS00020

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.9	(100%)

Estimate Method: Feasibility or Study

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	1,630	870									2,500
Construction			19,410	17,590							37,000
Land/Easements											
Equip/Other	1,000										1,000
Subtotal	2,630	870	19,410	17,590							40,500
Outside Funding											
Net Cost	2,630	870	19,410	17,590							40,500

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
110	41	55	73	94	119	146	172	1,194	208	212	204	2,628

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: PRWPS - General Improvements
 CIP Project #: PWS00009
 Program: PWS Potomac Water Supply

Requesting Dept: O-WTR
 Managing Dept.: O-WTR
 Project Manager: Mantha, Anurag
 Sheet Completed by: Mantha, Anurag



Project Description

The project includes the design, construction, and materials for miscellaneous improvements at the Potomac Raw Water Pump Station (PRWPS), including pump replacements.

Project Driver

Improvements at PRWPS to improve reliability and ease of O&M.

Additional Comments

2026 funding includes rebuilding two raw water pumps. One pump rebuild and miscellaneous improvements are budgeted for 2027 and 2028.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	300	200	250	50	250	250	250	250	50	50	1,900
Subtotal	300	200	250	50	250	250	250	250	50	50	1,900
Outside Funding											
Net Cost	300	200	250	50	250	250	250	250	50	50	1,900

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
			150						150			300

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

The project includes a series of projects identified during the construction of the TRWTF and as operational improvements. It includes the design, construction, and materials for miscellaneous improvements.

Project Driver

Projects at the TRWTF to improve reliability and ease of O&M.

Additional Comments

The 2026 budget includes additional sed basin squeegees and covers, chemical tank relining, and replacement of dessicant wheels (HVAC). 2026 budget also includes funding for an ongoing coagulation switch evaluation at TRWTF.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.7	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	360	200	200	100	100	100	100	100	100	100	1,460
Subtotal	360	200	200	100	100	100	100	100	100	100	1,460
Outside Funding											
Net Cost	360	200	200	100	100	100	100	100	100	100	1,460

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
10	10	70	55	55	5	105			50			360

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Spare Parts PWS
 CIP Project #: PWS00016
 Program: PWS Potomac Water Supply

Requesting Dept: O-WTR
 Managing Dept.: FIN
 Project Manager: Carnes, Brian
 Sheet Completed by: Dehler, Sally



Project Description

Placeholder for SAP tracking of Spare Equipment. Enables O&M to track which spares are purchased and Finance to track when spares are put in service to kick off depreciation.

Project Driver

Required financial tool.

Additional Comments

Spare equipment is any equipment >\$20,000 with a useful life of more than 1 year that will not be placed in service when received but rather held until needed. This includes both new equipment and existing equipment that is sent out for rebuild/repair that will be held until needed once it is received back.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	1	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.2	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	50	50	50	50	50	50	50	50	50	50	500
Subtotal	50	50	50	50	50	50	50	50	50	50	500
Outside Funding											
Net Cost	50	50	50	50	50	50	50	50	50	50	500

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		25						25				50

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

Install a second 2500 kVA diesel generator at the Trap Rock Water Treatment Plant.

Project Driver

Provides standby power capacity and redundancy to the TRWTF. The existing generator capacity was designed to sustain 10 MGD. More generator capacity is required to allow the plant to sustain more than 10 MGD during an emergency.

Additional Comments

Funds were negotiated with land purchase agreement (adjoining owner) to increase the TRWTF standby power capacity.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	5	(10%)
Total score	3.6	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	270										270
Land/Easements											
Equip/Other											
Subtotal	270										270
Outside Funding											
Net Cost	270										270

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
84	84	84										252

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

The project includes the preparation of a Technical Memorandum (TM) to evaluate the cause of the switchgear failure, design for a replacement unit, and install a new switchgear as specified in the TM, with the goal of restoring the failed pump to full operation.

Project Driver

One of the Raw Water Pump Station's switchgear units has failed, rendering one of the two large pumps inoperable. Restoring both pumps to service is critical to maintaining Loudoun Water's water supply, as the intake and pump station are essential for delivering water to the Trap Rock Water Treatment Plant (TRWTP) during water supply emergencies.

Additional Comments

PWS00021 will provide an alternative analysis of the Goose Creek RWPS.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.4	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design	40										40
Construction	690										690
Land/Easements											
Equip/Other	50										50
Subtotal	780										780
Outside Funding											
Net Cost	780										780

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
5	35	45	68	191	218	218						780

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: TRWTF - Phase III (40 MGD) Expansion
 CIP Project #: PWS00019
 Program: PWS Potomac Water Supply

Requesting Dept: O-WTR
 Managing Dept.: CAP PROGRAMS
 Project Manager: Osiecki, Matt
 Sheet Completed by: Osiecki, Matt

Project Description

This project includes the design and construction of Phase III of the water treatment plant (Trap Rock) for the Potomac Water Supply Program (PWSP). Phase III will increase treatment capacity from 32 MGD to 40 MGD. The expansion will require upgrades of most processes and supporting infrastructure.

Project Driver

As Loudoun Water's service area continues to grow, it is anticipated that there will be a need to increase production of water at TRWRF to meet demand. Specific developments of note that may impact the timing of this upgrade include multiple large data center campuses in the western portion of the central service area and in the western lands, additional land near Dulles, and urban-style developments near metro stations.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.65	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning			780	520							1,300
Design				590	5,690	1,920					8,200
Construction									15,510	41,390	56,900
Land/Easements											
Equip/Other											
Subtotal			780	1,110	5,690	1,920			15,510	41,390	66,400
Outside Funding											
Net Cost			780	1,110	5,690	1,920			15,510	41,390	66,400

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: TRWTF - Dewatering
 CIP Project #: PWS00020
 Program: PWS Potomac Water Supply

Requesting Dept: O-WTR
 Managing Dept.: CAP PROGRAMS
 Project Manager: Osiecki, Matt
 Sheet Completed by: Osiecki, Matt

Project Description

This projects includes the design and construction of dewatering facilities at the Trap Rock Water Treatment Facility (TRWTF). Dewatering is ultimately assumed to be achieved with centrifuges within a new building on the TRWTF site.

Project Driver

Currently, solids at TRWTF are thickened, stored and then hauled off-site, resulting in high, ongoing operations costs. The goal is to install dewatering infrastructure that will result on long-term operational and costs saving for the organization.

Additional Comments

A study was recently completed which compared installing dewatering facilities on-site versus pumping solids to the North Lower Sycolin Sewer pump station (NLSSPS) to allow BRWRF to treat the solids. The Study data led to internal discussions where a decision was made to begin a trial period of sending residuals to BRWRF. This trial period will allow LW to collect real world plant and cost impacts. Ultimately it is envisioned that the solids will be treated on-site at TRWTF.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.1	(100%)

Estimate Method: Feasibility or Study

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	30										30
Construction	150										150
Land/Easements											
Equip/Other											
Subtotal	180										180
Outside Funding											
Net Cost	180										180

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
15	10	5						50	50	50		180

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

The study will evaluate the entire pump station, perform a detailed condition assessment, and provide rehabilitation alternatives that will inform the next steps for the pump station.

Project Driver

The Goose Creek RWPS was built in 1959. Recent in-house inspections revealed significant overall deterioration, including pumps, motors, and intake structure rehabilitated in 1979. The GCRWPS is only way to access Goose Creek and Beaverdam Reservoirs. Given the age and condition of the PS, a near-term upgrade is essential to keep the station functioning. Express consideration will be given to LW's long-term water resiliency plan.

Additional Comments

Goose Creek RWPS - Switchgear (PWS00018) project will install a new Motor Control outside the pump station and bring both pumps online.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.85	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	100										100
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal	100										100
Outside Funding											
Net Cost	100										100

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
12	19	29	24	11	5							100



RECLAIMED (REC)

2026-2035 CIP Section Index ~ REC

Project Number	Project Name	Managing Division	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
REC00010	Equinix Property Reclaimed Main	CAP PROGRAMS	190	2,140	0	2,140
REC00011	Beaumeade Circle Gap Closures	CAP PROGRAMS	20	280	0	280
REC00018	Reclaimed Distribution Storage Tank	CAP PROGRAMS	0	1,300	0	1,300
REC00019	RWPS Surge Tank	O-WST	0	1,250	0	1,250
REC00020	Reclaimed System Master Plan	PLANNING	0	250	500	750
REC00021	Reclaimed Water Relocation (LC Pkwy)	CAP PROGRAMS	460	1,110	0	1,110
Total	6 projects		\$670	\$6,330	\$500	\$6,830

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Equinix Property Reclaimed Main
 CIP Project #: REC00010
 Program: REC Reclaimed Water

Requesting Dept: REC
 Managing Dept.: CAP PROGRAMS
 Project Manager: Hollida, Jaron
 Sheet Completed by: Hollida, Jaron



Project Description

The project includes design and construction of approximately 1,000 feet of 16" diameter reclaimed main. The location will connect the east and west sides of the reclaimed water loop by boring under Loudoun County Parkway and connecting to the dead-end line in the southern portion of Beaumeade Circle.

Project Driver

This connection will reinforce the reclaimed water distribution system by providing an additional loop which will increase reliability, redundancy and pressure.

Additional Comments

Loudoun Water will work with Digital Realty, the property owner of the Airbus site, for easements to install the transmission main. As of 2025, the developer plans to design and install reclaimed pipeline across the parcel. Loudoun Water plans to jack and bore on Loudoun County Parkway and Filagree Court.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.95	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	140										140
Construction	50	1,950									2,000
Land/Easements											
Equip/Other											
Subtotal	190	1,950									2,140
Outside Funding											
Net Cost	190	1,950									2,140

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
39	35	27	18	11	6					26	23	185

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Beaumeade Circle Gap Closures
 CIP Project #: REC00011
 Program: REC Reclaimed Water

Requesting Dept: REC
 Managing Dept.: CAP PROGRAMS
 Project Manager: Hollida, Jaron
 Sheet Completed by: Hollida, Jaron



Project Description

This project includes the design and construction of approximately 2,500 LF of 12" dia. reclaimed water main to connect dead-ends within Beaumeade Circle. There are three gaps that need to be closed. The gap closure would allow Loudoun Water to meet the projected demands in the area and improve system reliability and redundancy.

Project Driver

Project aligns with the Strategic Plan to develop an effective nutrient management strategy, develop additional sources of water, and manage potable demand. This distribution main has the potential to serve additional commercial, industrial and data center space through planned development and retrofits. Positions Loudoun Water to maintain service levels for existing customers by closing 3 dead ends in the central and northern portions of Beaumeade Circle.

Additional Comments

Identified in REC00016 Distribution Analysis as beneficial.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.55	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design	20	220	40								280
Construction											
Land/Easements											
Equip/Other											
Subtotal	20	220	40								280
Outside Funding											
Net Cost	20	220	40								280

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
										14	6	20

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Reclaimed Distribution Storage Tank
 CIP Project #: REC00018
 Program: REC Reclaimed Water

Requesting Dept: O-WST
 Managing Dept.: CAP PROGRAMS
 Project Manager: Tenzin, Jigme
 Sheet Completed by: Tenzin, Jigme

Project Description

This project is to locate, design, and construct a storage tank in the Reclaimed Water Distribution System to enable LW to meet the minimum system pressure requirements in the reclaimed customer agreements at future peak flows. The first phase of this project would be a Tank Siting Study.

Project Driver

When the Reclaimed Water system reaches a max demand of 11 MGD, storage (optimally elevated storage) will be required to maintain minimum distribution system pressures. Based on the time required to locate, design and build it is estimated design of the tank should start when peak flows reach 7 MGD. System storage will also improve efficiency of the pumping system by creating an operational buffer volume to manage peak flows.

Additional Comments

Land costs are not currently included in this estimate.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.2	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning		200	100								300
Design			60	870	70						1,000
Construction											
Land/Easements											
Equip/Other											
Subtotal		200	160	870	70						1,300
Outside Funding											
Net Cost		200	160	870	70						1,300

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project is to size, design, and install a surge tank on the discharge of the RWPS to protect the Reclaimed Water distribution piping from breaks due to surge or cavitation during pumping interruptions.

Project Driver

As the pumping stations flows increase the risk of damaging the distribution system piping due to surge or cavitation increases particularly for portions of the distribution system with PVC piping and dead ends with no air/vacuum valves.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.65	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design		250									250
Construction			430	570							1,000
Land/Easements											
Equip/Other											
Subtotal		250	430	570							1,250
Outside Funding											
Net Cost		250	430	570							1,250

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Reclaimed System Master Plan
 CIP Project #: REC00020
 Program: REC Reclaimed Water

Requesting Dept: REC
 Managing Dept.: PLANNING
 Project Manager: Vieux, Micah
 Sheet Completed by: Geldert, Darrin



Project Description

Develop Reclaimed Water System Master Plan. Steps will include developing tools - model, demand forecast - to support planning. Master plan will include updated projections, review level of service requirements, hydraulic modeling, calibration, scenario analysis, storage review, capital improvement needs with timing and cost estimates. Deliverables will include GIS, model, PowerBI and Excel data for Loudoun Water use, in addition to a report.

Project Driver

Continued growth, including potential expanded service area and increasing industrial demands, requires regular review and planning to maintain level-of-service requirements. The Master Plan is a tool LW references to confirm system conformance with contractual and regulatory guidelines.

Additional Comments

Will incorporate existing studies. Master planning will inform land development project approvals and allow for coordination with industry. Positions Loudoun Water for triennial master plan updates through 2031. REC00011, REC00018 timing and scope dependent on Master Planning.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.9	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning		150	100			250			250		750
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal		150	100			250			250		750
Outside Funding											
Net Cost		150	100			250			250		750

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Reclaimed Water Relocation (LC Pkwy)
 CIP Project #: REC00021
 Program: REC Reclaimed Water

Requesting Dept: O-PROGRAMS
 Managing Dept.: CAP PROGRAMS
 Project Manager: Poudel, Amulya
 Sheet Completed by: Poudel, Amulya



Project Description

Relocate approximately 1,400 feet of existing 16" reclaimed water main along Loudoun County Parkway prior to the installation of the new Dominion transmission line.

Project Driver

Dominion Energy's proposed Golden to Aspen electric transmission main is planned to come down Loudoun County Parkway on Loudoun Water's property. Our existing 16" reclaimed water main will be directly under some portions of this transmission main and will need to be moved in order to facilitate maintenance and to reduce the risk of corrosion and shock hazard.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.95	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	60										60
Construction	400	650									1,050
Land/Easements											
Equip/Other											
Subtotal	460	650									1,110
Outside Funding											
Net Cost	460	650									1,110

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
17	16	13	9	5					81	113	207	461

WASTEWATER (WST)

2026-2035 CIP Section Index ~ WST

Project Number	Project Name	Managing Division	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
WST00001	Wastewater System Planning Studies	PLANNING	0	300	900	1,200
WST00005	Upper Foley SPS Odor Control System	O-Remote Fac	0	0	420	420
WST00013	W-WW Needs Assessment Studies (County)	PLANNING	0	460	540	1,000
WST00022	Sys Capacity Upgrades - Sewer Mains	PLANNING	0	0	12,100	12,100
WST00023	Sys Capacity Upgrades - Pump Stations	PLANNING	0	0	12,200	12,200
WST00024	Russell Br SPS JLMA East, S2A-E & S2B-E	CAP PROGRAMS	7,670	11,930	0	11,930
WST00032	Grinder Pump Replacement Program	MNT-LINE	100	500	500	1,000
WST00033	Elklick Run SPS Phase 3 Upgrades	CAP PROGRAMS	250	11,100	950	12,050
WST00038	Sewer Meter Vault Replacements	O-WST	330	1,250	0	1,250
WST00039	UBRI Manhole Improvements	CAP PROGRAMS	1,640	2,800	0	2,800
WST00040	Waxpool SPS General Improvements	O-WST	120	340	900	1,240
WST00050	Wastewater Facility General Improvements	O-Remote Fac	290	1,250	1,360	2,610
WST00055	Grinder Pump Control Panel Replacement	ASSET MNG	60	300	300	600
WST00057	JLMA East, S4-E (GCIP to Crosstrail Blvd) [R]	LAND DEV	9,160	17,710	1,750	19,460
WST00058	JLMA West, S2 & S3A (Sycolin to RT 267) [R]	LAND DEV	9,360	12,160	0	12,160
WST00062	Spare Parts WST	FIN	50	250	250	500
WST00066	Digital Dulles 24" Sanitary Sewer Outfall [R]	LAND DEV	0	8,000	5,000	13,000
WST00068	JLMA East Forcemain (Phase 2)	CAP PROGRAMS	170	2,070	0	2,070
WST00069	JLMA West, S3B-W (Shreve South) [R]	LAND DEV	0	3,500	1,200	4,700
WST00070	JLMA West SPS, S1A-W & S1B-W [R]	LAND DEV	0	13,470	1,310	14,780
WST00071	JLMA West, S-4-W NLS SPS Upgrades	CAP PROGRAMS	550	23,640	24,000	47,640
WST00072	Sewer Replacement Shep/Blkwd/Caragana	CAP PROGRAMS	580	1,320	0	1,320
WST00073	Wastewater Infrastructure R&R	ASSET MNG	100	3,920	5,650	9,570
WST00074	Cabin Branch Lateral Lining Project	CAP PROGRAMS	1,000	7,000	0	7,000
WST00075	Connect Dulles Trade SPS to Gravity Sewer	CAP PROGRAMS	0	0	3,720	3,720
WST00078	Red Cedar 2 SPS Improvements	O-WST	70	3,420	0	3,420
WST00080	Western CSA AFP	PLANNING	150	450	200	650
WST00081	WW Collection Sys Master Plan	PLANNING	400	400	0	400
WST00082	Courtland WWPS Generator Replacement	CAP PROGRAMS	150	150	0	150

Project Number	Project Name	Managing Division	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
WST00083	Grinder Chamber Replacement Program	MNT-LINE	30	320	330	650
WST00084	Large Diameter Sewer Rehabilitation	CAP PROGRAMS	210	2,220	0	2,220
WST00086	Sanitary Sewer Lining Phase 3	CAP PROGRAMS	60	60	0	60
WST00087	Belmont Innovation Campus Gravity Outfall [R]	LAND DEV	0	230	0	230
WST00088	Elklick Upper Foley FM Corrosion Control Upgrades	CAP PROGRAMS	300	3,310	0	3,310
WST00090	JLMA East Sewer PS (Phase 2)	CAP PROGRAMS	160	4,410	0	4,410
WST00092	JLMA Downstream Sewer Capacity Upgrades	CAP PROGRAMS	160	14,750	0	14,750
WST00093	NLSSPS Secondary Forcemain	CAP PROGRAMS	40	9,920	0	9,920
WST00094	Russell Branch SPS Area Infrastructure [R]	LAND DEV	0	6,000	0	6,000
WST00095	Russell Branch SPS Capacity Upgrade	CAP PROGRAMS	0	650	12,500	13,150
WST00096	Small Diam. Sewer Replacement - Sterling Ph 1	CAP PROGRAMS	300	1,600	0	1,600
WST00097	Central Sewer CIPP Lining Phase 4	CAP PROGRAMS	350	350	0	350
WST00098	Claude Moore Trunk Main Upgrade	CAP PROGRAMS	100	10,530	0	10,530
WST00099	Electrical & Lightning Protection - Wastewater Sites	OT	100	100	0	100
WST00100	Horsepen Run Sewer Vault Meter	CAP PROGRAMS	200	1,200	0	1,200
WST00101	Loudoun County Support (County)	PLANNING	100	1,000	0	1,000
WST00102	MWAA Alignment Study	PLANNING	60	60	0	60
WST00103	Sanitary Sewer CIPP Lining Phase 5	CAP PROGRAMS	0	400	0	400
WST00104	Waxpool SPS Emergency Storage	CAP PROGRAMS	110	630	0	630
Total	48 projects		\$34,480	\$185,430	\$86,080	\$271,510

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Wastewater System Planning Studies
 CIP Project #: WST00001
 Program: WST Wastewater

Requesting Dept: PLANNING
 Managing Dept.: PLANNING
 Project Manager: Beatty, Andrew
 Sheet Completed by: Beatty, Andrew



Project Description

This project includes system-wide wastewater planning studies for the central system, such as 1) Major overall updates to wastewater collection system master plan every 5 to 7 years, 2) Annual updates to the collection system master plan, 3) Area facility plans as needs arise, 4) Other minor wastewater system studies.

Project Driver

Loudoun Water's service area continues to experience high-paced residential and commercial growth, increasing the wastewater flows in the system. Continued analysis of the service area is necessary to assure adequate capacity is provided in the system for efficient delivery of wastewater services.

Additional Comments

WST00080, WST00081 - AFP evaluations and master planning to be completed in 2026

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.7	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning			100	100	100	300	300	100	100	100	1,200
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal			100	100	100	300	300	100	100	100	1,200
Outside Funding											
Net Cost			100	100	100	300	300	100	100	100	1,200

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

Project includes an evaluation of equipment that is reaching the end of its useful life as well as odor control measures that may be required due to housing development near SPS.

Project Driver

The pump station was built in a secluded portion of the sewershed. However, as future development encroaches on the pump station and influent flows increase, there is concern that odors from the facility will impact surrounding development.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.6	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning								50			50
Design									70		70
Construction										300	300
Land/Easements											
Equip/Other											
Subtotal								50	70	300	420
Outside Funding											
Net Cost								50	70	300	420

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: W-WW Needs Assessment Studies (County)
 CIP Project #: WST00013
 Program: WST Wastewater

Requesting Dept: PLANNING
 Managing Dept.: PLANNING
 Project Manager: Beatty, Andrew
 Sheet Completed by: Beatty, Andrew



Project Description

This project includes studies (planning) of central water and sewer extensions to communities of need in the central service area or new facilities to service communities in the rural policy area. These projects would be forwarded by Loudoun County through the Needs Assessment community prioritization process -- the Water and Wastewater Program.

Project Driver

Loudoun Water coordination with the County is essential to develop feasible, long-term solutions to health and safety issues related to water and sewer service in the County.

Additional Comments

Related projects: Paeonian Springs COM00061, Waterford COM00063, Unison COM00068 and St Louis is pending. As projects move to design individual project sheets will be created.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	5	(10%)
Total score	3.55	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning		80	150	80	150	80	150	80	150	80	1,000
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal		80	150	80	150	80	150	80	150	80	1,000
Outside Funding		80	150	80	150	80	150	80	150	80	1,000
Net Cost											

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Sys Capacity Upgrades - Sewer Mains
 CIP Project #: WST00022
 Program: WST Wastewater

Requesting Dept: PLANNING
 Managing Dept.: PLANNING
 Project Manager: Beatty, Andrew
 Sheet Completed by: Beatty, Andrew



Project Description

This project includes the planning, design and construction of new and upgraded sewer mains identified in the Wastewater Collection System Master Plan and other planning studies.

Project Driver

Loudoun Water's service area continues to experience high-paced residential and commercial growth, increasing sewage flows in the system. There is continued need for capacity-related expansions of the central and community systems in response to projected residential and commercial growth (development).

Additional Comments

The 2016 WWCSMP identified potential gravity upgrades with a total value of approximately \$9M (2016 dollars). WST00081 will update and expand the WWCSMP and provide updated information in 2026.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3	(100%)

Estimate Method: Feasibility or Study

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning						100					100
Design							1,000				1,000
Construction								3,500	4,000	3,500	11,000
Land/Easements											
Equip/Other											
Subtotal						100	1,000	3,500	4,000	3,500	12,100
Outside Funding											
Net Cost						100	1,000	3,500	4,000	3,500	12,100

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Sys Capacity Upgrades - Pump Stations
 CIP Project #: WST00023
 Program: WST Wastewater

Requesting Dept: PLANNING
 Managing Dept.: PLANNING
 Project Manager: Beatty, Andrew
 Sheet Completed by: Beatty, Andrew



Project Description

This project includes the planning, design and construction of new and upgraded sewer pump stations identified in the Wastewater Collection System Master Plan and other planning studies.

Project Driver

Loudoun Water's service area continues to experience high paced residential and commercial growth increasing sewage flows in the system. Continued need for capacity related expansions of the central and community systems in response to projected residential and commercial growth (development).

Additional Comments

The 2016 WWCSMP identified 4 potential SPS upgrades with a total value of approximately \$9M (2016 dollars). WST00081 will update and expand the WWCSMP and provide updated information in 2026.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3	(100%)

Estimate Method: Feasibility or Study

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning						100	100				200
Design							500	500			1,000
Construction								3,500	4,000	3,500	11,000
Land/Easements											
Equip/Other											
Subtotal						100	600	4,000	4,000	3,500	12,200
Outside Funding											
Net Cost						100	600	4,000	4,000	3,500	12,200

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Russell Br SPS JLMA East, S2A-E & S2B-E
 CIP Project #: WST00024
 Program: WST Wastewater

Requesting Dept: CAP PROGRAMS
 Managing Dept.: CAP PROGRAMS
 Project Manager: _Capital Programs
 Sheet Completed by: Osiecki, Matt



Project Description

Design, permitting and construction of a new permanent pump station to replace the existing Belmont Ridge Interim Sewer Pump Station.

Project Driver

The existing interim station is approximately 15 years old and requires significant improvements to meet current reliability and redundancy standards. In addition, growth in system flows is anticipated to exceed existing capacity in approximately 5 years.

Additional Comments

Developer will be constructing the force mains, gravity sewer, and water main and will be reimbursed following substantial completion of those linear assets. The funds for the reimbursement will be tracked under CIP Sheet WST00094. Related to LW projects: 20220114, 20220072, 20240001

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.85	(100%)

Estimate Method: Design Phase Estimate

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	7,670	4,260									11,930
Land/Easements											
Equip/Other											
Subtotal	7,670	4,260									11,930
Outside Funding											
Net Cost	7,670	4,260									11,930

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
426	474	522	570	616	657	693	722	743	753	753	743	7,672



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **Grinder Pump Replacement Program**
 CIP Project #: **WST00032**
 Program: **WST Wastewater**

Requesting Dept: **O-PROGRAMS**
 Managing Dept.: **MNT-LINE**
 Project Manager: **Bussard, Bubba**
 Sheet Completed by: **Fetty, Isaiah**

Project Description

This project includes funding to procure and replace wastewater grinder pumps on a 10-year cycle or approximately 30 per year as part of our Asset Management program. We have approximately 400 grinder pump customers and grinder pumps typically have an expected useful life of 19 years.

Project Driver

The large percentage of our grinder pump customers are located in Broad Run Farms. The low pressure system and grinder pumps were installed in the late 1990s; many are close to 20 years old and are beyond their expected useful life. Replacing the older pumps over time will reduce the likelihood of SSOs, improve our level of service, and reduce maintenance costs.

Additional Comments

Average pump cost is \$3800 -- this price takes into account an increase in our contractor pricing. 113 Pumps are greater than twenty years old.
 Replacement Strategy:
 Unplanned replacement through quarters 1-3
 Proactive replacements in quarter 4 pending budget

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.65	(100%)

Estimate Method: **Firm Price/Quote**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	100	100	100	100	100	100	100	100	100	100	1,000
Land/Easements											
Equip/Other											
Subtotal	100	100	100	100	100	100	100	100	100	100	1,000
Outside Funding											
Net Cost	100	100	100	100	100	100	100	100	100	100	1,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
3	3	4	7	11	15	16	15	11	7	4	4	100

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

The first phase of the project will include pump station condition assessment and evaluation of improvement alternatives. Upon selecting the improvement option, the project will proceed to design and construction.

Project Driver

Elklick Run SPS is an older type SPS, and the original systems need to be evaluated for upgrade due to age and improved technologies.

Additional Comments

NPRC identified the need for a facility evaluation with recommended upgrades that may include a new facility location.

A new project in 2026 will evaluate and address Cathodic Protection depletion on the steel capsule as the anodes are depleted per August 2020 Assessment.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.5	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	250										250
Design		610	190								800
Construction				3,390	6,660	950					11,000
Land/Easements											
Equip/Other											
Subtotal	250	610	190	3,390	6,660	950					12,050
Outside Funding											
Net Cost	250	610	190	3,390	6,660	950					12,050

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
10	10	17	29	41	46	41	29	17	10			250

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

This project involves the structural assessment of Loudoun Water's sewer meter vaults, design for improvements or replacement as well as construction.

Project Driver

Following Loudoun Water's risk assessment in 2018, nine sewer meter vaults are structurally deficient and in need of replacement. These are needed for asset reliability and increased safety for personnel accessing the vaults.

Additional Comments

Phase 1 includes replacement of Countryside 1 & 2, and Great Falls 1 & 2. Phase 2 includes replacement of S-17, PI Sewer/Horsepen, Potomac Lakes Northern, and S-61.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.8	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction	330	870	50								1,250
Land/Easements											
Equip/Other											
Subtotal	330	870	50								1,250
Outside Funding											
Net Cost	330	870	50								1,250

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
			38	13	17	22	29	37	47	58	69	330

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: UBRI Manhole Improvements
 CIP Project #: WST00039
 Program: WST Wastewater

Requesting Dept: MNT-LINE
 Managing Dept.: CAP PROGRAMS
 Project Manager: Hollida, Jaron
 Sheet Completed by: Hollida, Jaron



Project Description

This project includes the design and construction associated with improving the condition of the force main discharge vault and 24 downstream manholes on the 30"/36" Upper Broad Run Interceptor downstream of Elklick SPS. Sewer improvement work will mostly involve the replacement of manholes.

Project Driver

The liners, benches/channels, and access rim and lids of the vault and downstream manholes are deteriorating and in need of improvement for proper operation and safety.

Additional Comments

A study to evaluate sewer condition and improvement options were completed as planning phase TO under this CIP project in 2022.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.7	(100%)

Estimate Method: Design Phase Estimate

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	1,640	1,160									2,800
Land/Easements											
Equip/Other											
Subtotal	1,640	1,160									2,800
Outside Funding											
Net Cost	1,640	1,160									2,800

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
				42	36	66	117	197	303	411	468	1,640

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Waxpool SPS General Improvements
 CIP Project #: WST00040
 Program: WST Wastewater

Requesting Dept: O-Remote Fac
 Managing Dept.: O-WST
 Project Manager: TBD
 Sheet Completed by: Downes, Kinsey



Project Description

This project includes the design and construction related to the installation of a new motor control center and pump control panel. Additionally, a manual transfer switch will be installed at the pump station for a portable generator connection.

Project Driver

Safety concerns related to high voltage and low voltage equipment being housed in the same pump control panel. Occupational health and safety and reliability of the pump station.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.3	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning		100									100
Design				120							120
Construction						900					900
Land/Easements											
Equip/Other	120										120
Subtotal	120	100		120		900					1,240
Outside Funding											
Net Cost	120	100		120		900					1,240

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
						30	30	30	30			120

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **Wastewater Facility General Improvements**
 CIP Project #: **WST00050**
 Program: **WST Wastewater**

Requesting Dept: **O-Remote Fac**
 Managing Dept.: **O-Remote Fac**
 Project Manager: **Lanham, Petie**
 Sheet Completed by: **Lanham, Petie**

Project Description

Project covers capital expenses for repairing or replacing equipment that reaches the end of service life. Project also covers all central system wastewater conveyance facilities needs, including pump stations, siphons, sewer meters, and valve vaults.

Project Driver

Ongoing O&M of facilities (asset management) to provide expected level of service to customers.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.5	(100%)

Estimate Method: **Industry Metrics**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	290	230	240	240	250	260	270	270	280	280	2,610
Subtotal	290	230	240	240	250	260	270	270	280	280	2,610
Outside Funding											
Net Cost	290	230	240	240	250	260	270	270	280	280	2,610

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
16	25	22	26	30	30	30	25	20	26	25	15	290



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **Grinder Pump Control Panel Replacement**
 CIP Project #: **WST00055**
 Program: **WST Wastewater**

Requesting Dept: **ASSET MNG**
 Managing Dept.: **ASSET MNG**
 Project Manager: **Fetty, Isaiah**
 Sheet Completed by: **Fetty, Isaiah**

Project Description

Replace aging grinder pump control panels throughout our grinder pump service areas and upgrade to flow monitoring and alarm capable panels.

Project Driver

The majority of control panels are 20 years or older. Replacing control panels allows for the opportunity to remotely monitor pump performance. Replacing panels will improve performance, reduce control panel and pump failures, and reduce repair costs. Remote monitoring provides the opportunity to identify issues such as excessive runtimes, power source issues, failing parts, etc. which can lead to premature pump failure and higher treatment cost.

Additional Comments

Control panel replacement cost is approximately \$2600 each which includes installation. We expect to replace about 20 a year. Panel replacements to date is 161. The cost also includes the first year of remote monitoring web service.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.05	(100%)

Estimate Method: **Firm Price/Quote**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	60	60	60	60	60	60	60	60	60	60	600
Land/Easements											
Equip/Other											
Subtotal	60	60	60	60	60	60	60	60	60	60	600
Outside Funding											
Net Cost	60	60	60	60	60	60	60	60	60	60	600

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
		1	2	5	9	15	15	9	4			60

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: JLMA East, S4-E (GCIP to Crosstrail Blvd) [R]
 CIP Project #: WST00057
 Program: WST Wastewater

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Tran, Huy
 Sheet Completed by: Tran, Huy



Project Description

Design and construction of 24" diameter to 16" diameter sanitary sewer upsizing and extension from the existing GCIP WWTP to the southern edge of Crosstrail Blvd. This upsizing and new sewer will serve the JLMA East area.

Project Driver

In 2019, the County named Loudoun Water the presumed water and sewer utility in the Leesburg JLMA. The GMO has committed Loudoun Water to initiate design and construction in coordination with development to extend service to these areas. This project is intended to provide major infrastructure in accordance with ongoing planning studies to the JLMA East service area.

Additional Comments

Currently, the planned Tuscarora Crossing Development is designing this project with their engineer. The spending listed in this sheet relates to the reimbursement of this project to the developer over a multi-year time period. Final agreements may alter spending schedule. Downstream projects to this project include COM.00015 and WST.00068 (JLMA East SPS). Part of proj #20220058. WST00057 and WTR00155 are connected.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	2	(10%)
Total score	4.2	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	90										90
Design	1,200	1,660									2,860
Construction	7,230	6,890									14,120
Land/Easements											
Equip/Other	640							1,750			2,390
Subtotal	9,160	8,550						1,750			19,460
Outside Funding											
Net Cost	9,160	8,550						1,750			19,460

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
954	1,604	997	966	1,049	1,002	841	636	448	305	208	145	9,155

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: JLMA West, S2 & S3A (Sycolin to RT 267) [R]
 CIP Project #: WST00058
 Program: WST Wastewater

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Kirby, Matthew
 Sheet Completed by: Kirby, Matthew



Project Description

Design and construction of approximately 6,500 LF of 20" to 36" diameter gravity sewer in the area included in the West JLMA planning, generally located southwest of Bolen Park. This portion of the gravity sewer (also referenced as West Sewer S2 and S3A) will extend from the new JLMA West SPS, cross under Sycolin Creek and then cross the Dulles Greenway to extend service to the Transition Policy Area.

Project Driver

The County has named Loudoun Water the preferred water and sewer utility in the Leesburg JLMA and expanded our Central Service Area in 2019. The GMO committed LW to initiate design and construction in coordination with development to extend service to the western half of the new JLMA service area and provide sewer for the new TPA portion of the Central Service Area west of the Dulles Greenway.

Additional Comments

Connected on the north end to WST00070 (S1A-W) - JLMA West SPS. Proj # 20240064. WST00058 and WTR00164 are connected.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	2	(10%)
Total score	4.2	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction	9,360										9,360
Land/Easements											
Equip/Other				2,800							2,800
Subtotal	9,360			2,800							12,160
Outside Funding											
Net Cost	9,360			2,800							12,160

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
950	950	950	950	950	900	900	900	500	500	500	414	9,364

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Spare Parts WST
 CIP Project #: WST00062
 Program: WST Wastewater

Requesting Dept: O-WST
 Managing Dept.: FIN
 Project Manager: Carnes, Brian
 Sheet Completed by: Dehler, Sally



Project Description

Placeholder for SAP tracking of Spare Equipment. Enables O&M to track which spares are purchased and Finance to track when spares are put in service to kick off depreciation.

Project Driver

Required financial tool.

Additional Comments

Spare equipment is any equipment >\$20,000 with a useful life of more than 1 year that will not be placed in service when received but rather held until needed. This includes both new equipment and existing equipment that is sent out for rebuild/repair that will be held until needed once it is received back

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	1	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.2	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	50	50	50	50	50	50	50	50	50	50	500
Subtotal	50	50	50	50	50	50	50	50	50	50	500
Outside Funding											
Net Cost	50	50	50	50	50	50	50	50	50	50	500

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		25						25				50

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Digital Dulles 24" Sanitary Sewer Outfall [R]
 CIP Project #: WST00066
 Program: WST Wastewater

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Tran, Huy
 Sheet Completed by: Tran, Huy



Project Description

Extension of 24" gravity sanitary sewer from Digital Dulles data center campus on the Dulles western lands through MWAA property. The trunk sewer will be 24-inch diameter and allow for the collection of flows from future MWAA development. The outfall is to Loudoun Water's Horsepen sanitary sewershed.

Project Driver

This project will allow for gravity sewer and eliminate the need of another small, additional pump station on the Digital Dulles Site. It will also provide Dulles airport with sanitary sewer access and the opportunity to decommission the existing Dulles West PS.

Additional Comments

Digital Dulles Project LD# 20220077; Includes areas of depths of up to 30 feet in all rock, plus multiple trenchless crossings of environmental sensitive areas and tunnelling under Horsepen.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	5	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.95	(100%)

Estimate Method: Detailed/Bid Estimate

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other				4,000	4,000	4,000	1,000				13,000
Subtotal				4,000	4,000	4,000	1,000				13,000
Outside Funding											
Net Cost				4,000	4,000	4,000	1,000				13,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: JLMA East Forcemain (Phase 2)
 CIP Project #: WST00068
 Program: WST Wastewater

Requesting Dept: PLN
 Managing Dept.: CAP PROGRAMS
 Project Manager: Parkinson, Paul
 Sheet Completed by: Parkinson, Paul



Project Description

Design and construction of approximately 2,500 LF 16" force main to convey wastewater from future JLMA East SPS and the new GCIP Interim SPS towards the Russell Branch SPS.

Project Driver

Growth in the JLMA will drive size and timing of the permanent SPS. Current planning figures show the interim station becoming over capacity in between 2029 & 2030. Transitioning the pumping of interim SPS flow through the permanent force main may extend the life of the interim station by a few years.

Additional Comments

Related: WST00052 JLMA East Sewer Plan, ADM00076 JLMA Planning, COM00015 GCIP Connection to Central.
 Gravity outfall to which force main will tie in is to be built by developers
 Only the force main costs are included in this sheet. The Sewer PS portion of this project is included in a different CIP sheet.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.1	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	170										170
Construction		100	1,800								1,900
Land/Easements											
Equip/Other											
Subtotal	170	100	1,800								2,070
Outside Funding											
Net Cost	170	100	1,800								2,070

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
11	13	15	17	18	19	18	17	16	14	12		170



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: JLMA West, S3B-W (Shreve South) [R]
 CIP Project #: WST00069
 Program: WST Wastewater

Requesting Dept: PLANNING
 Managing Dept.: LAND DEV
 Project Manager: TBD
 Sheet Completed by: Beatty, Andrew



Project Description

Design and construction of approximately 1,200 LF of 24" diameter gravity sewer in the area included in the West JLMA planning, generally located southwest of Bolen Park. This portion of the gravity sewer (also known as West Sewer 3B) will likely cross under Sycolin Creek, extend south of Shreve Mill Road, and then cross the Dulles Greenway to extend service to the TPA portion of the LW Central Service Area.

Project Driver

The County has named Loudoun Water the presumed water and sewer utility in the Leesburg JLMA and expanded our Central Service Area in 2019. The GMO committed LW to initiate design and construction in coordination with development to extend service to the western half of the new JLMA service area and provide sewer for the new TPA portion of the Central Service Area west of the Greenway.

Additional Comments

Connected on the north end to WST00058 (S2 & S3A). Developers will likely build this infrastructure and Loudoun Water will reimburse upon completion.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.3	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction			2,300	600	600	600	600				4,700
Land/Easements											
Equip/Other											
Subtotal			2,300	600	600	600	600				4,700
Outside Funding											
Net Cost			2,300	600	600	600	600				4,700

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: JLMA West SPS, S1A-W & S1B-W [R]
 CIP Project #: WST00070
 Program: WST Wastewater

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Tran, Huy
 Sheet Completed by: Tran, Huy



Project Description

This project (S1A-W & S1B-W) will be developer-led and includes the design and construction of the 1.5 MGD JLMA West SPS, associated force main (~4,900 LF), and gravity sewer (~1,800 LF). The pump station will be designed to be upgraded to an ultimate capacity near 4 MGD.

Project Driver

This project is required in order to meet the wastewater needs of several proposed data centers as well as future developments in the new service area and far western portion of the Central Service Area. In 2019, the County named Loudoun Water the presumed water and sewer utility in the Leesburg JLMA and expanded our Central Service Area.

Additional Comments

Project will be partially reimbursed based on agreement with developer. Project is underway as of 2022. Associated with LW Project #2021-0120 and 2021-0117

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	5	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.35	(100%)

Estimate Method: Other

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other		4,310	3,060	3,060	3,040	1,310					14,780
Subtotal		4,310	3,060	3,060	3,040	1,310					14,780
Outside Funding											
Net Cost		4,310	3,060	3,060	3,040	1,310					14,780

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: JLMA West, S-4-W NLS SPS Upgrades
 CIP Project #: WST00071
 Program: WST Wastewater

Requesting Dept: PLANNING
 Managing Dept.: CAP PROGRAMS
 Project Manager: Osiecki, Matt
 Sheet Completed by: Osiecki, Matt



Project Description

Design and construction of upgrades necessary to serve the JLMA West and new TPA area at the North Lower Sycolin Sewer Pump Station. This upgrade seeks to remain within the existing building footprint and will likely include electrical improvements, emergency storage, and larger pumps.

Project Driver

In 2019, the County named Loudoun Water the presumed water and sewer utility in the Leesburg JLMA and expanded our Central Service Area. The GMO has committed Loudoun Water to initiate design and construction in coordination with development to extend service to these areas. This project is intended to provide major infrastructure in accordance with ongoing planning studies to the JLMA West and new TPA areas.

Additional Comments

This project includes S4-W. Projects upstream of this project include WST.00058 and the JLMA West SPS. Phase 1 would increase the pump station capacity to approximately 4 MGD. Pending results of the study, a 2nd Phase may be required to increase the pump station capacity to approximately 7 MGD.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.85	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	550		1,000	800							2,350
Construction		4,870	1,420		15,000	24,000					45,290
Land/Easements											
Equip/Other											
Subtotal	550	4,870	2,420	800	15,000	24,000					47,640
Outside Funding											
Net Cost	550	4,870	2,420	800	15,000	24,000					47,640

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
23	36	54	72	84	84	72	54	36	23	14		552

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: **Sewer Replacement Shep/Blkwd/Caragana**
 CIP Project #: **WST00072**
 Program: **WST Wastewater**

Requesting Dept: **MNT-LINE**
 Managing Dept.: **CAP PROGRAMS**
 Project Manager: **Hollida, Jaron**
 Sheet Completed by: **Hollida, Jaron**



Project Description

Three sections of sewer pipe replacement.
 Shepard/Davis: Replace ~ 300 ft of 8" AC pipe with PVC. Requires AC pipe removal and relocation of approx. 300 lf of 8" WL to maintain 10 feet separation.
 Blackwood Ct: Remove and Replace 15-ft of 8-in PVC sanitary line.
 Caragana Ct: Replace 330 LF of 8" AC sewer with PVC.

Project Driver

Inspections indicate multiple problems that may lead to pipe failure.
 Shepard/Davis and Blackwood: This is sewer backup prevention due to existing bulge in pipe. If the object breaks through the pipe there is a great chance of a blockage/Back-up/SSO to happen.
 The low spots on Caragana collect debris that may create a backup/SSO.

Additional Comments

Shepard/Davis line is close to 24" water transmission main and 8" distribution main. Consult with contractor whether it makes sense to replace pipe section into the invert of the manhole.

 Projects will require traffic control, bypass pumping.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method: **Design Phase Estimate**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	20										20
Construction	560	740									1,300
Land/Easements											
Equip/Other											
Subtotal	580	740									1,320
Outside Funding											
Net Cost	580	740									1,320

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	19				21	18	33	57	95	144	191	579

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Wastewater Infrastructure R&R
 CIP Project #: WST00073
 Program: WST Wastewater

Requesting Dept: MNT-LINE
 Managing Dept.: ASSET MNG
 Project Manager: Bussard, Bubba
 Sheet Completed by: Dzara, Jessica



Project Description

Project covers capital expenses for repairing or replacing buried infrastructure with documented deficiencies requiring repair or replacement. Project covers all central system wastewater conveyance facilities including manholes, forcemains, and gravity sewers.

Project Driver

Ongoing O&M to provide expected level of service to customers.

Combines prior projects specific to:
 Sewer rehab and replacement (WST00042)
 Lateral rehab and replacement (WST00085)
 Manhole rehab and replacement (WST00091)

Additional Comments

2026 Priorities:
 Manhole Rehab (Start rehab on 42 manholes identified at ~\$5K/manhole)
 2027 Priorities:
 Continued manhole rehab + PVC lateral connections to PVC or Asbestos Cement sewer mains (10 currently identified)

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.65	(100%)

Estimate Method: N/A

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design		30	30	30	30	30	30	30	30	30	270
Construction	100	200	1,200	1,150	1,150	1,100	1,100	1,100	1,100	1,100	9,300
Land/Easements											
Equip/Other											
Subtotal	100	230	1,230	1,180	1,180	1,130	1,130	1,130	1,130	1,130	9,570
Outside Funding											
Net Cost	100	230	1,230	1,180	1,180	1,130	1,130	1,130	1,130	1,130	9,570

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
						3	21	54	22			100

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Cabin Branch Lateral Lining Project
 CIP Project #: WST00074
 Program: WST Wastewater

Requesting Dept: ASSET MNG
 Managing Dept.: CAP PROGRAMS
 Project Manager: Parkinson, Paul
 Sheet Completed by: Parkinson, Paul



Project Description

Install a CIPP liner in every lateral in the Cabin Branch sewershed. There are approximately 575 laterals in this area, and there are an additional 335 laterals outside of the Cabin Branch sewershed also included in this project.

Project Driver

Consistent breaks and after hours calls on laterals in this area have caused concern as well as continued I&I during rainfall events. The lateral lining standards developed under the Sanitary Rehab Program will inform how far up the lateral will be lined.

Additional Comments

Sterling Park section 1 water main replacement project will replace laterals in another area of Sterling Park within the Cabin Branch sewershed. Flow monitoring in the sewershed will be compared to help determine future lateral condition improvement approaches.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction	1,000	1,500	1,500	1,500	1,500						7,000
Land/Easements											
Equip/Other											
Subtotal	1,000	1,500	1,500	1,500	1,500						7,000
Outside Funding											
Net Cost	1,000	1,500	1,500	1,500	1,500						7,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
133	71	97	123	139	140	124	100	73				1,000

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Connect Dulles Trade SPS to Gravity Sewer
 CIP Project #: WST00075
 Program: WST Wastewater

Requesting Dept: O-Remote Fac
 Managing Dept.: CAP PROGRAMS
 Project Manager: _Capital Programs
 Sheet Completed by: Poudel, Amulya



Project Description

Planning, Design, and Construction of a 2,000 foot gravity sewer outfall to connect the existing Dulles Trade Center West sewer pump station flows to the proposed Digital Dulles gravity sewer outfall.

Project Driver

The Dulles Trade Center West sewer pump station is one of the smallest in the central system and is not positioned in the lowest point of the sewershed. Removing the pump station entirely by constructing this gravity sewer outfall will save maintenance and operational expense.

Additional Comments

Digital Dulles in the Western Lands of the airport has submitted a sewer outfall plan (LW project ID 20220077) that will drain to the Horsepen Run sewershed. This new gravity sewer will be able to provide a point low enough to tie in the Dulles Trade Center West sewer pump station flows.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.85	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design						120	200				320
Construction								3,220	180		3,400
Land/Easements											
Equip/Other											
Subtotal						120	200	3,220	180		3,720
Outside Funding											
Net Cost						120	200	3,220	180		3,720

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Red Cedar 2 SPS Improvements
 CIP Project #: WST00078
 Program: WST Wastewater

Requesting Dept: O-Remote Fac
 Managing Dept.: O-WST
 Project Manager: Pyles, Carly
 Sheet Completed by: Pyles, Carly



Project Description

Project will review sewershed development and flows to define upgrades required to account for new development, with a focus on resiliency planning related to emergency storage.

Project Driver

New emergency storage infrastructure will provide adequate emergency response time for staff to implement and deploy proper corrective actions prior to a potential Sanitary Sewer Overflow (SSO).

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.05	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	20										20
Design	50	350									400
Construction		2,790	210								3,000
Land/Easements											
Equip/Other											
Subtotal	70	3,140	210								3,420
Outside Funding											
Net Cost	70	3,140	210								3,420

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
17	6								12	13	26	74

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

This project will study and develop Area Facility Plan (AFP) for service to the areas in the western edge of the Central Service Area (CSA) and provide updates over time. This includes the area around and west of Trap Rock WTP including the new TPA, Potomac Energy, industrial data center development and Leesburg JLMA areas that were added as part the 2019 Loudoun County General Plan.

Project Driver

Continued rezoning and potential development of these areas requires updated Area Facility Plan (AFP).

Additional Comments

Will build on work completed in 2023, 2024 and is likely to continue. Study will address both water and wastewater needs. This is considered planned spending; funding for Area Facility Plans is carried in WST00001 and WTR00001 to address periodic needs to review the Loudoun Water system.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.2	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	150	200	100			200					650
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal	150	200	100			200					650
Outside Funding											
Net Cost	150	200	100			200					650

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
18	11	15	19	21	20	16	12	8	5	3	2	150



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: WW Collection Sys Master Plan
 CIP Project #: WST00081
 Program: WST Wastewater

Requesting Dept: PLANNING
 Managing Dept.: PLANNING
 Project Manager: Beatty, Andrew
 Sheet Completed by: Beatty, Andrew



Project Description

This project will be completed in two primary phases. Phase 1 will update the model to include additional critical infrastructure, develop growth projections and recommend flow monitoring. Phase 2 will prepare a comprehensive Master Plan incorporating flow data into the model, developing phased CIP and presenting in a digital format for use across LW departments. Sub-tasks to develop Technical Memoranda will support permitting and regional coordination.

Project Driver

2016 Master Plan requires update and revision to reflect new growth, expanded service area, incorporation of additional infrastructure, and updated flow information. The Master Plan is a tool required by Loudoun Water and industry best practice to update on a five to ten year cycle.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.1	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	400										400
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal	400										400
Outside Funding											
Net Cost	400										400

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
75	75	65	65	60	60							400



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

Courtland WWPS Emergency Electrical Generator is nearing the end of its useful life. Purchase of a new emergency standby generator (150 kW).

Project Driver

Facility operation during an electrical power outage.

Additional Comments

Loudoun Water staff will install and commission generator.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	5	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	150										150
Subtotal	150										150
Outside Funding											
Net Cost	150										150

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
2	1						150					153

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Grinder Chamber Replacement Program
 CIP Project #: WST00083
 Program: WST Wastewater

Requesting Dept: ASSET MNG
 Managing Dept.: MNT-LINE
 Project Manager: Bussard, Bubba
 Sheet Completed by: Fetty, Isaiah

Project Description

This program is to replace grinder pump chambers. The chambers to be replaced will be identified through the Grinder Chamber Inspection Program, which aims to identify high risk chambers or those damaged beyond repair.

Project Driver

Asset Management along with Line Maintenance began a grinder pump chamber inspection program in the Fall of 2023. With anticipated chamber issues, including housing corrosion and infiltration in ground, we are expecting to increase our frequency of replacements. Replacing broken or damaged chambers will reduce potential for sewer overflow, improve reliability, and reduce maintenance costs with our service contractor.

Additional Comments

Replaced all chambers needed in 2024 and 2025.
 Estimating 5 replacements per year starting in 2029 to align with next inspection cycle at \$25K each (costs include new chamber, excavation, installation, labor). These chambers have an Estimated Useful Life of 30 years, with a average system age currently sitting at 15 years.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.55	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction	30	30	30	110	120	30	30	30	120	120	650
Land/Easements											
Equip/Other											
Subtotal	30	30	30	110	120	30	30	30	120	120	650
Outside Funding											
Net Cost	30	30	30	110	120	30	30	30	120	120	650

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	5		5		5		5		5		5	30

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Large Diameter Sewer Rehabilitation
 CIP Project #: WST00084
 Program: WST Wastewater

Requesting Dept: ASSET MNG
 Managing Dept.: CAP PROGRAMS
 Project Manager: Parkinson, Paul
 Sheet Completed by: Parkinson, Paul



Project Description

Rehabilitation of approximately 4,000 LF of 15" to 42" diameter gravity sewer mains and connected manholes within the central system. The sewer will either be lined or replaced to fix the defects noted in the most recent CCTV.

Project Driver

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	70										70
Design	140	10									150
Construction		1,190	810								2,000
Land/Easements											
Equip/Other											
Subtotal	210	1,200	810								2,220
Outside Funding											
Net Cost	210	1,200	810								2,220

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
35	23	8			5	7	16	30	38	30	16	208



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Sanitary Sewer Lining Phase 3
 CIP Project #: WST00086
 Program: WST Wastewater

Requesting Dept: ASSET MNG
 Managing Dept.: CAP PROGRAMS
 Project Manager: Parkinson, Paul
 Sheet Completed by: Parkinson, Paul



Project Description

This project includes the lining of 8" diameter sewer mains and accompanying laterals within the Countryside 2 and Triple Seven sewersheds. We anticipate lining about 6,000 feet of gravity sewer main and 180 associated laterals.

Project Driver

In fixing the defects that are currently recorded in the system, we hope to reduce the amount of I&I that flows to either BRWRF or Blue Plains. The greater reduction in I&I flows in the sanitary sewer system, the lower the treatment cost.

Additional Comments

The project is intended to reduce leakage and corrosion and restore a portion of design life to the system. Using relining techniques, the project is intended to reduce the costs of full replacement of pipe(s) within the main and the connection of laterals.

Pricing based on riding the Fairfax County lining contract.

Estimate Method: Industry Metrics

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction	60										60
Land/Easements											
Equip/Other											
Subtotal	60										60
Outside Funding											
Net Cost	60										60

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
62												62

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Belmont Innovation Campus Gravity Outfall [R]
 CIP Project #: WST00087
 Program: WST Wastewater

Requesting Dept: PLN
 Managing Dept.: LAND DEV
 Project Manager: Tran, Huy
 Sheet Completed by: Tran, Huy

Project Description

This project (S3C-E) will be developer-led and includes the design and construction of approximately 2,200 LF of 18" sewer main extending through the Belmont Innovation Campus.

Project Driver

This project is required in order to meet the wastewater needs of several proposed data centers as well as future developments. In 2019, the County named Loudoun Water the presumed water and sewer utility in the Leesburg JLMA and expanded our Central Service Area.

Additional Comments

Project is reimbursement for oversizing, as part of the Belmont Innovation Campus Project LW#20230110

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.9	(100%)

Estimate Method: Design Phase Estimate

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other		230									230
Subtotal		230									230
Outside Funding											
Net Cost		230									230

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Elklick Upper Foley FM Corrosion Control Upgrad
 CIP Project #: WST00088
 Program: WST Wastewater

Requesting Dept: MNT-LINE
 Managing Dept.: CAP PROGRAMS
 Project Manager: Simmons, Kwame
 Sheet Completed by: Simmons, Kwame



Project Description

The project will improve the condition of corrosion protection measures along approximately 15,500 LF of parallel 16" and 20" force main from the Elk Lick pump station, and 14,500 LF of 20" force main from the Upper Foley pump station.

Project Driver

Readings from test stations indicate that the Elklick and Upper Foley force mains are not fully protected from corrosion. Additional studies and field investigations are needed to determine the extent of deterioration and feasible improvement options. These force mains carry significant flow and are critical to Loudoun Water's operation.

Additional Comments

In the first phase, which is ongoing, the design consultant is conducting field investigations and studies to identify the extent of deterioration and provide improvement options. The subsequent phases will design and construct the selected improvement solution.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.65	(100%)

Estimate Method: Feasibility or Study

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	10										10
Design	290	10									300
Construction		2,260	740								3,000
Land/Easements											
Equip/Other											
Subtotal	300	2,270	740								3,310
Outside Funding											
Net Cost	300	2,270	740								3,310

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
8	19	11	17	24	31	37	40	37	31	24	17	296



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: JLMA East Sewer PS (Phase 2)
 CIP Project #: WST00090
 Program: WST Wastewater

Requesting Dept: PLN
 Managing Dept.: CAP PROGRAMS
 Project Manager: TBD
 Sheet Completed by: Osiecki, Matt

Project Description

Design and construction of upgrades to the interim GCIP to facilitate pumping through the permanent force main, as well as increase capacity of the station to 3.2 MGD.

Project Driver

Growth in the JLMA will drive size and timing of the permanent SPS. Current planning figures show the interim station becoming over capacity in between 2029 & 2030. Transitioning the pumping of interim SPS flow through the permanent force main will likely increase the peak pumping capacity of the interim SPS. The need for this SPS will depend on the development in the area.

Additional Comments

Related: WST00052 JLMA East Sewer Plan, ADM00076 JLMA Planning, COM00015 GCIP Connection to Central, WST00068 JLMA East Forcemain

 The associated forcemain design towards the Russell Branch SPS is WST00068.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.85	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	160	30									190
Construction		1,170	3,050								4,220
Land/Easements											
Equip/Other											
Subtotal	160	1,200	3,050								4,410
Outside Funding											
Net Cost	160	1,200	3,050								4,410

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
					9	10	17	28	36	36	28	164

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: JLMA Downstream Sewer Capacity Upgrades
 CIP Project #: WST00092
 Program: WST Wastewater

Requesting Dept: PLN
 Managing Dept.: CAP PROGRAMS
 Project Manager: Morriss, Ryan
 Sheet Completed by: Morriss, Ryan



Project Description

This project includes upsizing approximately 7,100 LF of gravity sewer downstream of North Lower Sycolin SPS to 24"

Project Driver

The existing gravity sewer immediately downstream of the JLMA do not have adequate capacity. Evaluation of sewer alignment is needed to identify optimal upgrade options.

Additional Comments

This sheet is related to WST00071 and WST00093

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.85	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	50										50
Design	110	570	20								700
Construction			1,480	6,240	6,280						14,000
Land/Easements											
Equip/Other											
Subtotal	160	570	1,500	6,240	6,280						14,750
Outside Funding											
Net Cost	160	570	1,500	6,240	6,280						14,750

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
30	16	8				19	8	12	17	23	31	164

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **NLSSPS Secondary Forcemain**
 CIP Project #: **WST00093**
 Program: **WST Wastewater**

Requesting Dept: **PLN**
 Managing Dept.: **CAP PROGRAMS**
 Project Manager: **TBD**
 Sheet Completed by: **Morriss, Ryan**

Project Description

This project includes roughly 9,500 LF of 12" force main, routed adjacent to the existing 12" NLSSPS force main, in order to provide full buildout capacity (7 MGD) at the station. There is currently a study which will determine whether the JMLA West SPS can bypass the NLSSPS with its FM to avoid double pumping. This sheet assumes that JLMA West will still need to pump to NLSSPS.

Project Driver

Growth of the JLMA/TPA has resulted in a need to increase the capacity of the NLSSPS. The station was never intended to accept flow from the regional area, therefore major upgrades are required to increase capacity to a sufficient level.

Additional Comments

Related to this project is WST00071, which captures the design and construction cost of the 7 MGD station, and WST00092, which captures the design and construction costs for the gravity sewer upgrades downstream of the FM outfall required to convey the buildout flow.

The study reference above is tracked under WST00080: Western CSA AFP.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.85	(100%)

Estimate Method: **Industry Metrics**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	40	690	90								820
Construction			610	5,900	1,990						8,500
Land/Easements		600									600
Equip/Other											
Subtotal	40	1,290	700	5,900	1,990						9,920
Outside Funding											
Net Cost	40	1,290	700	5,900	1,990						9,920

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
										25	12	37

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Russell Branch SPS Area Infrastructure [R]
 CIP Project #: WST00094
 Program: WST Wastewater

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Tran, Huy
 Sheet Completed by: Tran, Huy

Project Description

This project will be developer-led and includes the design and construction of several utilities in the vicinity of the new Russell Branch SPS, which is located in an easement on property south of Route 7 and west of Belmont Ridge Road. The project includes approximately: 6,000 LF of 16"-24" gravity sewer; 4,600 LF of 12" force main; 2,800 LF of 12" water main, 30" casing pipe under Belmont Ridge Road for future force main, and electrical and comm. duct banks.

Project Driver

The parcel on which Russell Branch SPS is located is undergoing development. The developer will design and construct future Loudoun Water linear assets on their parcel together with the rest of their development. Loudoun Water will reimburse the developer in accordance with the executed agreements.

Additional Comments

Related project - Russell Branch SPS WST00024.
 20220072, 20220114, 20230078, 20240001

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.1	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other		6,000									6,000
Subtotal		6,000									6,000
Outside Funding											
Net Cost		6,000									6,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **Russell Branch SPS Capacity Upgrade**
 CIP Project #: **WST00095**
 Program: **WST Wastewater**

Requesting Dept: **PLN**
 Managing Dept.: **CAP PROGRAMS**
 Project Manager: **TBD**
 Sheet Completed by: **Poudel, Amulya**

Project Description

Study, design, permit, and construct additional emergency storage, as well as upsize downstream force mains & gravity sewer to operate the Russell Branch SPS at its peak installed capacity of 4.5 MGD.

Project Driver

The new Russell Branch SPS construction is scheduled to be completed in 2027. The station will have a peak pumping capacity of 4.5 MGD. However, the emergency storage tank, existing downstream force mains, and gravity sewer sizes limit the operating capacity to 2.5 MGD. The work in this project is required to operate the station at the maximum installed capacity.

Additional Comments

Related project - Russell Branch SPS WST00024.
 Some of the downstream upsizing may be completed by developers. The work included in this CIP will likely be done in phases.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.9	(100%)

Estimate Method: **Industry Metrics**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design				250	400						650
Construction						6,360	6,140				12,500
Land/Easements											
Equip/Other											
Subtotal				250	400	6,360	6,140				13,150
Outside Funding											
Net Cost				250	400	6,360	6,140				13,150

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Small Diam. Sewer Replacement - Sterling Ph 1
 CIP Project #: WST00096
 Program: WST Wastewater

Requesting Dept: ASSET MNG
 Managing Dept.: CAP PROGRAMS
 Project Manager: Parkinson, Paul
 Sheet Completed by: Parkinson, Paul



Project Description

Replacement of 2,500 LF of 8", 10", and 12" gravity sewer main and the associated approximate 25 laterals whose defects could not be fixed by lining.

Project Driver

As the system continues to age and CCTV is used to inspect sewers, we are noting problems we find. Some of these projects cannot be fixed by lining and will need to be replaced in order to keep water from infiltrating the sewer or leaking out of the sewer into the environment.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design	300										300
Construction		1,110	190								1,300
Land/Easements											
Equip/Other											
Subtotal	300	1,110	190								1,600
Outside Funding											
Net Cost	300	1,110	190								1,600

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
					9	25	69	104	69	24		300

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Central Sewer CIPP Lining Phase 4
 CIP Project #: WST00097
 Program: WST Wastewater

Requesting Dept: ASSET MNG
 Managing Dept.: CAP PROGRAMS
 Project Manager: Parkinson, Paul
 Sheet Completed by: Parkinson, Paul



Project Description

This project includes the lining of 8" diameter sewer mains and accompanying laterals within the Seneca and Great Falls sewersheds. We anticipate lining approximately 3,500 LF of gravity sewer main and the associated 30 laterals.

Project Driver

In fixing the defects that are currently recorded in the system, we hope to reduce the amount of I&I that flows to either BRWRF or Blue Plains. The greater reduction in I&I flows in the sanitary sewer system, the lower the treatment cost.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	350										350
Land/Easements											
Equip/Other											
Subtotal	350										350
Outside Funding											
Net Cost	350										350

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
			11	75	189	75						350

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: **Claude Moore Trunk Main Upgrade**
 CIP Project #: **WST00098**
 Program: **WST Wastewater**

Requesting Dept: **LAND DEV**
 Managing Dept.: **CAP PROGRAMS**
 Project Manager: **Morriss, Ryan**
 Sheet Completed by: **Morriss, Ryan**



Project Description

This project would include the design and construction of approximately 4,000 linear feet of trunk main ranging in size from 14" to 24" to replace the existing two trunk mains through the Loudoun Valley Estates neighborhood.

Project Driver

Due to planned and proposed development within the Claude Moore sewershed, the existing trunk mains through Loudoun Valley Estates will be over capacity and require upsizing. Because of the critical nature of trunk mains, the potential impact to the community, and the level of coordination and outreach required; this is being proposed as a capital improvement project rather than developer built infrastructure with reimbursement due to its complexity and amount of interaction with the existing homes.

Additional Comments

Related Projects:
 00-0143 - LOUDOUN VALLEY ESTATES SECTION
 00-0038 - S-192 Vantage Pointe Offsite S
 Reffer to Project Number 20240068 for drainage divide and sewer calculations.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method: **Benchmark Data**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	100										100
Design		400									400
Construction			4,760	5,240							10,000
Dev. Reimbursement		30									30
Equip/Other											
Subtotal	100	430	4,760	5,240							10,530
Outside Funding											
Net Cost	100	430	4,760	5,240							10,530

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
3	3	4	7	11	15	16	15	11	7	4	4	100



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

Installation of electronic equipment protective devices across all remote wastewater facilities, such as pump stations and sewer metering vaults.

Project Driver

Reduce the occurrences of equipment damage associated with electrical surges and lightning strikes.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.1	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Dev. Reimbursement											
Equip/Other	100										100
Subtotal	100										100
Outside Funding											
Net Cost	100										100

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	20	20	20	20	20							100

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Horsepen Run Sewer Vault Meter
 CIP Project #: WST00100
 Program: WST Wastewater

Requesting Dept: O-CONVEY
 Managing Dept.: CAP PROGRAMS
 Project Manager: TBD
 Sheet Completed by: Poudel, Amulya

Project Description

Install a permanent sewer flow meter in the existing Horsepen Run Sewer Vault to meter sewer flows into the Potomac Interceptor. Project includes access road, power, and SCADA as well as the physical flow meter.

Project Driver

The Innovation Multifamily project will push Loudoun Water sewer flows heading into the Potomac Interceptor at this location over the 60,000 gallons per day average limit that DC Water allows for unmetered sewer flows.

Additional Comments

More information is needed on Rivana's development in order to say when we can use the Horsepen Run trunk sewer that conveys flows into the BRIPPI line.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method: Benchmark Data

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	200										200
Construction		1,000									1,000
Dev. Reimbursement											
Equip/Other											
Subtotal	200	1,000									1,200
Outside Funding											
Net Cost	200	1,000									1,200

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
			6	16	46	69	46	17				200



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Loudoun County Support (County)
 CIP Project #: WST00101
 Program: WST Wastewater

Requesting Dept: PLANNING
 Managing Dept.: PLANNING
 Project Manager: TBD
 Sheet Completed by: Beatty, Andrew



Project Description

Phased study to evaluate potential options to address water and wastewater concerns within Loudoun County

Project Driver

Loudoun County on occasion engages Loudoun Water to provide technical support when evaluating potential solutions to address water and wastewater concerns within the County.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	5	(10%)
Total score	3.35	(100%)

Estimate Method: Other

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	100	400	250	250							1,000
Design											
Construction											
Dev. Reimbursement											
Equip/Other											
Subtotal	100	400	250	250							1,000
Outside Funding	100	400	250	250							1,000
Net Cost											

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
					10	15	15	15	15	15	15	100

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

Study to determine potential utility service corridors in developable areas of MWAA property

Project Driver

MWAA recently completed an update to their master plan for Dulles International Airport. The plan depicts areas of MWAA property that may be developed and require service from Loudoun Water. This study will determine and document potential utility service corridors.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.6	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	60										60
Design											
Construction											
Dev. Reimbursement											
Equip/Other											
Subtotal	60										60
Outside Funding											
Net Cost	60										60

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		5	15	15	15	10						60

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Sanitary Sewer CIPP Lining Phase 5
 CIP Project #: WST00103
 Program: WST Wastewater

Requesting Dept: ASSET MNG
 Managing Dept.: CAP PROGRAMS
 Project Manager: Parkinson, Paul
 Sheet Completed by: Parkinson, Paul



Project Description

This project includes the lining of 8" and 12" diameter sewer mains and accompanying laterals within the Cabin Branch and Indian Creek sewersheds. We anticipate lining about 3,500 feet of gravity sewer main and 40 associated laterals.

Project Driver

In fixing the defects that are currently recorded in the system, we hope to reduce the amount of I&I that flows to either BRWRF or Blue Plains. The greater reduction in I&I flows in the sanitary sewer, the lower the cost of treatment.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.05	(100%)

Estimate Method: Benchmark Data

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction		400									400
Dev. Reimbursement											
Equip/Other											
Subtotal		400									400
Outside Funding											
Net Cost		400									400

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Waxpool SPS Emergency Storage
 CIP Project #: WST00104
 Program: WST Wastewater

Requesting Dept: LAND DEV
 Managing Dept.: CAP PROGRAMS
 Project Manager: Tenzin, Jigme
 Sheet Completed by: Tenzin, Jigme



Project Description

Evaluation, design, and construction of emergency storage structure to provide 2-hour emergency storage required to increase the pump station capacity.

Project Driver

DEQ requires emergency storage at pump stations in the Dulles Area watershed. The projected flows from new developments in the Waxpool SPS sewershed will exceed the intalled emergency storage capacity. Additional storage is needed to increase the operating capacity of the pump station.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	4	(10%)
Total score	4	(100%)

Estimate Method: Other

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	50										50
Design	60	20									80
Construction		420	80								500
Dev. Reimbursement											
Equip/Other											
Subtotal	110	440	80								630
Outside Funding											
Net Cost	110	440	80								630

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	2	11	27	10		5	5	8	12	15	15	110

WATER (WTR)

2026-2035 CIP Section Index ~ WTR

Project Number	Project Name	Managing Division	2026 Spending	1st Five	2nd Five	Ten-year
				Years	Years	CIP
				2026-30	2031-35	2026-2035
WTR00001	Water System Planning Studies	PLANNING	0	700	1,250	1,950
WTR00005	Rt 7-Rt 28 24in Main	CAP PROGRAMS	0	0	1,300	1,300
WTR00011	Rt7 36in Main	CAP PROGRAMS	0	0	2,200	2,200
WTR00020	Rt 50 - 30in Parallel Main	CAP PROGRAMS	0	21,000	0	21,000
WTR00025	Dulles North Permanent Pump Station	CAP PROGRAMS	0	0	12,500	12,500
WTR00046	Goose Creek Reservoir Dredging	CAP PROGRAMS	200	1,600	23,000	24,600
WTR00056	Transmission - Hydraulic Surge Analysis	PLANNING	0	300	0	300
WTR00062	Former COF Properties VRP Enrollment	WTR RES	50	50	0	50
WTR00082	Dulles North IWBPS Improvements	CAP PROGRAMS	0	500	3,000	3,500
WTR00086	Rt 659-Belmont 36in Main Upsize	CAP PROGRAMS	1,020	23,150	0	23,150
WTR00087	Rt 50-Fleetwood 24in Main	CAP PROGRAMS	0	100	2,850	2,950
WTR00091	Water Distribution Looping-Gap Closures	PLANNING	0	740	3,520	4,260
WTR00104	Rt 50-Hiddenwood Lane 24in Main [R]	LAND DEV	0	350	0	350
WTR00107	W Beech-Concord-Colonial Pipe Replacement	CAP PROGRAMS	640	3,610	0	3,610
WTR00108	Hall Road 16in Gap Closure	CAP PROGRAMS	90	1,120	0	1,120
WTR00112	Landfill Booster Station Improvements	CAP PROGRAMS	0	220	450	670
WTR00119	Pipeline Corrosion Control Program	O-PROGRAMS	200	1,000	1,000	2,000
WTR00120	TTM Technologies Meter Vault Replacement	CAP PROGRAMS	50	280	0	280
WTR00124	Sterling Standpipe Improvements	O-WST	200	1,700	0	1,700
WTR00126	Acoustic Listening Devices	ASSET MNG	100	260	100	360
WTR00127	Goose Creek Dam Improvements	CAP PROGRAMS	170	1,380	0	1,380
WTR00130	Water Facility General Improvements	O-Remote Fac	110	570	620	1,190
WTR00138	Broad Run Farms Waterline Ext. (County)	CAP PROGRAMS	3,780	16,050	0	16,050
WTR00143	Waterside - Old Ox Rd 16" Watermain [R]	CAP PROGRAMS	0	0	500	500
WTR00145	30" Water Ruritan Rd to Rt 28 Crossing	CAP PROGRAMS	320	4,300	0	4,300
WTR00151	Dulles South WBS Upgrade	CAP PROGRAMS	150	150	0	150
WTR00152	Brambleton 600 WBS Upgrade	CAP PROGRAMS	290	4,900	0	4,900

Project Number	Project Name	Managing Division	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
WTR00153	MV VFD Vibration Mon Upgrade	O-WTR	650	650	0	650
WTR00154	JLMA/TPA - Water (Phase 2)	CAP PROGRAMS	0	4,400	0	4,400
WTR00155	JLMA East, W1, W2 & W3-E [R]	LAND DEV	15,000	29,640	1,760	31,400
WTR00157	Meter Crock Rehabilitation	FIELD SERV	500	2,100	500	2,600
WTR00158	Mt. Sterling WBPS [R]	CAP PROGRAMS	80	2,080	2,500	4,580
WTR00160	Beaumeade PRV Vault Rehabilitation	O-Remote Fac	0	50	150	200
WTR00161	Russell Branch Broad Run Crossing Water Main	PLANNING	0	0	5,600	5,600
WTR00162	LCParkway-Lockridge 16-inch water [R]	LAND DEV	0	1,200	0	1,200
WTR00163	Spare Parts WTR	FIN	50	250	250	500
WTR00164	JLMA West, W2A & W7 (Sycolin to RT 267) [R]	LAND DEV	7,190	8,190	0	8,190
WTR00165	JLMA West, W2B-W Shreve South [R]	LAND DEV	0	2,700	900	3,600
WTR00169	Dulles West Blvd 16-inch Watermain [R]	LAND DEV	0	3,000	0	3,000
WTR00172	JLMA West, W1A-W [R]	LAND DEV	500	1,100	0	1,100
WTR00174	Willard Road 30-in Watermain Extension [R]	LAND DEV	0	2,000	0	2,000
WTR00176	Water Infrastructure R&R	ASSET MNG	0	16,000	77,500	93,500
WTR00177	Beaverdam Dam Improvements	O-WTR	50	250	250	500
WTR00178	Woodstone 1 & 2 Improvements	CAP PROGRAMS	130	1,520	0	1,520
WTR00179	Brambleton Tank 1 Rehabilitation	O-WST	1,950	1,950	0	1,950
WTR00180	Oakdale, Lindenwood & W Ash Pipe Replacement	CAP PROGRAMS	690	3,740	0	3,740
WTR00181	Valve Replacements and Misc. Improvements	CAP PROGRAMS	870	2,260	0	2,260
WTR00184	Water Storage Tank Process Upgrades	O-WST	80	680	0	680
WTR00185	16" WM Innovation Ave to Old Ox	CAP PROGRAMS	100	350	0	350
WTR00188	Dulles South Storage Tanks Modifications	O-WST	120	3,500	0	3,500
WTR00189	Sterling Park Water Main Replacement	CAP PROGRAMS	300	18,800	0	18,800
WTR00190	Water System Master Plan	PLANNING	250	250	600	850
WTR00192	Brambleton Tank 2 Upgrades	O-WST	390	3,060	0	3,060
WTR00193	Central System Electrical Shock Mitigation	ASSET MNG	200	370	0	370
WTR00194	Evergreen Mills 16" Waterline - JLMA GF [R]	LAND DEV	0	2,780	0	2,780

Project Number	Project Name	Managing Division	2026 Spending	1st Five Years 2026-30	2nd Five Years 2031-35	Ten-year CIP 2026-2035
WTR00195	Evergreen Mills 16" Waterline - JLMA VCS [R]	LAND DEV	0	3,380	0	3,380
WTR00196	Rt50 to Dulles West Blvd 24-inch Gap [R]	LAND DEV	0	2,000	0	2,000
WTR00197	Sterling Park Section 2 Water Main Replacement	CAP PROGRAMS	80	16,250	350	16,600
WTR00198	W1B-West 24-inch Extension to Shreve Mill Road [R]	LAND DEV	800	800	0	800
WTR00199	JLMA W-4-E East/West Interconnection [R]	LAND DEV	0	5,700	0	5,700
WTR00201	Water Main Replacement Sterling Phase 3	CAP PROGRAMS	0	15,460	540	16,000
WTR00202	Water Main Replacement Lipscomb, Austen	CAP PROGRAMS	50	2,100	0	2,100
WTR00203	Electrical & Lightning Protection - Water Sites	OT	100	100	0	100
Total	63 projects		\$37,500	\$242,690	\$143,190	\$385,880

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Water System Planning Studies
 CIP Project #: WTR00001
 Program: WTR Water

Requesting Dept: PLANNING
 Managing Dept.: PLANNING
 Project Manager: Geldert, Darrin
 Sheet Completed by: Geldert, Darrin



Project Description

This project includes system-wide water planning studies for the central system, such as 1) Major overall updates to the water distribution system master plan every 5 years, 2) Minor annual updates to the water master plan, 3) Area facility plans (AFP) as needs arise, 4) Minor water system studies.

Project Driver

Loudoun Water's service area continues to experience high-paced residential and commercial growth, increasing the water demands in the system. There is continued need for expansion of the central water system in response to projected residential and commercial growth (development) in the central service area.

Additional Comments

Master Planning scheduled in separate CIP projects for 2026.

 Major Update Master Planning in 2033-4.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.7	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning		150	150	150	250	150	150	400	400	150	1,950
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal		150	150	150	250	150	150	400	400	150	1,950
Outside Funding											
Net Cost		150	150	150	250	150	150	400	400	150	1,950

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

This project includes the design and construction of 800 LF of 24" diameter water main crossing Route 7, just east of the Route 28 intersection. Currently, a 12" diameter water main crossing exists at this location and will be replaced, or parallel installation will be proposed.

Project Driver

Currently, a 12" diameter water main crossing exists at this location and additional capacity is required to increase system reliability. Identified in 2012 Master Plan as an area of increased headloss, but removed from 2018 MP. The potential connection between the High Pressure 510 Transmission Main and the 538 W&OD main at Paragon Park make this a redundancy project.

Additional Comments

Limited new development potential in this area; likely a capital project.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.1	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design						200					200
Construction							300	800			1,100
Land/Easements											
Equip/Other											
Subtotal						200	300	800			1,300
Outside Funding											
Net Cost						200	300	800			1,300

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project includes design and construction of approximately 3 miles of 36" water transmission main along Route 7. The project extends from Route 659 to Lexington Drive and includes significant road crossings that will require trenchless construction.

Project Driver

This project was envisioned in the 2012 Master Plan and would help hydraulically balance operations within the Central Water Service Area and meet emergency demands in the eastern portion of the Service Area, should service from Fairfax be disrupted.

Additional Comments

Project needs to be reviewed in next round of master planning to confirm need in correlation with 24" W&OD transmission main. Project funding is reduced to fund design only, pending the study planned in association with the 2026 Water Master Plan.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	1	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.85	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design								600	1,000	600	2,200
Construction											
Land/Easements											
Equip/Other											
Subtotal								600	1,000	600	2,200
Outside Funding											
Net Cost								600	1,000	600	2,200

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project includes the construction of approximately 10,000 LF of 30" dia. water main from Willard Rd. and then along the Dulles Airport perimeter road to Loudoun County Parkway (Rte. 606). Project is needed to increase transmission main capacity from Route 50 WBPS to the southwestern part of the central system.

Project Driver

Need for expansion of the central water system in response to projected demand increases due to growth (development) in the central service area. Project identified in interim water supply strategy and water system master planning.

Additional Comments

Design completed, easements acquired; project need delayed in correspondence with revised growth projections. Development along Willard Road (WTR00174) provided opportunity to construct the easterly N-S section. Potential large scale development on MWA land adjacent to LC Pkwy may alter timing/need.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.6	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design		1,000									1,000
Construction			5,190	9,920	4,890						20,000
Land/Easements											
Equip/Other											
Subtotal		1,000	5,190	9,920	4,890						21,000
Outside Funding											
Net Cost		1,000	5,190	9,920	4,890						21,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Dulles North Permanent Pump Station
 CIP Project #: WTR00025
 Program: WTR Water

Requesting Dept: PLANNING
 Managing Dept.: CAP PROGRAMS
 Project Manager: _Capital Programs
 Sheet Completed by: Geldert, Darrin

Project Description

This project includes design and construction of the permanent Dulles North Water Booster Pump Station. The permanent pump station will replace the current interim booster pump station. The pump station will be sized for 30 MGD and will be one of the three water supply points into the central water system.

Project Driver

Loudoun Water currently has an interim booster pump station serving the Dulles North supply connection. A permanent booster station will provide necessary HGL for proper operation of water system once the interim facility needs to be replaced.

Additional Comments

Coordination with Fairfax Water regarding available supply HGL range is required. Land easement purchase should be considered as area develops. To be reviewed in next round of master planning, construction funding will be proposed when timing is known.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.35	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning						250					250
Design							750	1,500			2,250
Construction									5,000	5,000	10,000
Land/Easements											
Equip/Other											
Subtotal						250	750	1,500	5,000	5,000	12,500
Outside Funding											
Net Cost						250	750	1,500	5,000	5,000	12,500

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Goose Creek Reservoir Dredging
 CIP Project #: WTR00046
 Program: WTR Water

Requesting Dept: WTR RES
 Managing Dept.: CAP PROGRAMS
 Project Manager: Davis, Christina
 Sheet Completed by: Davis, Christina



Project Description

The project involves the dredging of sediment from the Goose Creek Reservoir to maintain and protect the existing dam and intake. The initial planning work will be to develop sampling and permitting plan.

Project Driver

The Goose Creek Reservoir was initially designed with a storage capacity of 325 million gallons; however, the most recent bathymetric survey (2018) indicated that the storage capacity has been reduced to approximately 125 MG due to sedimentation (a loss of ~60% of reservoir storage capacity). With the noted drought susceptibility of this source, as well as the fact that it is most useful during emergencies, removal of sediment is an important consideration to ensure the reliability and usability of the supply.

Additional Comments

2025 - dredging concept memo and cost estimate
 2026 - preliminary design and permitting
 2027 - construction and start dredging
 2028 - finish dredging

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.1	(100%)

Estimate Method: Design Phase Estimate

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	200										200
Design			360	810	230						1,400
Construction						10,950	12,050				23,000
Land/Easements											
Equip/Other											
Subtotal	200		360	810	230	10,950	12,050				24,600
Outside Funding											
Net Cost	200		360	810	230	10,950	12,050				24,600

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
				9	10	20	33	43	40	28	17	200

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Transmission - Hydraulic Surge Analysis
 CIP Project #: WTR00056
 Program: WTR Water

Requesting Dept: PLANNING
 Managing Dept.: PLANNING
 Project Manager: Geldert, Darrin
 Sheet Completed by: Geldert, Darrin



Project Description

This project includes the study of future hydraulic operating conditions of the Trap Rock WTP and Route 50 WBPS and with respect to pressure surges. It also studies the likelihood, magnitude and impacts of pressure transients on the transmission mains.

Project Driver

Changing the hydraulic operating conditions on the central water system due to future growth demands may negatively impact the pipe system in the event of a hydraulic surge (pressure transient) caused by a power failure.

Additional Comments

Transient analysis may be included in Master Planning (increasing Master Planning budget); however, analysis is currently planned to follow completion of Water Master Plan (2026/6). Surge mitigation projects would follow.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.05	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning		180	120								300
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal		180	120								300
Outside Funding											
Net Cost		180	120								300

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Former COF Properties VRP Enrollment
 CIP Project #: WTR00062
 Program: WTR Water

Requesting Dept: WTR RES
 Managing Dept.: WTR RES
 Project Manager: Schmitz, Bradley
 Sheet Completed by: Schmitz, Bradley



Project Description

Loudoun Water applied to, and was accepted by, the DEQ Voluntary Remediation Program in 2014 to mitigate existing environmental issues at the Beaverdam Reservoir C&D Landfill site and the Goose Creek Dredge Spoils site. The process requires coordination with DEQ and a "roadmap" for any necessary remedial actions.

Project Driver

Enrollment in the VRP allows Loudoun Water to work with DEQ to appropriately remediate the sites and make them appropriate for a range of future uses.

Additional Comments

Dredge Spoils Site Characterization Report and Risk Assessments were submitted to DEQ in September 2022. Feedback was received and final reports were resubmitted and accepted. Next steps are to determine how to finalize final recommended actions from DEQ.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	50										50
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal	50										50
Outside Funding											
Net Cost	50										50

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2	1	2	4	6	7	8	7	6	4	2	1	50

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project includes the study, design and construction of hydraulic improvements to the Dulles North transmission main and booster pump station. These improvements are envisioned to include DPRVs for pressure control on the suction side of the pump station, and surge control at the station (includes review of power loss scenarios).

Project Driver

Hydraulic surge modeling of transmission mains indicates a possibility of negative pressures developing in the event of power failure at Corbalis. The supply side pressures at the pump station are very high and do not allow for the pumps and generator to be fully operational. When the pumps shut off, the pressure at the pump station increases significantly (by over 160 psi). This may be a source of main breaks.

Additional Comments

This project will follow surge analysis for the system, WTR00056, and WTR00190 Master Planning. Completion of WTR00145 water main loop is also required for optimal evaluation.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.55	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning				200							200
Design					300						300
Construction						1,430	1,570				3,000
Land/Easements											
Equip/Other											
Subtotal				200	300	1,430	1,570				3,500
Outside Funding											
Net Cost				200	300	1,430	1,570				3,500

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Rt 659-Belmont 36in Main Upsize
 CIP Project #: WTR00086
 Program: WTR Water

Requesting Dept: PLANNING
 Managing Dept.: CAP PROGRAMS
 Project Manager: Hollida, Jaron
 Sheet Completed by: Hollida, Jaron



Project Description

Design and construction of two segments of 36" dia. water transmission main along Belmont Ridge Road (Route 659) to upsize existing 20" main. Segment 1 is approx. 2,200 LF from Route 7 to the existing 36" south of the PRV. Segment 2 is 7,600 LF from Builders Lane to the Goose Creek WTF, to be built first.

Project Driver

There is hydraulic need to increase transmission capacity along Rt 659 to serve the existing CSA, JLMA and the 510 area to the North if providing additional TOL demands. The upgrade timing is in review and associated with Phase 2 expansion of Trap Rock to 32 MGD and development of the JLMA. Additional project information is identified in Master Plan; 2,200 LF in North as projects TM-09-35-64-36, TM-13-35-64-36, and 6,400 LF as project TM-14-35-64-36.

Additional Comments

Two small segments of easement needed on Belmont to join to 510/538 control valve. Remainder of work is in public right of way. Design has been done to establish a corridor in right of way. Original project was planned and designed in conjunction with design of the adjoining upsizing, currently being done with the Rte.7/Rte. 659 highway interchange.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.7	(100%)

Estimate Method: Feasibility or Study

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	1,020	130									1,150
Construction		2,360	16,440	3,200							22,000
Land/Easements											
Equip/Other											
Subtotal	1,020	2,490	16,440	3,200							23,150
Outside Funding											
Net Cost	1,020	2,490	16,440	3,200							23,150

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
26	37	51	69	89	108	122	127	122	108	89	69	1,017

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

Initial planning study to include alignment and hydraulic benefit evaluation; possible alternate crossing Rt 50 at Lenah Mill Blvd to derive same goal. This project includes the extension of up to 2,500 LF of 24" waterline, including boring under Fleetwood Drive, easement acquisition, utility investigation, design, permitting, and construction.

Project Driver

There is a gap in the 24" transmission main along Route 50, west of Fleetwood Road. Closing the gap will improve the transmission capacity and water quality in the area.

Additional Comments

Potential to have a developer construct this portion is very low due to the cost and there isn't much development potential left on the remaining parcels. Master Plan to review need and alignments for this area.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.15	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning					100						100
Design						250					250
Construction							700	1,900			2,600
Land/Easements											
Equip/Other											
Subtotal					100	250	700	1,900			2,950
Outside Funding											
Net Cost					100	250	700	1,900			2,950

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **Water Distribution Looping-Gap Closures**
 CIP Project #: **WTR00091**
 Program: **WTR Water**

Requesting Dept: **LAND DEV**
 Managing Dept.: **PLANNING**
 Project Manager: **_Capital Programs**
 Sheet Completed by: **Lo Presti, Maria**

Project Description

Reinforce areas of the system that are fed with only one source of water. Areas chosen for reinforcement will include places where development has occurred and left stubs near one another or long dead-ends. Requires easement acquisition, design, permitting, and construction.

Project Driver

Provide a redundant second water feed to improve water quality and reliability.

Additional Comments

This project is meant to be a funding placeholder.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.55	(100%)

Estimate Method: **Feasibility or Study**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design				60		70		70			200
Construction					680	670	680	670	680	680	4,060
Land/Easements											
Equip/Other											
Subtotal				60	680	740	680	740	680	680	4,260
Outside Funding											
Net Cost				60	680	740	680	740	680	680	4,260

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Rt 50-Hiddenwood Lane 24in Main [R]
 CIP Project #: WTR00104
 Program: WTR Water

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Tran, Huy
 Sheet Completed by: Tran, Huy



Project Description

Portions of this 24" main will be constructed by the County road project 20210097 (Dulles West Blvd Extension) and also the data center 20180059 (Arcola Lakhvinder Property) 1273 LF.
 Corresponds to Master Plan Project TM-02-35-64-24

Project Driver

Need for reinforcement of redundant water supply to critical infrastructure in the County (Stone Springs hospital) and expansion of the central water system in response to projected demand increases due to growth (development) in the central service area. Project identified in interim water supply strategy and water system master planning.

Additional Comments

This project includes the design and construction of 3,500 LF of 24" waterline with a crossing of South Fork Broad Run, plus wetlands, floodplain, tree save, steep slopes, and environmental issues. There is an existing gap between the 24" main from the Dulles South Tanks crossing Rt 50 and going up Youngwood Lane and the west side of Stone Springs Blvd. Completion of the 24" transmission main along Rt 50, currently terminating west of Stone Springs Blvd to the 24" at Racefield Parkway, proj # 20180059

Estimate Method: Industry Metrics

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.65	(100%)

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other			350								350
Subtotal			350								350
Outside Funding											
Net Cost			350								350

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: W Beech-Concord-Colonial Pipe Rplcmnt
 CIP Project #: WTR00107
 Program: WTR Water

Requesting Dept: ASSET MNG
 Managing Dept.: CAP PROGRAMS
 Project Manager: Simmons, Kwame
 Sheet Completed by: Simmons, Kwame



Project Description

Replace the existing approx. 4,000 LF of 6" and 8" CI pipe installed in 1960s within W Beech Road, N Dogwood, N Fir, N Joshua, S Concord Ct and Colonial Ave in Sterling area with new 8" DIP, approx. 150 service lines, 14 fire hydrants, and valves. Add extra valving to limit the number of customers that are affected by a break. Additionally, approx. 51 sewer laterals will be replaced.

Project Driver

W Beech Road has had 50 water main breaks over its 55 year lifetime, 3 within the past 5 years. The almost 50 customers on this segment of pipe have disruption of service at least once a year. S Concord Ct and Colonial Ave are roads that service townhouses. Every time a break occurs on this segment of pipe, over 100 customers have a disruption of service.

Additional Comments

Connected to the WTR 00189 Sterling Park Project, will be tied into it. Currently in design phase, planning to move into construction in 2026.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.3	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	10										10
Construction	630	2,970									3,600
Land/Easements											
Equip/Other											
Subtotal	640	2,970									3,610
Outside Funding											
Net Cost	640	2,970									3,610

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
								110	92	161	267	630

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

This project includes the construction of approximately 750 LF of 16" dia. water main along the north side of Hall Road, between Oak Grove Rd and Transdullles Plaza. Project is needed to reinforce our water system in this area for the Rivana and Waterside developments to the northeast part of the central system.

Project Driver

Need for redundant supply and expansion of the central water system in response to projected demand increases due to growth (development) in the central service area. This line needs to be in place prior to the Waterside development.

Additional Comments

Project is needed to reinforce our water system in this area for the Rivana and Waterside developments to the northeast part of the central system.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	1	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.7	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	90	30									120
Construction		300	700								1,000
Land/Easements											
Equip/Other											
Subtotal	90	330	700								1,120
Outside Funding											
Net Cost	90	330	700								1,120

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
					5	5	8	14	20	22	20	94

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **Landfill Booster Station Improvements**
 CIP Project #: **WTR00112**
 Program: **WTR Water**

Requesting Dept: **O-CONVEY**
 Managing Dept.: **CAP PROGRAMS**
 Project Manager: **TBD**
 Sheet Completed by: **Downes, Kinsey**

Project Description

This project includes initial rehabilitation to maintain and upgrade reliability. Future study will include potential options, design and construction of improvements to the landfill booster pump station. These improvements include installation of a permanent generator and automatic transfer switch, upgraded HVAC, new flow meter, installation on new control panels and other electrical components, and upgraded instrumentation equipment.

Project Driver

The pump station is aging and in need of repairs to keep the facility operating properly and to improve reliability.

Additional Comments

Planning related to the TPA/JLMA may impact design requirements. CIP Sheet schedule reflects the JLMA process with upgrades occurring in FY2028, as service in the JLMA is extended.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.4	(100%)

Estimate Method: **Industry Metrics**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning		100									100
Design					120						120
Construction						450					450
Land/Easements											
Equip/Other											
Subtotal		100			120	450					670
Outside Funding											
Net Cost		100			120	450					670

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Pipeline Corrosion Control Program
 CIP Project #: WTR00119
 Program: WTR Water

Requesting Dept: ASSET MNG
 Managing Dept.: O-PROGRAMS
 Project Manager: Fetty, Isaiah
 Sheet Completed by: Fetty, Isaiah



Project Description

Repair program for pipeline corrosion control. Project includes design and construction for replacement of anodes. There are currently >100 test stations that need repairs and/or have anodes at the end of their useful life. Asset Management is integrating this program with BI Reporting to allow better decision-making on test stations that need to be renewed.

Project Driver

There are over 800 corrosion test stations and cathodic protection installations in the central water system, including on the Potomac Raw Water Transmission Main where components must be replaced when they reach the end of service life in order to keep the pipe protected.

Additional Comments

We are testing and inspecting approximately 200 test stations per year within the central system, in addition to the 175 on the raw water transmission main. When inspection is completed, necessary repairs are documented and will be completed under this project.
 Related Project: 2026 Project WST00088 Elklick & Upper Foley Anode Replacement

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.75	(100%)

Estimate Method: Detailed/Bid Estimate

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction	200	200	200	200	200	200	200	200	200	200	2,000
Land/Easements											
Equip/Other											
Subtotal	200	200	200	200	200	200	200	200	200	200	2,000
Outside Funding											
Net Cost	200	200	200	200	200	200	200	200	200	200	2,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
					10	59	102	29				200

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **TTM Technologies Meter Vault Replacement**
 CIP Project #: **WTR00120**
 Program: **WTR Water**

Requesting Dept: **GEN SERV**
 Managing Dept.: **CAP PROGRAMS**
 Project Manager: **Morriss, Ryan**
 Sheet Completed by: **Morriss, Ryan**

Project Description

TTM Technologies (formerly, Viasystems Technologies Corp., LLC) operates a PCB manufacturing facility in Sterling. The facility is one of Loudoun Water's largest consumers of potable water. This project involves removal of the facility's deteriorated water meter vault and installing new water meter and vault in the parking lot.

Project Driver

The existing water meter vault is severely deteriorated and certain mechanical components within the vault are in need of replacement. Entry into the vault by field service staff poses a health and safety risk. Failure of the vault or its associated mechanical equipment has the potential to interrupt water supply to one of Loudoun Water's largest customers.

Additional Comments

Scope for project now is for LW to design and contract for installation of new meter and vault in parking lot, in lieu of Owner hiring contractor to install meter inside building mechanical room and be reimbursed by LW.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.75	(100%)

Estimate Method: **Industry Metrics**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	50										50
Construction		230									230
Land/Easements											
Equip/Other											
Subtotal	50	230									280
Outside Funding											
Net Cost	50	230									280

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		2	2	4	8	11	11	8	4			50



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Sterling Standpipe Improvements
 CIP Project #: WTR00124
 Program: WTR Water

Requesting Dept: O-Remote Fac
 Managing Dept.: O-WST
 Project Manager: TBD
 Sheet Completed by: Downes, Kinsey

Project Description

This project involves the evaluation, design and construction of several upgrades at the Sterling Standpipe site. These include replacing the roof on the pump vault, pump motors, PLC, installing a generator and ATS, upgrading electric panels, installing a Pax Water Quality System, and installing a flow meter.

Project Driver

The facility is aging and does not have any backup power. These upgrades are needed to improve the safety and reliability of the facility.

Additional Comments

NPRC recommended a facility evaluation to confirm PS/Tank capacities, OT requirements, safety setbacks, and site layout. Future spending will be dictated by the results of the proposed evaluation.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	5	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.5	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	200										200
Construction		1,500									1,500
Land/Easements											
Equip/Other											
Subtotal	200	1,500									1,700
Outside Funding											
Net Cost	200	1,500									1,700

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		6	8	17	30	42	42	30	17	8		200

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Acoustic Listening Devices
 CIP Project #: WTR00126
 Program: WTR Water

Requesting Dept: ASSET MNG
 Managing Dept.: ASSET MNG
 Project Manager: Crowder, Peter
 Sheet Completed by: Crowder, Peter



Project Description

Program is to install remote leak detection nodes throughout the water distribution system in areas experiencing break/leak history, having older pipe material, and areas of high pressure.

Project Driver

This project is an effort to identify water main breaks that don't surface immediately and to reduce unaccounted water usage. Unless the break is catastrophic, leaks may be undetectable and can cause pipe damage, soil erosion, or road damage before staff is notified. Currently, leaks are often identified by customers after water has reached the ground surface. By utilizing this technology, our response time is reduced, in turn saving time, damage, and funds.

Additional Comments

2026 Budget for about 80 nodes
 This listening device (node) replaces the large fire hydrant nozzle cap. Loudoun Water intends to continue to install these devices in areas of need for the next three years. Then, as we replace the pipe, we will move the nodes to other areas of the system.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.85	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	100	100	20	20	20	20	20	20	20	20	360
Land/Easements											
Equip/Other											
Subtotal	100	100	20	20	20	20	20	20	20	20	360
Outside Funding											
Net Cost	100	100	20	20	20	20	20	20	20	20	360

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
				21	48	31						100

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

Evaluation, design, and construction of a new low-level outlet works structure (Alternative 3 per 2025 GFT TM) required under the DCR Impounding Structure Regulations. This project could include additional improvements, such as the boat buster relocation to protect the new low-level outlet.

Project Driver

Goose Creek Dam (GCD) is classified as high-hazard potential in accordance with the DCR Impounding Structure Regulations. GCD does not have an operable outlet works as required by regulation. GCD is currently operating under a 2-year conditional O&M Certificate from DCR. An operable low-level outlet is required by the Regulations, and one of the conditions for Loudoun Water to satisfy is to obtain a regular O&M Certificate on 6-year renewal cycles.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	170										170
Construction		1,130	80								1,210
Land/Easements											
Equip/Other											
Subtotal	170	1,130	80								1,380
Outside Funding											
Net Cost	170	1,130	80								1,380

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		5	8	19	34	43	34	19	8			170

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: Water Facility General Improvements
 CIP Project #: WTR00130
 Program: WTR Water

Requesting Dept: O-Remote Fac
 Managing Dept.: O-Remote Fac
 Project Manager: Lanham, Petie
 Sheet Completed by: Lanham, Petie

Project Description

Project covers capital expenses for repairing or replacing equipment that reaches the end of service life. Project covers all central system water conveyance facilities needs, including pump stations, valve vaults, new valves, and pipes.

Project Driver

Ongoing water system improvements (asset management) to provide expected level of service to customers.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.5	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	110	110	110	120	120	120	120	120	130	130	1,190
Subtotal	110	110	110	120	120	120	120	120	130	130	1,190
Outside Funding											
Net Cost	110	110	110	120	120	120	120	120	130	130	1,190

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
6	6	10	10	10	12	10	10	10	6	5	5	100

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Broad Run Farms Waterline Ext. (County)
 CIP Project #: WTR00138
 Program: WTR Water

Requesting Dept: CAP PROGRAMS
 Managing Dept.: CAP PROGRAMS
 Project Manager: Simmons, Kwame
 Sheet Completed by: Simmons, Kwame



Project Description

Design and construction of a new water distribution system consisting of 22,000 linear feet of DI pipe connecting the Broad Run Farms community to the central system and to the newly constructed, EPA water system adjacent to it.

Project Driver

The EPA is extending the water distribution system into Broad Run Farms to address groundwater contamination from the adjacent Hidden Lane Landfill. The EPA waterline extension will serve only a portion of the community, and Loudoun County has committed to extending service to the remainder of the community. The County asked Loudoun Water to manage the design and construction of the project on their behalf.

Additional Comments

This project is initially funded by Loudoun Water and reimbursed by Loudoun County.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	5	(10%)
Total score	3.6	(100%)

Estimate Method: Design Phase Estimate

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	50										50
Construction	3,730	11,760	510								16,000
Land/Easements											
Equip/Other											
Subtotal	3,780	11,760	510								16,050
Outside Funding	3,780	11,760	510								16,050
Net Cost											

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
20	20	10	295	119	166	229	313	422	558	721	904	3,777

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Waterside - Old Ox Rd 16" Watermain [R]
 CIP Project #: WTR00143
 Program: WTR Water

Requesting Dept: LAND DEV
 Managing Dept.: CAP PROGRAMS
 Project Manager: Kirby, Matthew
 Sheet Completed by: Tran, Huy



Project Description

Developer built improvements to Rt. 606 between Shaw Road and Oakgrove Road to support future Waterside development. Requested betterments include approximately 2,000 LF of 16-inch watermain to account for future Waterside demand and 1,000 LF of upsizing from 12-inch to 16-inch to provide a consistent 16-inch line from Davis Drive to Shaw Road.

Project Driver

Future hydraulic need. Main will provide needed flows and pressures to meet future demands.

Additional Comments

Land Development project #20190010 and 20200023; Project on hold indefinitely due to developer unable to acquire ROW for Old Ox Road improvements.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	5	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.7	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other										500	500
Subtotal										500	500
Outside Funding											
Net Cost										500	500

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: **30" Water Ruritan Rd to Rt 28 Crossing**
 CIP Project #: **WTR00145**
 Program: **WTR Water**

Requesting Dept: **PLANNING**
 Managing Dept.: **CAP PROGRAMS**
 Project Manager: **Parkinson, Paul**
 Sheet Completed by: **Parkinson, Paul**



Project Description

The project will extend the existing 30" high-pressure transmission main from Ruritan Road to the existing 30" diameter main just east of Route 28 to close the gap in the transmission main.

Project Driver

The main will replace the gap that exists in the system after the removal of a segment with the Guilford Station project. Closing this gap is required to meet future demands and maintain the desired level of service. This is a critical hydraulic improvement in addition to a redundancy - resiliency benefit.

Additional Comments

The easement along Route 28 on the BF Saul property was secured with project WTR.00129. Additional easements will need to be acquired.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.4	(100%)

Estimate Method: **Industry Metrics**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	220	80									300
Construction		390	3,510								3,900
Land/Easements	100										100
Equip/Other											
Subtotal	320	470	3,510								4,300
Outside Funding											
Net Cost	320	470	3,510								4,300

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		35	11	14	17	20	22	124	26	26	24	319

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

This project will include the study, design, and construction necessary to upgrade the pumping capacity at the Dulles South Water Booster Station to address ongoing operational issues, increase capacity to meet future needs, and enhance the level of service.

Project Driver

Operations have recorded extended pump run times and the inability to meet pressure set points during high demand. With the continued high rate of growth in this area, the ability to maintain the desired level of service requires attention. The 2021 600 Zone Capacity Analysis and the 2018 Water Master Plan identified the upgrade needs for various scenarios including the near-term need, buildout need, and buildout emergency need.

Additional Comments

Upgrades are based on the WTR00137 - 600 Zone Capacity Analysis study recommendations.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	5	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.65	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	150										150
Land/Easements											
Equip/Other											
Subtotal	150										150
Outside Funding											
Net Cost	150										150

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
	40	110										150

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **Brambleton 600 WBS Upgrade**
 CIP Project #: **WTR00152**
 Program: **WTR Water**

Requesting Dept: **O-WTR**
 Managing Dept.: **CAP PROGRAMS**
 Project Manager: **Hollida, Jaron**
 Sheet Completed by: **Hollida, Jaron**

Project Description

This project will develop a Preliminary Engineering Report, design documentation and construct upgraded pumping capacity at the Brambleton 600 Zone Water Booster Station. Additionally, this project will include operational technology upgrades to address obsolescence and include process improvements to address operations and maintenance deficiencies. This project will also decommission the fire pumps.

Project Driver

Operations has recorded extended pump run times and inability to meet pressure set points during high demand. With continued high-rate growth in this area, the ability to maintain the desired level of service requires attention.

Additional Comments

Upgrades are based on the WTR00137 - 600 Zone Capacity Analysis study recommendations. Added work from WTR00122 - General Brambleton Tank improvements, to this project. Added work from WTR00184 - Water Storage Tank Process Upgrades. With 600 zone online, Brambleton fire pumps are no longer needed. The project is waiting to begin to design until the water master plan is complete.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	2	(25%)
2. Level of Service	5	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.65	(100%)

Estimate Method: **Feasibility or Study**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	290	210									500
Construction		760	3,470	170							4,400
Land/Easements											
Equip/Other											
Subtotal	290	970	3,470	170							4,900
Outside Funding											
Net Cost	290	970	3,470	170							4,900

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
				15	10	17	26	38	52	64	69	291

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

This project is to upgrade the vibration monitoring systems associated with the medium voltage (MV) variable frequency drives (VFD) located at the Trap Rock Raw Water Pump Station. Project includes all required engineering, parts, and installations. The project assumes that a large percentage of the work will be installed by Loudoun Water.

Project Driver

The Raw Water Pump station is a critical part of the LW supply system. Vibration monitoring for this asset is necessary to identify problems and extend the life of the asset. Installing this vibration monitoring system is key to protecting the pumps.

Additional Comments

Project will evaluate the approach to vibration monitoring to determine if a standalone system is a viable alternative to the current system located within each VFD.
 Phase 1 completed in 2025. Phase 2 planned for 2026 and requires engineering evaluation and vendor support.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	1	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.45	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design	150										150
Construction											
Land/Easements											
Equip/Other	500										500
Subtotal	650										650
Outside Funding											
Net Cost	650										650

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
5	4	7	11	17	22	24	22	17	511	7	3	650

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: JLMA/TPA - Water (Phase 2)
 CIP Project #: WTR00154
 Program: WTR Water

Requesting Dept: PLANNING
 Managing Dept.: CAP PROGRAMS
 Project Manager: _Capital Programs
 Sheet Completed by: Beatty, Andrew



Project Description

Phase 2 watermains in the new transition policy area and JLMA service areas - Design and Construction of a 16" waterline along Evergreen Mills Rd extending from the Landfill Water Booster Station northwards across Sycolin Creek to tie into the proposed Greenfield Farm development.

Project Driver

In 2019, the County named Loudoun Water the presumed water and sewer utility in the Leesburg JLMA and expanded our Central Service Area. This project will reinforce the water system and increase reliability to this new service area in accordance with area facility planning.

Additional Comments

Timing, sizing and alignments will be coordinated with development. Price based on 16" Evergreen Mills Road main only.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.9	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design		400									400
Construction			4,000								4,000
Land/Easements											
Equip/Other											
Subtotal		400	4,000								4,400
Outside Funding											
Net Cost		400	4,000								4,400

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: JLMA East, W1, W2 & W3-E [R]
 CIP Project #: WTR00155
 Program: WTR Water

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Tran, Huy
 Sheet Completed by: Tran, Huy



Project Description

Design and construction of 24" and 16" diameter transmission mains and associated appurtenances to serve the JLMA East area. This project will connect to the existing 36" diameter transmission main in Belmont Ridge Road, cross the Goose Creek, and extend the 24" main along Cochran Mill Road to the intersection of Samuel's Mill Road. At that location, it will transition to a 16" diameter main and head north to Crosstrail Blvd.

Project Driver

In 2019, the County named Loudoun Water the presumed water and sewer utility in the Leesburg JLMA and expanded our Central Service Area. The GMO has committed Loudoun Water to initiate design and construction in coordination with development to extend service to these areas. This project is intended to provide the major water backbone to the JLMA East area.

Additional Comments

The design is currently underway and being run by the Tuscarora Crossing development. The project will be reimbursed per pending developer agreement. This project includes projects identified as W1-E, W2-E, and W3-E in the planning phase. W4 is included and assumed to be a future (2030) Loudoun Water design/construction project to connect the JLMA East to the JLMA West. proj # 20220058. WST00057 and WTR00155 are connected.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	2	(10%)
Total score	4.2	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction	15,000	14,640									29,640
Land/Easements											
Equip/Other								1,760			1,760
Subtotal	15,000	14,640						1,760			31,400
Outside Funding											
Net Cost	15,000	14,640						1,760			31,400

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1,821	1,071	1,495	1,877	2,066	1,969	1,634	1,209	820	524	322	192	15,000



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

Loudoun Water is working to address and rehabilitate distressed and exposed meter crocks in the Central Service Area and Community Systems. Loudoun Water plans to repair and replace at least 80 meter crocks a year for the first five years and 60 crocks a year for the next five years, or until a majority of repairs have been made.

Project Driver

Addressing aged out, damaged and exposed meter crocks and components will allow Loudoun Water to continue to maintain safe and secure meter crock locations for extended periods of time. Rehabbing smaller meter frames with larger meter frames and lids for commercial applications.

Additional Comments

This is an ongoing project. Loudoun Water contracted out work to complete meter crock and frame replacements starting in Summer of 2022.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	500	500	400	400	300	300	200				2,600
Subtotal	500	500	400	400	300	300	200				2,600
Outside Funding											
Net Cost	500	500	400	400	300	300	200				2,600

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
	125			125		125			125			500

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

This project includes funds for the design and construction (reimbursement) of a Water Booster Pump Station (BPS) near the Mt. Sterling development.

Project Driver

A development is being planned for the Mt. Sterling area. Due to site elevations, a water booster pump station is required in order to meet minimum pressures and flows. This project includes funds for the partial design of the pump station.

Additional Comments

Developer is designing and constructing Phase 1 of the booster pump station, which includes PRV valves and isolation valves. Booster pump station will be expandable to Phase 2 to meet required fire flows for future developments. LW#2021-0090

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.9	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	80	500	500	500	500	500	500	500	500	500	4,580
Subtotal	80	500	500	500	500	500	500	500	500	500	4,580
Outside Funding											
Net Cost	80	500	500	500	500	500	500	500	500	500	4,580

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
		82										82

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Beaumeade PRV Vault Rehabilitation
 CIP Project #: WTR00160
 Program: WTR Water

Requesting Dept: O-CONVEY
 Managing Dept.: O-Remote Fac
 Project Manager: TBD
 Sheet Completed by: Downes, Kinsey



Project Description

This project includes planning, design and construction of improvements needed to develop options and rehab the Beaumeade PRV vault. The improvements would consist of replacing piping, valves, PRV, and electrical components. Additionally, it would address structural issues and install psi transmitters, mag meter and other OT instrumentation to have the capability to communicate with SCADA to make operational changes.

Project Driver

Beaumeade PRV Vault is connected to the 24" W&OD transmission main that supplies water from western portion (538 zone) to the eastern portion (510 zone) of the central system. Beaumeade Vault has the capability to supply water into the 510 zone in the Beaumeade area. Beaumeade vault has been out of service since 2018 due to age and functionality and will need replacement to be put back in service.

Additional Comments

NPRC recommended evaluating the need for this vault as well as others, including the Ashburn PRV. Internal investigations can be supported by consultant support or by use of the on-call water distribution modeling contract.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.85	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design					50						50
Construction						150					150
Land/Easements											
Equip/Other											
Subtotal					50	150					200
Outside Funding											
Net Cost					50	150					200

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Russell Branch Broad Run Crossing Water Main
 CIP Project #: WTR00161
 Program: WTR Water

Requesting Dept: PLANNING
 Managing Dept.: PLANNING
 Project Manager: _Planning
 Sheet Completed by: Geldert, Darrin



Project Description

Project includes design and construction of approximately 2,400 LF of 16-inch waterline. The project is located where Russell Branch Parkway transitions to become Pacific Boulevard, at the southwest corner of Route 7 - Harry Bird Hwy and Route 28, including a crossing of Broad Run.

Project Driver

Extension of the waterline in Russell Branch Parkway would result in a long dead end, resulting in water quality issues and constant flushing. On the other side, connection to Kincora, a 300+ acre mixed-use development, would add additional redundancy and reliability to that development. Schedule will be driven by internal drivers, such as water quality and looping, and not necessarily external.

Additional Comments

Likely capital project, with possible developer involvement. Master Plan Project TM-04-35-64-16
 16" water extension across Broad Run for the dead end at Kincora. Low development potential on the north side of Broad Run and Russell Branch Parkway; crossing Broad Run increases cost and complexity.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.75	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design						400	200				600
Construction							2,380	2,620			5,000
Land/Easements											
Equip/Other											
Subtotal						400	2,580	2,620			5,600
Outside Funding											
Net Cost						400	2,580	2,620			5,600

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: LCParkway-Lockridge 16-inch water [R]
 CIP Project #: WTR00162
 Program: WTR Water

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Kirby, Matthew
 Sheet Completed by: Tran, Huy

Project Description

Extension of approximately 3,550 linear feet of 16-inch water main from Bullpen Drive and the Dulles Greenway to Lockridge Road.

Project Driver

The project interconnects the existing 16-inch mains between Loudoun County Parkway and Lockridge Road. Project will provide increased supply to support large developments planned in the area. Water main identified as part of master plan.

Additional Comments

Developer is currently planning to design and construct and then be reimbursed by Loudoun Water. Loudoun Water Project ID 20220082 Shellhorn Road Watermain

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.9	(100%)

Estimate Method: Design Phase Estimate

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other			1,200								1,200
Subtotal			1,200								1,200
Outside Funding											
Net Cost			1,200								1,200

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Spare Parts WTR
 CIP Project #: WTR00163
 Program: WTR Water

Requesting Dept: O-WTR
 Managing Dept.: FIN
 Project Manager: Carnes, Brian
 Sheet Completed by: Dehler, Sally



Project Description

Placeholder for SAP tracking of Spare Equipment. Enables O&M to track which spares are purchased and Finance to track when spares are put in service to kick off depreciation.

Project Driver

Required financial tool.

Additional Comments

Spare equipment is any equipment >\$20,000 with a useful life of more than 1 year that will not be placed in service when received but rather held until needed. This includes both new equipment and existing equipment that is sent out for rebuild/repair that will be held until needed once it is received back

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	1	(25%)
3. Implication of Deferring	1	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.2	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	50	50	50	50	50	50	50	50	50	50	500
Subtotal	50	50	50	50	50	50	50	50	50	50	500
Outside Funding											
Net Cost	50	50	50	50	50	50	50	50	50	50	500

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		25						25				50

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: JLMA West, W2A & W7 (Sycolin to RT 267) [R]
 CIP Project #: WTR00164
 Program: WTR Water

Requesting Dept: PLANNING
 Managing Dept.: LAND DEV
 Project Manager: Kirby, Matthew
 Sheet Completed by: Kirby, Matt



Project Description

Design and construction of approximately 6,100 LF of 24" diameter water transmission main in the area included in the West JLMA planning, generally located southwest of Bolen Park. This portion of the transmission main (also referenced as West Water 2A and 7) will extend from Shreve Mill Road, cross under Sycolin Creek, and then cross the Dulles Greenway to extend service to the TPA portion of the LW Central Service Area.

Project Driver

The County has named Loudoun Water the preferred water and sewer utility in the Leesburg JLMA and expanded our Central Service Area as of 2019. The GMO committed LW to initiate design and construction in coordination with development to extend service to the western half of the new JLMA service area and provide water for the new TPA portion of the Central Service Area west of the Dulles Greenway.

Additional Comments

Connected on the south end (intersection of Sycolin Rd and Shreve Mill Rd) to WTR00173 (W1B-W), a developer-led design and construction of a 24" extension.
 LW Proj # 20240064
 WST00058 and WTR00164 are connected.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	2	(10%)
Total score	4	(100%)

Estimate Method: Detailed/Bid Estimate

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	7,190										7,190
Land/Easements											
Equip/Other				1,000							1,000
Subtotal	7,190			1,000							8,190
Outside Funding											
Net Cost	7,190			1,000							8,190

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
900	800	700	700	600	600	600	500	450	450	450	442	7,192

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: JLMA West, W2B-W Shreve South [R]
 CIP Project #: WTR00165
 Program: WTR Water

Requesting Dept: PLANNING
 Managing Dept.: LAND DEV
 Project Manager: TBD
 Sheet Completed by: Beatty, Andrew



Project Description

Design and construction of approximately 1,200 LF of 24" diameter transmission main in the area included in the West JLMA planning, generally located southwest of Bolen Park. This portion of the transmission main (also known as West Water 2B) will likely cross under Sycolin Creek, extend south of Shreve Mill Road, and then cross the Dulles Greenway to extend service to the TPA portion of the LW Central Service Area.

Project Driver

The County has named Loudoun Water the preferred water and sewer utility in the Leesburg JLMA and expanded our Central Service Area as of 2019. The GMO committed LW to initiate design and construction in coordination with development to extend service to the western half of the new JLMA service area and provide water for the new TPA portion of the Central Service Area west of the Greenway.

Additional Comments

Connected on the north end to WTR00164 (W2A-W & W7-W). Developers will likely build this infrastructure and Loudoun Water will reimburse upon completion.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.3	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction			1,800	450	450	450	450				3,600
Land/Easements											
Equip/Other											
Subtotal			1,800	450	450	450	450				3,600
Outside Funding											
Net Cost			1,800	450	450	450	450				3,600

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Dulles West Blvd 16-inch Watermain [R]
 CIP Project #: WTR00169
 Program: WTR Water

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Kirby, Matthew
 Sheet Completed by: Tran, Huy



Project Description

Extension of 4,650 LF of 16-inch water main along Dulles West Blvd from Arcola Boulevard to Racefield Drive. Corresponds to Water Master Plan project DEV-01400

Project Driver

Loudoun County DTCL is constructing Dulles West Blvd along this alignment. The water master plan calls for a 16-inch main along this corridor.

Additional Comments

County Betterment Reimbursement
 LW proj #20210097

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.9	(100%)

Estimate Method: Detailed/Bid Estimate

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other			3,000								3,000
Subtotal			3,000								3,000
Outside Funding											
Net Cost			3,000								3,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: JLMA West, W1A-W [R]
 CIP Project #: WTR00172
 Program: WTR Water

Requesting Dept: PLN
 Managing Dept.: LAND DEV
 Project Manager: Tran, Huy
 Sheet Completed by: Tran, Huy

Project Description

This project (W1A-W) will be developer-led and includes the design and construction of approximately 3,100 LF of 24-inch watermain extending along Sycolin Rd. to Shreve Mill Road East.

Project Driver

This project is required in order to meet the water needs of several proposed data centers as well as future developments. In 2019, the County named Loudoun Water the presumed water and sewer utility in the Leesburg JLMA and expanded our Central Service Area.

Additional Comments

Project is reimbursement for oversizing, as part of the Celtics Development Project. Corresponds to LW #20210091 Project Celtics Watermain Extension

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.9	(100%)

Estimate Method: Firm Price/Quote

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	500	200	200	200							1,100
Subtotal	500	200	200	200							1,100
Outside Funding											
Net Cost	500	200	200	200							1,100

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		500										500

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Willard Road 30-in Watermain Extension [R]
 CIP Project #: WTR00174
 Program: WTR Water

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Tran, Huy
 Sheet Completed by: Tran, Huy



Project Description

Extension of approximately 3,000 LF of 30-inch water main along Willard Road to MWAA property. The project is a segment of the future planned 30-inch redundant feed along Route 50. The currently planned data centers on the H&M property propose to bring a main up Willard Road to serve the data center parcel. This project would seek to have the development extend the main as part of their project.

Project Driver

Water main is part of the master plan to bring a 30-inch redundant water transmission main along Route 50, between Willard Road and Loudoun County Parkway.

Additional Comments

Land Development #2020-0101 through 2020-0105. H&M Property Oversizing and extension work.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.7	(100%)

Estimate Method: Detailed/Bid Estimate

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other			2,000								2,000
Subtotal			2,000								2,000
Outside Funding											
Net Cost			2,000								2,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Water Infrastructure R&R
 CIP Project #: WTR00176
 Program: WTR Water

Requesting Dept: MNT-LINE
 Managing Dept.: ASSET MNG
 Project Manager: Bussard, Bubba
 Sheet Completed by: Dzara, Jessica



Project Description

Project covers capital expenses for repairing or replacing linear water infrastructure that reaches the end of service life. Project covers all central system water distribution components such as pipes, valves, ARVs, and associated buried structures.

Project Driver

Aging infrastructure requires regular replacement to maintain level of service to customers. This project includes systemwide replacement of water mains that have been identified through a systematic program that reviews break history, customer impacts, pipeline condition assessment and coordination with VDOT paving schedules.

Additional Comments

Annual priorities are budgeted in stand-alone CIP project sheets for implementation.

 Standalone projects target to replace five miles of cast iron (CI) pipe per year until 2035.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.05	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design				500	500	500	500	500	500	500	3,500
Construction					15,000	15,000	15,000	15,000	15,000	15,000	90,000
Land/Easements											
Equip/Other											
Subtotal				500	15,500	15,500	15,500	15,500	15,500	15,500	93,500
Outside Funding											
Net Cost				500	15,500	15,500	15,500	15,500	15,500	15,500	93,500

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

The following is a project to capture ongoing improvements and enhancements to the Beaverdam Creek Dam and transfer pump station.

Project Driver

The project is required for the longevity of the dam and transfer pump station, and to meet regulatory requirements for maintaining the dam.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.65	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	50	50	50	50	50	50	50	50	50	50	500
Subtotal	50	50	50	50	50	50	50	50	50	50	500
Outside Funding											
Net Cost	50	50	50	50	50	50	50	50	50	50	500

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
						50						50

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

This project will design and construct upgrades to the Woodstone PRV Vault 1 and Woodstone PRV Vault 2 to address issues due to age, corrosion, and code changes, including OT and operational updates.

Project Driver

Extending the useful life of critical assets originally constructed in 1992 and 2000. These vaults are one of two primary interconnects with the Fairfax Water supply system and thus critical to Loudoun Water supply.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	120										120
Design	10	180	10								200
Construction			340	860							1,200
Land/Easements											
Equip/Other											
Subtotal	130	180	350	860							1,520
Outside Funding											
Net Cost	130	180	350	860							1,520

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
7	18	32	32	18	9				6	3	4	129

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Brambleton Tank 1 Rehabilitation
 CIP Project #: WTR00179
 Program: WTR Water

Requesting Dept: O-Remote Fac
 Managing Dept.: O-WST
 Project Manager: Stanekzai, Mariam
 Sheet Completed by: Downes, Kinsey



Project Description

Brambleton Water Storage Tank 1 painting and component improvements. This project consists of external and internal tank pressure cleaning and painting, as well as replacement of deteriorating manway hatches, tank ceiling panels, and supports.

Project Driver

This project was identified through and in alignment with the Steel Tank Maintenance Program. Storage is a key asset for Loudoun Water distribution and requires regular maintenance to maintain and extend useful life.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.8	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction	1,950										1,950
Land/Easements											
Equip/Other											
Subtotal	1,950										1,950
Outside Funding											
Net Cost	1,950										1,950

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
505	762	505	181									1,953

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Oakdale, Lindenwood & W Ash Pipe Replacemen
 CIP Project #: WTR00180
 Program: WTR Water

Requesting Dept: O-PROGRAMS
 Managing Dept.: CAP PROGRAMS
 Project Manager: Simmons, Kwame
 Sheet Completed by: Simmons, Kwame



Project Description

Replace approximately 3,000 LF of existing 6" and 8" main on Oakdale Court, Lindenwood Court, W Ash Road, and N Ash Court with new 8" DIP (Ductile Iron Pipe) service lines, hydrants, and valves. Additionally, replace approximately 40 sanitary sewer laterals on W Ash Road and N Ash Court.

Project Driver

The water main in Oakdale Court was installed in 1981 but has experienced three breaks due to corrosion in the last two years. When repairing the breaks, extensive corrosion made it difficult to find smooth pipe to band with new pipe. Lindenwood was installed at the same time and is believed to have a similar problem. W Ash Road and N Ash Court have had more than 30 breaks in the past, with five occurring in the last ten years.

Additional Comments

Related: WTR00106 Pipe Replacement Program.
 WTR 00107 W Beech, Concord, and Colonial Pipe Replacement. WTR 00189 Sterling Park Watermain Replacement. Parts of these projects are next to each other and will be connected (Oakdale connects to Sterling). Sewer Laterals within the project area will also be replaced.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	40										40
Construction	650	3,050									3,700
Land/Easements											
Equip/Other											
Subtotal	690	3,050									3,740
Outside Funding											
Net Cost	690	3,050									3,740

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
10	10	10	10					240	98	134	181	693

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: **Valve Replacements and Misc. Improvements**
 CIP Project #: **WTR00181**
 Program: **WTR Water**

Requesting Dept: **MNT-LINE**
 Managing Dept.: **CAP PROGRAMS**
 Project Manager: **Morriss, Ryan**
 Sheet Completed by: **Morriss, Ryan**

Project Description

This project will permit, design and construct replacements of 34 waterline valves ranging from 6 inches to 36 inches. It will also add 8 new water valves on main lines, remove one valve and vault, decommission 2 manholes, replace 12 water meters, and extend the waterline in Hay Road.

Project Driver

Several water valves in the oldest area of the system, which has high risk of main breaks, are aging and in poor condition. These need to be replaced to ensure pipes can be isolated in the event of a water main repair. The location of these valves in the roadway present a greater risk of significant damage to the roadway, as well as to personal property and public safety.

Additional Comments

Valve replacement need was identified through the annual valve exercising program. Locations were noted as deteriorating, leaking during operation, and not closing properly. Safety concerns include placement of valves in relation to intersections and ability to safely operate such valves during repairs or preventive maintenance work. The 12 water meter replacements was merged from WTR00123.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method: **Industry Metrics**

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	60										60
Construction	810	1,320	70								2,200
Land/Easements											
Equip/Other											
Subtotal	870	1,320	70								2,260
Outside Funding											
Net Cost	870	1,320	70								2,260

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
30	30			142	46	59	75	93	113	132	150	870

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Water Storage Tank Process Upgrades
 CIP Project #: WTR00184
 Program: WTR Water

Requesting Dept: O-Remote Fac
 Managing Dept.: O-WST
 Project Manager: TBD
 Sheet Completed by: Downes, Kinsey



Project Description

This project involves the design and construction of improvements at Broadlands and Brambleton Water Storage Tanks. These improvements include upgrading the existing check valve, lighting, and exhaust fans, as well as installing new PSI transmitters, motorized valves, Pax Water Quality System, and PLCs in each tank.

Project Driver

These upgrades are needed to improve the reliability and efficiency of the water storage tanks. The existing PLCs have no more space for future upgrades.

Additional Comments

Replaces FY22 CIP Projects WTR00121 and WTR00122. This project includes the electrical and OT component replacement due to aged or obsolete equipment. Project updated to reflect Broadlands only (Brambleton covered under PS Upgrades).

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	2.8	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	80										80
Design		100									100
Construction			250	250							500
Land/Easements											
Equip/Other											
Subtotal	80	100	250	250							680
Outside Funding											
Net Cost	80	100	250	250							680

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
					2	16	41	16				75

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: 16" WM Innovation Ave to Old Ox
 CIP Project #: WTR00185
 Program: WTR Water

Requesting Dept: LAND DEV
 Managing Dept.: CAP PROGRAMS
 Project Manager: _Capital Programs
 Sheet Completed by: Morriss, Ryan



Project Description

This project will follow the Horsepen AFP. Design and construction of approximately 5,000 feet of 16-inch diameter water main between Old Ox Road and Innovation Avenue is anticipated to follow. The first phase will be a pre-design effort to determine capacity constraints and solutions in coordination with all stakeholders, considering alignments, development plans, and existing agreements.

Project Driver

Multiple developments are proposed along Innovation Avenue, and growth in the system is driving the need for this water main loop. The area is currently served by a single 16-inch main. This is insufficient to meet future level-of-service standards for flow and pressure. This project will also provide required redundancy with a second feed to the area.

Additional Comments

The project was identified in the 2018 Water Master Plan as a future main dependent on development. Land Development coordination will be required.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design	100	250									350
Construction											
Land/Easements											
Equip/Other											
Subtotal	100	250									350
Outside Funding											
Net Cost	100	250									350

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
					11	5	8	11	15	20	26	96

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Dulles South Storage Tanks Modifications
 CIP Project #: WTR00188
 Program: WTR Water

Requesting Dept: O-Remote Fac
 Managing Dept.: O-WST
 Project Manager: TBD
 Sheet Completed by: Downes, Kinsey



Project Description

The Dulles South Water Storage Tanks will be pressure washed and painted, then modified to add metal fall protection and handholds.

Project Driver

This project was identified through and in alignment with the Steel Tank Maintenance Program. Water storage tanks are a key asset for Loudoun Water distribution and requires regular maintenance to extend useful life.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.65	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	120	80									200
Construction		1,500	1,800								3,300
Land/Easements											
Equip/Other											
Subtotal	120	1,580	1,800								3,500
Outside Funding											
Net Cost	120	1,580	1,800								3,500

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
					6	5	9	15	22	29	33	119

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Sterling Park Water Main Replacement
 CIP Project #: WTR00189
 Program: WTR Water

Requesting Dept: ASSET MNG
 Managing Dept.: CAP PROGRAMS
 Project Manager: Simmons, Kwame
 Sheet Completed by: Simmons, Kwame



Project Description

Replacement of five miles of water main within Sterling Park Section 1 and W Church Road. The pipe to be removed ranges in size from 3" to 12" in diameter. All of the pipe to be removed is cast iron. The project will replace these pipes along with hydrants, valves, and water services with ductile iron pipe, meeting the standards in the Engineering Design Manual. Approximately 450 sewer laterals will also be replaced.

Project Driver

Sterling Park Section 1 is the oldest section of pipe in Loudoun Water's system and was installed prior to Loudoun Water having formal design standards. A quarter of all LW breaks occur within this section of pipe. Replacing the old cast iron with new ductile iron should drastically reduce emergency water main breaks in the central system.

Additional Comments

Associated projects include:
 WTR.00106 - Water Main Replacement Program
 WTR.00107 - W Beech, Concord, Colonial
 WTR.00180 - Oakdale, Lindenwood, and W Ash
 WTR.00181 - Sterling Blvd Valve Replacement

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	300										300
Construction		300	11,720	6,480							18,500
Land/Easements											
Equip/Other											
Subtotal	300	300	11,720	6,480							18,800
Outside Funding											
Net Cost	300	300	11,720	6,480							18,800

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
25	20	30	25	40	40	20	25	25	30	10	10	300



2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:



Project Description

Develop Water System Master Plan. Master plan will include updated projections, water modeling, calibration, scenario analysis, storage review, capital improvement needs with timing and cost estimates. Deliverables will include GIS, model, PowerBI and excel data for Loudoun Water use, in addition to a report.

Project Driver

Continued growth, including expanded service area and increasing industrial demands, requires regular review and planning maintain level-of-service requirements. The Master Plan is a tool that the Virginia Department of Health references to confirm system conformance with regulatory guidelines.

Additional Comments

Budget previously tracked in WTR.00001
 5 year update required to manage dynamic growth
 Project NTP July 2025

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.1	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning	250					300	300				850
Design											
Construction											
Land/Easements											
Equip/Other											
Subtotal	250					300	300				850
Outside Funding											
Net Cost	250					300	300				850

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
19	27	49	62	49	27	12	5					250

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Brambleton Tank 2 Upgrades
 CIP Project #: WTR00192
 Program: WTR Water

Requesting Dept: O-Remote Fac
 Managing Dept.: O-WST
 Project Manager: Pyles, Carly
 Sheet Completed by: Pyles, Carly



Project Description

This project consists of surface preparation and coating of the exterior and wet interior, foundation spot repair, upgraded fall protection on ladders, removal of 2" drain line from bottom of bowl, replacement of interior ceiling tiles, coating of piping and the interior concrete floor, and other misc. items.

Project Driver

A routine inspection report performed in October 2022 identified necessary and recommended improvements to the tank to meet Virginia Department of Health requirements and maintain scheduled maintenance.

Additional Comments

Tank 2 was constructed in 2005 and was the most recently completed paint project. The typical overcoat frequency for modern urethane systems is 15 years. In 2010, localized area addressed exterior per contractor warranty. Wet interior ceiling was repainted in 2017 due to large areas of paint peeling

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	1	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	1.85	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design	60										60
Construction	330	2,670									3,000
Land/Easements											
Equip/Other											
Subtotal	390	2,670									3,060
Outside Funding											
Net Cost	390	2,670									3,060

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
31	21	7						36	41	86	171	393

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Central System Electrical Shock Mitigation
 CIP Project #: WTR00193
 Program: WTR Water

Requesting Dept: ASSET MNG
 Managing Dept.: ASSET MNG
 Project Manager: Whitten, Kathleen
 Sheet Completed by: Whitten, Kathleen



Project Description

Study on the impact of the existing high voltage power lines in proximity to existing Loudoun Water metallic infrastructure. This study will determine if there are areas of the system that require shock mitigation when a fault occurs on the power line. If the study indicates that shock is a hazard, this project will also install mitigation to address the shock and add signage for those nearby.

Project Driver

Recently, Loudoun Water has worked closely with Dominion Power to examine the impact of new power lines to existing Loudoun Water infrastructure. Multiple studies on the new power lines have found shock hazards on existing water mains, and research must be conducted to determine if there are additional safety hazards.

Additional Comments

An additional outcome may be an update to the EDM, details, and approved materials list.

No construction dollars estimated at this time.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	2	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.45	(100%)

Estimate Method: Feasibility or Study

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning	70										70
Design	130	170									300
Construction											
Land/Easements											
Equip/Other											
Subtotal	200	170									370
Outside Funding											
Net Cost	200	170									370

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
34	24	15				9	8	13	22	34	44	203

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Evergreen Mills 16" Waterline - JLMA GF [R]
 CIP Project #: WTR00194
 Program: WTR Water

Requesting Dept: PLN
 Managing Dept.: LAND DEV
 Project Manager: TBD
 Sheet Completed by: Beatty, Andrew



Project Description

Reimbursement for potential upsizing of a 16" waterline along Evergreen Mills Road as part of the proposed Greenfield Farm development. Approximate length for project is 3700 LF

Project Driver

The 2019 General Plan expanded Loudoun Water's service area by expansion of the Transition Policy Area. Master planning efforts identified new waterline transmission corridors to include along the east side of Evergreen Mills Rd. This project will facilitate the construction of the new water infrastructure.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.7	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction			2,000	780							2,780
Land/Easements											
Equip/Other											
Subtotal			2,000	780							2,780
Outside Funding											
Net Cost			2,000	780							2,780

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Evergreen Mills 16" Waterline - JLMA VCS [R]
 CIP Project #: WTR00195
 Program: WTR Water

Requesting Dept: PLN
 Managing Dept.: LAND DEV
 Project Manager: TBD
 Sheet Completed by: Beatty, Andrew



Project Description

Reimbursement for potential upsizing for a 16" waterline along Evergreen Mills Rd as part of the proposed Village at Clear Springs development. Approximate length for project is 4500 LF

Project Driver

The 2019 General Plan expanded Loudoun Water's service area by expansion of the Transition Policy Area. Master planning efforts identified new waterline transmission corridors to include along the east side of Evergreen Mills Rd. This project will facilitate the construction of the new water infrastructure.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.7	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction		2,000	1,380								3,380
Land/Easements											
Equip/Other											
Subtotal		2,000	1,380								3,380
Outside Funding											
Net Cost		2,000	1,380								3,380

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Rt50 to Dulles West Blvd 24-inch Gap [R]
 CIP Project #: WTR00196
 Program: WTR Water

Requesting Dept: LAND DEV
 Managing Dept.: LAND DEV
 Project Manager: Kirby, Matthew
 Sheet Completed by: Tran, Huy



Project Description

This project includes 1,500 LF of 24-inch watermain with a crossing of South Fork Broad Run, plus wetlands, floodplain, tree save, steep slopes, and environmental issues. It fills in an anticipated gap between the 24-inch water stub from Dulles West Blvd (20210097) and the stub from Arcola Lakhvinder Property (20180059).

Project Driver

Need for reinforcement of redundant water supply to critical infrastructure in the County (Stone Springs hospital) and expansion of the central water system in response to projected demand increases due to growth (development) in the central service area. Project identified in interim water supply strategy and water system master planning.

Additional Comments

This project is anticipated to be constructed by one of the phases for INOVA Health System (20200039,20200040, 20200041, 20210017, 20210110). Corresponds to Master Plan Project TM-02-35-64-24

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.9	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other					2,000						2,000
Subtotal					2,000						2,000
Outside Funding											
Net Cost					2,000						2,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Sterling Park Section 2 Water Main Replacement
 CIP Project #: WTR00197
 Program: WTR Water

Requesting Dept: ASSET MNG
 Managing Dept.: CAP PROGRAMS
 Project Manager: Simmons, Kwame
 Sheet Completed by: Simmons, Kwame



Project Description

Replace existing 6" and 8" cast iron water main in the Sterling Park Section 2 neighborhood with new DIP. This project will replace 5.3 miles of 60-year old cast iron water main that is prone to breakage and update the water main to our new standards.

Project Driver

This area of Sterling Park has had 75 breaks over its lifetime and 15 in the last five years. Cast iron in Sterling Park continues to have failure rates far exceeding the rest of the system and should be replaced in the schedule below in order to keep up with the end of useful life for the rest of the system.

Additional Comments

Per mile replacement cost was used to estimate the cost of this project, no detailed estimate has been completed.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	80	580	140								800
Construction				7,810	7,640	350					15,800
Land/Easements											
Equip/Other											
Subtotal	80	580	140	7,810	7,640	350					16,600
Outside Funding											
Net Cost	80	580	140	7,810	7,640	350					16,600

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
							24	12	11	14	19	80

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: **W1B-West 24-inch Extension to Shreve Mill Road**
 CIP Project #: **WTR00198**
 Program: **WTR Water**

Requesting Dept: **LAND DEV**
 Managing Dept.: **LAND DEV**
 Project Manager: **Tran, Huy**
 Sheet Completed by: **Tran, Huy**



Project Description

This project (W1B-W) will be developer-led and includes the design and construction of approximately 2,023 LF of 24-inch watermain extending along Sycolin Rd. to Shreve Mill Road East.

Project Driver

This project is required in order to meet the water needs of the JLMA, several proposed data centers as well as future developments. In 2019, the County named Loudoun Water the presumed water and sewer utility in the Leesburg JLMA and expanded our Central Service Area.

Additional Comments

Project is reimbursement for oversizing, as part of the Sycolin Distribution Facility project. Corresponds to LW #2021-0114 Sycolin Distribution Facility.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	5	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	4.1	(100%)

Estimate Method: **Firm Price/Quote**

10-Year Capital Expenditures in Thousands (2026 dollars)

	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	Total
Planning											
Design											
Construction											
Land/Easements											
Equip/Other	800										800
Subtotal	800										800
Outside Funding											
Net Cost	800										800

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	Total
		800										800

2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name: JLMA W-4-E East/West Interconnection [R]
 CIP Project #: WTR00199
 Program: WTR Water

Requesting Dept: PLN
 Managing Dept.: LAND DEV
 Project Manager: TBD
 Sheet Completed by: Beatty, Andrew

Project Description

This project (W4-E) will be developer-led and includes the design and construction of approximately 7,600 LF of 24-inch watermain extending along Cochran Mill Rd.

Project Driver

This project is required in order to meet the water needs of several proposed data centers as well as future developments. In 2019, the County named Loudoun Water the presumed water and sewer utility in the Leesburg JLMA and expanded our Central Service Area.

Additional Comments

Project is reimbursement for oversizing, as part of the Luck Stone Cochran Mill Project.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	4	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	5	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.9	(100%)

Estimate Method: Industry Metrics

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction		3,000	2,700								5,700
Land/Easements											
Equip/Other											
Subtotal		3,000	2,700								5,700
Outside Funding											
Net Cost		3,000	2,700								5,700

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Water Main Replacement Sterling Phase 3
 CIP Project #: WTR00201
 Program: WTR Water

Requesting Dept: ASSET MNG
 Managing Dept.: CAP PROGRAMS
 Project Manager: _Capital Programs
 Sheet Completed by: Whitten, Kathleen



Project Description

Six miles of cast iron water main replacement with new ductile iron pipe. The water main, hydrants, services, and valves will be replaced with new appurtenances. This area was developed as Sterling Park Section 6 and includes the area nearest Route 7 on both sides of Sterling Blvd.

Project Driver

The cast iron water main has reached the end of its useful life and must be replaced. We have had over 40 breaks in this section over the life of the pipe, with eight breaks occurring in the last five years.

Additional Comments

Project supports Loudoun Water's long-term pipe replacement program goals.

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	2	(20%)
4. Alignment	4	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.05	(100%)

Estimate Method: Benchmark Data

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design		70	870	70							1,000
Construction				1,450	13,000	540					15,000
Dev. Reimbursement											
Equip/Other											
Subtotal		70	870	1,520	13,000	540					16,000
Outside Funding											
Net Cost		70	870	1,520	13,000	540					16,000

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total

2026 - 2035 Loudoun Water Capital Improvement Plan

Project Name: Water Main Replacement Lipscomb, Austen
 CIP Project #: WTR00202
 Program: WTR Water

Requesting Dept: ASSET MNG
 Managing Dept.: CAP PROGRAMS
 Project Manager: Simmons, Kwame
 Sheet Completed by: Simmons, Kwame



Project Description

3,500 feet of water main replacement in Countryside neighborhood on the following streets: Austen Ct, Lipscomb Ct, Webley Ct, and Devonshire Ct. There is no cathodic protection on these mains and the soils are corroding the pipelines here. The mains will be replaced with corrosion protection to reduce breakage in the future.

Project Driver

These ductile iron water mains were installed in 1983 and 1984, making them over 40 years old. These four streets have experienced 11 breaks over its lifespan, with 5 of those in the last five years. All of these roads have dead-end water mains, so every break means the entire road is out of water. Also, due to their elevation, the pressure is higher, meaning more water is lost with each break compared to an area like Sterling Park.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	3	(25%)
2. Level of Service	4	(25%)
3. Implication of Deferring	4	(20%)
4. Alignment	3	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.25	(100%)

Estimate Method: Benchmark Data

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design	50	250									300
Construction		120	1,680								1,800
Dev. Reimbursement											
Equip/Other											
Subtotal	50	370	1,680								2,100
Outside Funding											
Net Cost	50	370	1,680								2,100

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
									10	13	27	50



2026 - 2035 Loudoun Water Capital Improvement Plan



Project Name:
 CIP Project #:
 Program:

Requesting Dept:
 Managing Dept.:
 Project Manager:
 Sheet Completed by:

Project Description

Installation of electronic equipment protective devices across all remote waster facilities such as vaults, pump stations and tanks.

Project Driver

Reduce the occurrences of equipment damage associated with electrical surges and lightning strikes.

Additional Comments

Project Prioritization; Criteria - Rating (5 High, 1 Low)

1. Regulatory/Safety Requirement	5	(25%)
2. Level of Service	3	(25%)
3. Implication of Deferring	3	(20%)
4. Alignment	2	(20%)
5. Funding/Other Opportunities	1	(10%)
Total score	3.1	(100%)

Estimate Method:

10-Year Capital Expenditures in Thousands (2026 dollars)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
Planning											
Design											
Construction											
Dev. Reimbursement											
Equip/Other	100										100
Subtotal	100										100
Outside Funding											
Net Cost	100										100

2026 Monthly Capital Expenditures in Thousands (2026 dollars)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
				20	20	20	20	20				100



