

Approved
May 11, 2023



FY 2024-FY 2028

CAPITAL IMPROVEMENT PROGRAM



**CAPITAL IMPROVEMENT PROGRAM
FISCAL YEARS 2024 - 2028**



Service Authority
Prince William County

May 11, 2023

CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2024 – 2028



Service Authority
Prince William County

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CAPITAL IMPROVEMENT PROGRAM FISCAL YEARS 2024-2028

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CAPITAL IMPROVEMENT PROGRAM

PURPOSE

The Capital Improvement Program (CIP) is presented annually to the Board of Directors as a planning document for the express purpose of identifying future capital projects and schedules of capital project activity as projected by all Divisions within the Service Authority. The CIP Program is not intended to commit funding but sets planning level project budgets, identifies funding sources, approximates funding allocation and estimates the project schedules.

The timing of many projects is heavily dependent on development activity throughout various areas of the county. As often occurs, CIP projects may be postponed due to reprioritization of other projects or low development activity in a specific area. Preliminary engineering design and the purchase of needed land can be initiated as a phased and timely effort in advance of development activity to prevent delays in construction when the associated development occurs. The General Manager may adjust the timing and spending schedule for projects in accordance with the Service Authority's budget transfer policy for CIP projects.

All contracts related to the CIP are approved in accordance with the Service Authority Purchasing Regulations and project funds are encumbered through the Purchase Order process. As projects can span several fiscal years, unspent encumbered funds are rolled over to the next fiscal year at the end of each fiscal year. Note that for accounting purposes, any projects not resulting in a capital asset, or any costs that do not meet the accounting criteria to be capitalized will be reclassified from capital to expense, as a year-end closing adjustment. The CIP is updated on an annual basis to reflect the latest project priorities, cost estimates and spending schedules.

CIP DOCUMENT FORMAT

The CIP is presented for a five-year cycle for Fiscal Years 2024 through 2028 in three sections: Section A (Program Summary), Section B (Project Data Sheets), and Section C (Project Maps). The following discussion describes the contents of each Section within this report.

Section A - Program Summary

This section provides a financial summary of each project including the project's expenditures prior to FY24, proposed expenditure schedule and respective funding source. The projects are organized into categories, which are defined in Table 1, CIP Project Categories.

This section includes all existing and proposed CIP projects that have design or construction activity in the current five-year cycle. Projects constructed by developers and contributed to the Service Authority are not included in the document, unless the project comprises a system improvement in which the Service Authority plans to participate in financially.

CIP PROJECT CATEGORIES

The CIP is organized with respect to project categories. This arrangement facilitates locating project data sheets for comparison or study. The functional categories are listed in Table 1 below.

Table 1. CIP Project Categories

Project Category	Description
Water Supply Projects (WSUP)	Booster pumping stations and water supply projects are presented under this category.
Water Storage Tank Projects (WST)	This project category includes tank design, construction, maintenance and rehabilitation programs. Tanks maintain system pressures, provide fire and reserve storage, and provide water during peak demands.
Water Transmission Projects (WAT)	Water main projects are presented under this category. Transmission mains are pipes sized 16-inches and larger to convey large volumes of water to booster pumping stations, storage tanks and regional demand areas. Distribution mains are pipes sized 12-inches and smaller to provide water service and fire protection to localized areas.
Sewage Pumping Stations Projects (SPS)	This category includes replacements, upgrades or modifications to existing sewage pumping stations and associated force mains to meet future capacity needs within the sewer shed, improve safety conditions and to continue meeting DEQ regulations. Sewage pumping stations pump sewage from a low point in one gravity sewer shed to another gravity sewer shed for conveyance to either the Upper Occoquan Service Authority (UOSA) or H.L. Mooney Advanced Water Reclamation Facility (AWRF).
Sewage Collection System Projects (SEW)	New sewer mains and replacement/upgrades to existing sewer mains that convey sewage from commercial and residential customers to sewage pumping stations or water reclamation facilities are presented under this category.
Water Reclamation Facility Projects (WRF)	Construction projects and facility modifications at the H.L. Mooney AWRF are presented in this category.
Miscellaneous Projects (MISC)	Projects that are not directly related to any of the previous six categories are included in this section. Several projects include upgrades or expansions to office complexes and maintenance facilities.
Information Technology (IT)	Projects that involve improvements to Information Technology applications, infrastructure, support, and data analytics are presented in this category. Examples include: financial systems, work order management, and Supervisory Control and Data Acquisition (SCADA) upgrades and modifications; IT server, database, and communications equipment upgrades; and system integration and business analytics software improvements.
Regional Utility Projects (REG)	Major expansion or upgrades to regional treatment facilities at which the Service Authority has purchased capacity rights, such as UOSA's Water Reclamation Facility and the City of Manassas' and/or Fairfax Water's Water Treatment Plants are presented under this category. This category also includes a new Occoquan River crossing to increase transmission capacity and reliability of the potable water supply to eastern Prince William County.

Section B – Project Data Sheets

This section provides detailed information for each CIP project, which are grouped by project category. Table 2 defines all the information included on the project’s data sheet.

Table 2. CIP Project Data Sheet Fields

Data Sheet Field	Description
Project Title	Provides a name for the project.
Project CIP	Identifies the project category and “Engineering” project number(s).
JDE Job Number(s)	The job cost coding to be utilized within JD Edwards tracking system.
Location	A description of where the project will be in Prince William County.
Pressure Zone	This identifies the Pressure Zone, Sewershed and Magisterial District where the project will occur. If the project is marked as “multiple”, this indicates that the project falls within more than one area of service.
Sewershed	
Magisterial District	
Project Description	The scope and/or justification of the project are identified.
Project Benefit	The benefit of the project is described.
Source Derivation	Details the engineering/planning study, wherein the project need was identified. In some cases, in-house analyses have recommended projects and these are identified by the respective Division.
Estimate By	Identifies the Division within the Service Authority and/or Engineering Consultant that prepared the cost estimate.
Project Estimate	The annual estimated spending amounts and totals shown are in thousands of dollars (\$1,000’s).
	An "Order of Magnitude" estimate is generally used in the early stages of a project when only concepts, maps and historical project data are available, without the benefit of detailed engineering reports or preliminary plans. Order of Magnitude Estimates are also appropriate when anticipated construction is beyond the five-year period of the CIP. As such, “Order of Magnitude” cost estimates are accurate within +50 and -30 percent.
	When available, more accurate cost estimates as a result of a Preliminary Engineering Report (PER), Consultant’s Opinion of Probable Construction Costs (OPCC) or the Contract Award cost are utilized.

Table 2. CIP Project Data Sheet Fields (cont.)

Data Sheet Field	Description
Proposed Funding Sources	This section provides the estimated breakdown of funding of the total cost by Fund, e.g. Expansion Fund 02 – from Availability Fees, Commitment Fund 03 – from Availability Fees, Replacement Fund 04 – from User Rates, Other Contributions or Developer Contributions. The allocations may vary from the initial estimates.
Project Total	Total project costs include anticipated land acquisition, design and construction costs, and Service Authority inspection and project management costs. A review of the construction and materials costs over the previous year has indicated increases, and consequently, estimates from the previous year's CIP have been adjusted upward for inflation this year. The conservative nature of the estimates will absorb these minor increases for ensuing years.
Project Map	Maps are produced from the Service Authority’s Mapping System. The maps are annotated to detail information about the various projects. Photographs are also used for many countywide type projects.

Section C – Project Maps

This section provides overall county maps showing the location of the projects, giving the “big picture” of the Capital Improvement Program. The maps prove useful when correlating the information about pressure zone and sewershed on the project data sheet with the project’s location in Prince William County.

CIP PROJECT EVALUATION AND SCHEDULING

The Service Authority’s Strategic Plan plays an ongoing critical role in the management and operations of the Service Authority. All CIP projects must align with the Service Authority’s immediate business needs and remain well aligned with the short and long-term outcomes the Service Authority strives to achieve.

In support of the water and wastewater systems, Service Authority CIP projects are typically: capacity and transmission improvements, new facilities, and investment in replacement of expiring assets. Other CIP projects include support facilities and IT initiatives that are needed to meet strategic plan objectives.

Each CIP project requires a business case that documents its alignment with the Master Plan, the Strategic Plan Areas of Excellence, Strategic Objectives, and Strategic Goals. In addition, CIP projects are evaluated according to the CIP Project Evaluation Criteria shown in Table 3 below. The evaluation process involves discussion and scoring of CIP projects by the Service Authority’s Work Coordination Council (WCC), consisting of Service Authority leadership and subject matter experts. The WCC uses the outcomes of this evaluation process in conjunction with consideration of available funding, resources, and other constraints to develop the CIP fiscal year schedule, as reflected in Section A (CIP Program Summary).

Table 3 - CIP Project Evaluation Criteria

Criteria	Criteria/Factors	Criteria Description and Objectives
1	Physical Condition of Asset <ul style="list-style-type: none"> • Physical Condition Assessment • Operating/Maintenance History • Probability/Consequence of Failure • Age/Useful Life 	Protect the health, safety and service to customers by replacing assets or information systems that have a high risk of failure due to age, condition or obsolescence.
2	Regulatory/Environmental Requirements <ul style="list-style-type: none"> • Permit/Regulatory Compliance • Water Quality • Health and Safety • Environmental Impact • Compliance Data Accuracy 	Protect public health and the environment by reducing the risk of regulatory non-compliance or negative environmental impact due to the failure of an asset or information system.
3	Service Level/Reliability Requirements <ul style="list-style-type: none"> • Workforce Productivity • Service interruption History • Health and Safety Risks • Water and Air Quality • Water Main Breaks or Sewer Backups • Noise or Odor Complaints 	Increase the reliability and redundancy of service to our customers by replacing and augmenting facilities and/or information systems that do not fully meet Service Authority standards.
4	Capacity/Technical Obsolescence Issues <ul style="list-style-type: none"> • Workforce Productivity • Probability of Failure • Single Point of Failure • Customer Service Needs • Capacity for New Customers • Future Support for Equipment/Systems 	Meet current and future technical, capacity, operational, health, safety, security and level of service requirements.
5	Operations and Maintenance Issues <ul style="list-style-type: none"> • Maintenance Requirements • Breakdowns and Downtime • Reactive Maintenance • Equipment Obsolescence • Manufacturer/Supplier Support • Labor and Operating Cost Savings 	Optimizing operational efficiency and reliability by replacing or enhancing the Service Authority's plant, water and sewer facilities and information systems.

FISCAL YEAR 2024 Summary of CIP Projects

The following is a list of Projects slated for study, design or construction during Fiscal Year 2024.

WATER SUPPLY PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
WSUP-103	Water Meter Vault Improvements	Commercial Meter Vault Locations
WSUP-105	Montclair/Four Seasons Water System Improvements	17361 Four Seasons Dr., Dumfries
WSUP-111	Bull Run Mountain Well Upgrades	Bull Run Upper & Lower and Evergreen Pressure Zones
WSUP-112	Manassas Southside Booster Pumping Station Upgrades	8170 Blooms Quarry Ln., Manassas
WSUP-114	Capital Meter Program	County Wide
WSUP-116	Unity Reed (F14) Booster Pumping Station and Discharge Main	8814 Rixlew Ln., Manassas
WSUP-117	Eastern Area Pressure Reducing Valves	MS06, MS27 and F06

WATER STORAGE PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
WST-110	Water Storage Tank Rehabilitation Program	5895 Antioch Rd., Haymarket
WST-111	Tank Re-Chlorination Program	9933 Broadsword Dr., Bristow

WATER TRANSMISSION PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
WAT-115	Dawkins Branch Transmission Main	University Boulevard from Sudley Manor Drive to Edmonston Drive
WAT-181	Route 1 Transmission Main – Phase 1	Route 1 from Garfield BPS to Dumfries Road
WAT-182	Route 1 Transmission Main – Phase 2	Route 1 and Old Triangle Rd. from Dumfries Road to Fuller Heights Road
WAT-183	Western Area Resiliency – Rt. 28 Bypass	Proposed Rt. 28 Bypass Road Project from Fairfax County to Godwin Drive
WAT-184	Sudley Road Water Main – Phase 3	Sudley Road from Godwin Drive to Thomas Drive
WAT-200	Water Distribution Asset Replacement Program	County Wide

SEWAGE PUMPING STATION PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
SPS-100	Generator Replacement Program	County Wide
SPS-107	Occoquan Forest Sewage Pumping Stations, OQL36 and OQL37	10820 Split Rail Dr. and 6204 Ramblewood Tr., Manassas
SPS-108	Nokesville Sewage Pumping Station, L20	12829 Fitzwater Dr., Nokesville
SPS-112	Graham Park Sewage Pumping Station, L13	3196 Shoreview Rd., Dumfries
SPS-113	Heritage Hunt Sewage Pumping Station, L52 and Force Main	6588 Alderwood Way, Gainesville
SPS-115	Belmont Sewage Pumping Station, L17 and Force Main	13760 Dabney Rd., Woodbridge
SPS-116	Hornbaker Sewage Pumping Station, L06 and Force Main	13010 Sport&Health Dr., Woodbridge
SPS-118	Koon's Sewage Pumping Station, L28	10640 Automotive Dr., Manassas
SPS-123	Spinnaker Court Sewage Pumping Station, L02 and Force Main	2280 Spinnaker Ct., Woodbridge
SPS-125	Occoquan Creek Sewage Pumping Station, L04 and Gravity Main	13221 Marina Way, Woodbridge
SPS-134	Hooes Run Sewage Pumping Station, L01 and Force Main	2502 Old Bridge Rd., Woodbridge
SPS-135	Yorkshire Sewage Pumping Station, L30 and Force Main	7415 Lake Dr., Manassas
SPS-136	Melrose Sewage Pumping Station, L10	3350 Melrose Ave., Triangle
SPS-138	Powell's Creek Sewage Pumping Station, L08 and Force Main	2750 Dettingen Pl., Woodbridge
SPS-142	Featherstone Sewage Pumping Station, L16 and Force Main	15023 Farm Creek Dr., Woodbridge

SEWAGE COLLECTION PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
SEW-106	Dumfries Force Main and Water Main Replacement	Near Route 1, Dumfries
SEW-157	Sudley Road Sewer Main Replacement and Upgrade	Sudley Rd. to Williamson Blvd., South of I-66
SEW-158	I-66 Rest Area Sewer Main Replacement	Crossing at I-66 Rest Area
SEW-200	Sewer Collection Rehabilitation & Replacement Program	County Wide

WATER RECLAMATION FACILITY PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
WRF-123	Ongoing Renewal and Replacement	H.L. Mooney AWRP
WRF-131	FBI and Solids Building Repairs and Modifications	H.L. Mooney AWRP
WRF-134	Bioreactor Basin Improvements	H.L. Mooney AWRP
WRF-138	Facility Wide Improvements – Design-Build Project	H.L. Mooney AWRP

MISCELLANEOUS PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
MISC-100	Water and Sewer Utility System Improvement Opportunity (USIO)	County Wide
MISC-101	Water and Sewer Facility Security Enhancements	County Wide
MISC-102	Wellington Road Operations Center Expansion	8410 Virginia Meadows Dr., Manassas
MISC-103	Facilities Renewals and Upgrades	County Wide
MISC-112	Administrative Office Space Expansion	TBD
MISC-114	System Wide Master Plan	County Wide
MISC-116	English Gardens Property Building & Site Improvements	14195 Dumfries Rd., Manassas
MISC-117	Studies and PER's – Organization Wide	County Wide
MISC-118	Nottoway Tank Site Development	2011 Horner Rd., Woodbridge
MISC-200	Vehicle Replacement Program	County Wide
MISC-201	Mechanical Equipment Replacement Program	County Wide
MISC-202	Computer and Other Replacement Program	County Wide
MISC-203	Major Facility Rehabilitation Program	County Wide

INFORMATION TECHNOLOGY PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
IT-106	Cayenta - CIS	County Wide
IT-107	Computerized Maintenance Management System (CMMS) Implementation	County Wide
IT-110	Document Management System Implementation	County Wide
IT-117	Vertical Asset Data Development	County Wide
IT-118	System Integration	County Wide
IT-121	Asset Management Analytics	County Wide
IT-122	Project Management Information System (PMIS) Implementation	County Wide
IT-125	Network Security Upgrades	County Wide
IT-126	SCADA System Upgrade	County Wide
IT-128	Web Content Management System Migration	County Wide

REGIONAL UTILITY PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
REG-1	Occoquan River Crossing	Occoquan River at Griffith WTP

GLOSSARY OF TERMS AND ACRONYMS

The following is a list of acronyms and abbreviations frequently used by Prince William County Service Authority

<i>Acronym/Abbreviation List</i>	
PWCSA	Prince William County Service Authority
PWC	Prince William County
SA	Service Authority
AWRF	Advanced Water Reclamation Facility
B&C	Brown and Caldwell (Engineers)
BAKER	Michael Baker International, Inc. (Engineers)
BI	Business Intelligence
BNR	Biological Nitrogen Removal
BOCS	Board of County Supervisors
BOD	PWCSA Board of Directors
BPS	Booster Pumping Station
CBA	Chesapeake Bay Agreement
CIP	Capital Improvement Program
CIP	Cast Iron Pipe
CIPP	Cured In-Place Pipe
CMMS	Computerized Maintenance Management System
COM	City of Manassas
COMP	City of Manassas Park
CSX	Chesapeake-Seaboard Corporation (Railroad)
Ct.	Court
DIP	Ductile Iron Pipe
Dr.	Drive
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FM	Force Main
FUND 02	Expansion Fund
FUND 03	Commitment Fund
FUND 04	Replacement Fund
FW	Fairfax Water
FY	Fiscal Year
GIS	Geographic Information System

Acronym/Abbreviation List (Cont.)

GPM	Gallons Per Minute
GPS	Global Positioning System
H&S	Hazen and Sawyer Environmental Engineers and Scientists
HDPE	High Density Polyethylene Pipe
HOA	Homeowner Association
HP	Horsepower
HVAC	Heating Ventilation Air Conditioning
I&I	Inflow and Infiltration
IT	Information Technology
LFC	Local Facilities Charge
Ln.	Lane
MCB	Marine Corps Base
MCBQ	Marine Corps Base, Quantico
MG	Million Gallons
MGD	Million Gallons Per Day
MHI	Multiple Hearth Incinerator
MISC	Miscellaneous
MPUA	Master Plan Utility Adjustment
N-S RWY	Norfolk-Southern Railway Company
NPDES	National Pollution Discharge Elimination System
O&M	Operations and Maintenance Division
OPCC	Opinion of Probable Construction Cost
PER	Preliminary Engineering Report
PES	Potomac Embayment Standards
PFR	Public Facilities Review
PH	Phase
PO	Purchase Order
PRV	Pressure Reducing Valve
PS	Pumping Station
PVC	Polyvinyl Chloride (Plastic Pipe)
PWP	Prince William Pipeline, Corp.

Acronym/Abbreviation List (Cont.)

PZ	Pressure Zone
RCP	Reinforced Concrete Pipe
RCS	Residual Control System
Rd.	Road
RDA	Rinker Design Associates (Engineers)
RF&P	Richmond, Fredericksburg and Petersburg Railroad
RK&K	Rummel, Klepper and Kahl Consulting Engineers
RPM	Revolutions Per Minute
SA	Service Authority
SCADA	Supervisory Control and Data Acquisition
SEW	Sewer (Collection Mains)
SPS	Sewage Pumping Station
SS	Sanitary Sewer
SSES	Sanitary Sewer Evaluation Study
SSO	Sanitary Sewer Overflow
TDH	Total Dynamic Head
Tr.	Terrace/Trail
UOSA	Upper Occoquan Service Authority
USIO	Utility System Improvement Opportunity
UV	Ultraviolet
VDEQ	Virginia Department of Environmental Quality
VDOT	Virginia Department of Transportation
WAT	Water (Transmission and Distribution)
WL	Water Line
WRA	Whitman, Requardt and Associates, LLP (Engineers)
WRF	Water Reclamation Facility (Now AWRF)
WST	Water Storage Tank
WSUP	Water Supply
WWTP	Wastewater Treatment Plant

Water Pressure Zones

BH	Bull Run Mountain High
BW	Bull Run Mountain Low
DT	Dumfries
EG	Evergreen
FW	Fairfax Water
GM	Greater Manassas
GW	Gainesville
HM	Haymarket
HO	Hoadly
LR	Lake Ridge
MO	Montclair
MS	Manassas Southside
OR	Oak Ridge
WL	Woodbridge

Water Pressure Sub-Zones (Primary Zone)

DV	Dominion Valley Boosted (Haymarket)
OF	Occoquan Forest Reduced (Hoadly)
PC	Powell's Creek Reduced (Dumfries)

Sewersheds

BM	Belmont
BR	Broad Run
BU	Bull Run
CB	Cabin Branch
CC	Catharpin Creek
DE	Deweys Branch
DM	Dumfries
FB	Flat Branch
FS	Featherstone
GD	Godwin Drive
HB	Holkums Branch
HR	Hooes Run
HS	Harbor Station
LB	Little Bull Run
LC	Little Creek
MR	Melrose
NB	North Branch
NE	Neabsco
NK	Nokesville
OC	Occoquan Creek
OQ	Occoquan Forest
OS	Occoquan Plant
OT	Occoquan Town
PB	Piney Branch
PC	Powells Creek
PU	Purcell Branch
RU	Russia Branch
WA	Airport
YS	Yorkshire

Magisterial Districts

BR	Brentsville
CO	Coles
GN	Gainesville
NE	Neabsco
OC	Occoquan
PO	Potomac
WB	Woodbridge

**CAPITAL IMPROVEMENT PROGRAM
FISCAL YEARS 2024 - 2028**



Service Authority
Prince William County

SECTION A

PROGRAM SUMMARY

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENT PROGRAM, FISCAL YEARS 2024-2028**

FUNDING SOURCE SUMMARY - ALL PROJECTS

	TOTAL EXPENDITURES (\$1,000's)	SPENDING SCHEDULE (\$1,000's)						
		PRE FY-24	FY-24	FY-25	FY-26	FY-27	FY-28	BEYOND FY-28
WATER SUPPLY PROJECTS (WSUP)								
Exp Fund 002	14819	3618	3303	4082	3207	305	305	0
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	28884	7631	7233	6772	4559	1345	1345	0
Other	0	0	0	0	0	0	0	0
TOTAL	43702	11249	10535	10853	7765	1650	1650	0
WATER STORAGE PROJECTS (WST)								
Exp Fund 002	0	0	0	0	0	0	0	0
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	11783	0	1355	2950	2950	2950	1578	0
Other	0	0	0	0	0	0	0	0
TOTAL	11783	0	1355	2950	2950	2950	1578	0
WATER TRANSMISSION PROJECTS (WAT)								
Exp Fund 002	41831	13185	2246	1650	3750	7170	9625	4205
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	65758	13079	5546	5150	8658	13942	15625	3758
Other	525	82	0	0	0	38	250	156
TOTAL	108114	26346	7792	6800	12408	21150	25500	8118
SEWAGE PUMPING STATION PROJECTS (SPS)								
Exp Fund 002	89676	6770	9947	9976	14999	18865	13409	15710
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	191469	22477	15321	25383	32738	39641	30095	25815
Other	915	268	0	125	250	273	0	0
TOTAL	282060	29514	25268	35484	47987	58778	43504	41525
SEWER COLLECTION PROJECTS (SEW)								
Exp Fund 002	4010	3471	539	0	0	0	0	0
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	10911	5473	1477	1161	1600	600	600	0
Other	0	0	0	0	0	0	0	0
TOTAL	14920	8944	2015	1161	1600	600	600	0
WATER RECLAMATION FACILITY PROJECTS (WRF)								
Exp Fund 002	6491	1693	360	434	825	855	465	1860
Fund 003	66726	4825	5100	14445	14756	13800	13800	0
Rep Fund 004	170840	15208	12740	34717	36355	34195	33285	4340
Other	0	0	0	0	0	0	0	0
TOTAL	244057	21726	18200	49595	51936	48850	47550	6200
MISCELLANEOUS PROJECTS (MISC)								
Exp Fund 002	51764	1434	2598	4925	8650	10680	18927	4550
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	91157	993	9851	13986	17836	18769	24972	4750
Other	0	0	0	0	0	0	0	0
TOTAL	142920	2427	12448	18911	26486	29449	43899	9300
INFORMATION TECHNOLOGY (IT)								
Exp Fund 002	695	442	53	143	38	19	0	0
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	47956	7130	9235	10296	11902	9394	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	48650	7572	9287	10438	11940	9413	0	0
REGIONAL UTILITY PROJECTS (REG)								
Exp Fund 002	9525	1985	3770	3770	0	0	0	0
Fund 003	84200	0	0	3100	7900	24400	24400	24400
Rep Fund 004	22224	4632	8796	8796	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	115949	6617	12566	15666	7900	24400	24400	24400
TOTAL EXPANSION FUND 002	218809	32598	22814	24978	31468	37894	42731	26325
TOTAL COMMITMENT FUND 003	150926	4825	5100	17545	22656	38200	38200	24400
TOTAL REPLACEMENT FUND 004	640980	76623	71552	109210	116598	120836	107500	38662
TOTAL DEVELOPER/OTHER FUND	1440	350	0	125	250	310	250	156
GRAND TOTAL - ALL CIP PROJECTS	1012155	114395	99466	151858	170972	197240	188681	89543

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENT PROGRAM, FISCAL YEARS 2024-2028**

WATER SUPPLY PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	FUNDING SOURCES				SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-24	FY-24	FY-25	FY-26	FY-27	FY-28	BEYOND FY-28
WSUP-103	Water Meter Vault Improvements	675	0	0	675	0	0	175	125	125	125	125	0
WSUP-105	Montclair/Four Seasons Water System Improvements	15230	5331	0	9900	0	6430	7800	1000	0	0	0	0
WSUP-111	Bull Run Mountain Well Upgrades	2826	0	0	2826	0	1739	200	650	237	0	0	0
WSUP-112	Manassas Southside Booster Pumping Station, F18	1600	800	0	800	0	1565	35	0	0	0	0	0
WSUP-114	Capital Meter Program	7625	1525	0	6100	0	0	1525	1525	1525	1525	1525	0
WSUP-116	Unity Reed Booster Pumping Station, F14 and Discharge Main	14326	7163	0	7163	0	1170	500	6853	5803	0	0	0
WSUP-117	Eastern Area Pressure Reducing Valves	1420	0	0	1420	0	345	300	700	75	0	0	0
TOTAL: WATER SUPPLY PROJECTS		43702	14819	0	28884	0	11249	10535	10853	7765	1650	1650	0

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENT PROGRAM, FISCAL YEARS 2024-2028**

WATER STORAGE PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	FUNDING SOURCES				SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-24	FY-24	FY25	FY-26	FY-27	FY-28	BEYOND FY-28
WST-110	Water Storage Tank Rehabilitation Program	6638	0	0	6638	0	0	40	1750	1750	1750	1348	0
WST-111	Tank Re-Chlorination Program	5145	0	0	5145	0	0	1315	1200	1200	1200	230	0
TOTAL: WATER STORAGE PROJECTS		11783	0	0	11783	0	0	1355	2950	2950	2950	1578	0

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENT PROGRAM, FISCAL YEARS 2024-2028**

WATER TRANSMISSION PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	FUNDING SOURCES				SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-24	FY-24	FY25	FY-26	FY-27	FY-28	BEYOND FY-28
WAT-115	Dawkins Branch Transmission Main	7766	4660	0	3106	0	529	1000	1500	0	0	2500	2237
WAT-122	Gainesville to Manassas South Connector	5254	2364	0	2364	525	820	0	0	0	378	2500	1556
WAT-138	Possum Point Road Water Main - Phase 2	4680	0	0	4680	0	0	0	0	408	2272	2000	0
WAT-181	Route 1 Transmission Main - Phase 1	13193	6597	0	6597	0	12882	311	0	0	0	0	0
WAT-182	Route 1 Transmission Main - Phase 2	13416	6708	0	6708	0	11935	1481	0	0	0	0	0
WAT-183	Western Area Resiliency - Rt. 28 Bypass	40825	20413	0	20413	0	0	500	500	7500	14000	14000	4325
WAT-184	Sudley Road Water Main - Phase 3	2180	1090	0	1090	0	180	1000	1000	0	0	0	0
WAT-200	Water Distribution Asset Replacement Program	17500	0	0	17500	0	0	3500	3500	3500	3500	3500	0
WAT-201	Bull Run Mountain Distribution System Improvements	3300	0	0	3300	0	0	0	300	1000	1000	1000	0
TOTAL: WATER TRANSMISSION PROJECTS		108114	41831	0	65758	525	26346	7792	6800	12408	21150	25500	8118

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENT PROGRAM, FISCAL YEARS 2024-2028**

SEWAGE PUMPING STATION PROJECTS

CIP	Number	PROJECT NAME	ESTIMATED PROJECT COST	FUNDING SOURCES				SPENDING SCHEDULE					
			(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-24	FY-24	FY25	FY-26	FY-27	FY-28

SPS-100	Generator Replacement Program	4370	0	0	4370	0	0	340	820	1070	1070	1070	0
SPS-107	Occoquan Forest Sewage Pumping Stations, OQL36 & OQL37	6494	0	0	6494	0	6022	472	0	0	0	0	0
SPS-108	Nokesville Sewage Pumping Station, L20	2841	0	0	2841	0	2629	212	0	0	0	0	0
SPS-112	Graham Park Sewage Pumping Station, L13	4829	0	0	4829	0	4767	62	0	0	0	0	0
SPS-113	Heritage Hunt Sewage Pumping Station, L52 and Force Main	43991	21996	0	21996	0	10715	17000	10000	6276	0	0	0
SPS-115	Belmont Sewage Pumping Station, L17 and Force Main	16533	4960	0	11573	0	944	1000	800	2500	6000	5289	0
SPS-116	Hornbaker Sewage Pumping Station, L06 and Force Main	3966	0	0	3966	0	200	513	3000	253	0	0	0
SPS-118	Koon's Sewage Pumping Station, L28	5324	0	0	5324	0	586	1000	2238	1500	0	0	0
SPS-123	Spinnaker Court Sewage Pumping Station, L02 and Force Main	4539	0	0	4539	0	609	1000	1430	1500	0	0	0
SPS-125	Occoquan Creek Sewage Pumping Station, L04 and Gravity Main	15389	3078	0	12311	0	505	600	5745	6000	2539	0	0
SPS-126	Piney Branch Sewage Pumping Station, L26 and Gravity Main	3660	2196	0	549	915	1070	0	500	1000	1090	0	0
SPS-134	Hooes Run Sewage Pumping Station, L01 and Force Main	27055	9469	0	17586	0	213	600	3234	12000	11008	0	0
SPS-135	Yorkshire Sewage Pumping Station, L30 and Force Main	8506	3828	0	4678	0	210	761	2500	2535	2500	0	0
SPS-136	Melrose Sewage Pumping Station, L10	8269	0	0	8269	0	208	708	2000	3353	2000	0	0
SPS-137	Dawson Landing Sewage Pumping Station, L51	6794	0	0	6794	0	206	0	517	1000	3071	2000	0
SPS-138	Powell's Creek Sewage Pumping Station, L08 and Force Main	20000	10000	0	10000	0	155	500	700	5000	8000	5645	0
SPS-139	North Fork Sewage Pumping Station, L39	14000	6300	0	7700	0	131	0	400	600	4000	6500	2369
SPS-140	Occoquan Plant Sewage Pumping Station, L14	18500	3700	0	14800	0	133	0	400	600	5000	7500	4867

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENT PROGRAM, FISCAL YEARS 2024-2028**

SEWAGE PUMPING STATION PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	FUNDING SOURCES				SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-24	FY-24	FY25	FY-26	FY-27	FY-28	BEYOND FY-28
SPS-141	Dewey's Creek Sewage Pumping Station, L09	20000	3000	0	17000	0	136	0	400	600	5000	8000	5864
SPS-142	Featherstone Sewage Pumping Station, L16 and Force Main	47000	21150	0	25850	0	75	500	800	2200	7500	7500	28425
TOTAL: SEWAGE PUMPING STATION PROJECTS		282060	89676	0	191469	915	29514	25268	35484	47987	58778	43504	41525

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENT PROGRAM, FISCAL YEARS 2024-2028**

SEWER COLLECTION PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	FUNDING SOURCES				SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-24	FY-24	FY25	FY-26	FY-27	FY-28	BEYOND FY-28
SEW-106	Dumfries Force Main and Water Main	4674	0	0	4674	0	4251	423	0	0	0	0	0
SEW-157	Sudley Road Sewer Main	5346	4010	0	1337	0	4628	718	0	0	0	0	0
SEW-158	I-66 Rest Area Sewer Main	1900	0	0	1900	0	65	274	561	1000	0	0	0
SEW-200	Sewer Collection Rehabilitation & Replacement Program	3000	0	0	3000	0	0	600	600	600	600	600	0
TOTAL: SEWER COLLECTION PROJECTS		14920	4010	0	10911	0	8944	2015	1161	1600	600	600	0

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENT PROGRAM, FISCAL YEARS 2024 - 2028**

WATER RECLAMATION FACILITY PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	FUNDING SOURCES				SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-24	FY-24	FY25	FY-26	FY-27	FY-28	BEYOND FY-28
WRF-123	Ongoing Renewal and Replacement	9642	2893	0	6749	0	1442	400	400	400	400	400	6200
WRF-126	Dynamic Hydraulic Model and Instrumentation	1265	380	0	886	0	665	0	100	200	300	0	0
WRF-131	FBI and Solids Building Repairs and Modifications	6894	2068	0	4826	0	1864	480	600	1650	1650	650	0
WRF-134	Bioreactor Basin Improvements	3837	1151	0	2686	0	1672	320	345	500	500	500	0
WRF-138	Facility Wide Improvements - Design-Build Project *	222419	0	66726	155693	0	16083	17000	48150	49186	46000	46000	0
TOTAL: WATER RECLAMATION FACILITY PROJECTS		244057	6491	66726	170840	0	21726	18200	49595	51936	48850	47550	6200

* Partially Debt Funded Project (\$100M)

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENT PROGRAM, FISCAL YEARS 2024 - 2028**

MISCELLANEOUS PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	FUNDING SOURCES				SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-24	FY-24	FY25	FY-26	FY-27	FY-28	BEYOND FY-28
MISC-100	Water and Sewer Utility System Improvement Opportunity (USIO)	7840	3920	0	3920	0	0	1440	1600	1600	1600	1600	0
MISC-101	Water & Sewer Facility Security Enhancements	2275	0	0	2275	0	0	585	410	420	450	410	0
MISC-102	Wellington Road Operations Center Expansion	16662	8331	0	8331	0	629	1500	4500	6500	3533	0	0
MISC-103	Facility Renewals and Upgrades	1359	0	0	1359	0	159	200	200	200	200	200	200
MISC-112	Administrative Office Space Expansion	20786	10393	0	10393	0	951	135	600	500	3500	6000	9100
MISC-114	System Wide Master Plan	1035	1035	0	0	0	600	185	0	0	0	250	0
MISC-116	English Gardens Property Building & Site Improvements	51869	25935	0	25935	0	88	850	1850	8000	12027	29054	0
MISC-117	Studies and PER's - Organization Wide	3500	1750	0	1750	0	0	700	700	700	700	700	0
MISC-118	Nottoway Tank Site Development	800	400	0	400	0	0	200	600	0	0	0	0
MISC-200	Vehicle Replacement Program	7523	0	0	7523	0	0	1983	1075	1400	1400	1665	0
MISC-201	Mechanical Equipment Replacement Program	13411	0	0	13411	0	0	2210	3176	2866	2489	2670	0
MISC-202	Computer and Other Replacement Program	6100	0	0	6100	0	0	1200	1200	1550	1550	600	0
MISC-203	Major Facility Rehabilitation Program	9760	0	0	9760	0	0	1260	3000	2750	2000	750	0
TOTAL: MISCELLANEOUS PROJECTS		142920	51764	0	91157	0	2427	12448	18911	26486	29449	43899	9300

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENT PROGRAM, FISCAL YEARS 2024 - 2028**

INFORMATION TECHNOLOGY PROJECTS

CIP	Number	PROJECT NAME	ESTIMATED PROJECT COST	FUNDING SOURCES				SPENDING SCHEDULE					
			(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-24	FY-24	FY25	FY-26	FY-27	FY-28
IT-105	JD Edwards Upgrade	1329	0	0	1329	0	829	0	250	250	0	0	0
IT-106	Cayenta - CIS	1102	0	0	1102	0	402	250	0	250	200	0	0
IT-107	Computerized Maintenance Management System (CMMS) Implementation	3287	0	0	3287	0	532	1450	560	620	125	0	0
IT-110	Document Management System Implementation	2580	0	0	2580	0	200	1560	420	275	125	0	0
IT-117	Vertical Asset Data Development	663	0	0	663	0	248	365	50	0	0	0	0
IT-118	System Integration	1675	0	0	1675	0	1338	75	150	75	37	0	0
IT-121	Asset Management Analytics	1212	0	0	1212	0	222	215	600	175	0	0	0
IT-122	Project Management Information System (PMIS) Implementation	2315	695	0	1621	0	1474	175	475	127	64	0	0
IT-125	Network Security Upgrades	500	0	0	500	0	0	150	150	100	100	0	0
IT-126	SCADA System Upgrade	22612	0	0	22612	0	2161	4838	5283	5068	5262	0	0
IT-128	Web Content Management System Migration	375	0	0	375	0	166	209	0	0	0	0	0
IT-129	Enterprise Resource Planning	11000	0	0	11000	0	0	0	2500	5000	3500	0	0
	TOTAL: INFORMATION AND TECHNOLOGY PROJECTS	48650	695	0	47956	0	7572	9287	10438	11940	9413	0	0

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENT PROGRAM, FISCAL YEARS 2024-2028**

REGIONAL UTILITY PROJECTS

CIP	Number	PROJECT NAME	ESTIMATED PROJECT COST	FUNDING SOURCES				SPENDING SCHEDULE						
			(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-24	FY-24	FY25	FY-26	FY-27	FY-28	BEYOND FY-28
REG-1		Occoquan River Crossing	31749	9525	0	22224	0	6617	12566	12566	0	0	0	0
REG-2		UOSA Expansion - Project 60	84200	0	84200	0	0	0	3100	7900	24400	24400	24400	
TOTAL: REGIONAL UTILITY PROJECTS			115949	9525	84200	22224	0	6617	12566	15666	7900	24400	24400	24400

**CAPITAL IMPROVEMENT PROGRAM
FISCAL YEARS 2024 - 2028**



Service Authority
Prince William County

SECTION B

PROJECT DATA SHEETS



Service Authority

WATER SUPPLY PROJECTS



PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Water Meter Vault Improvements
CIP Number: WSUP-103
JDE Number(s): 24WCWV0001, 24WWLZ0001
Location: Commercial Meter Vault Locations
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Finance - Field Services

PROJECT DESCRIPTION

Project Description: Repair and replacement of commercial meter vaults county-wide as needed.
Project Benefit: Aging meter vaults pose a safety issue for Field Services personnel servicing the respective meters. Maintenance of these facilities will provide a safe environment for the repair, replacement, and necessary customer service.
Source Derivation: Operations and Maintenance Division; Finance – Field Services; Managed by Finance – Field Services.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	175	125	125	125	125	0	675

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Montclair / Four Seasons Water System Improvements
CIP Number: WSUP-105
JDE Number(s): 22WMOM0801, 24WMOM0801
Location: 17361 Four Seasons Dr., Dumfries
Pressure Zone: MO – Montclair
Sewershed: DM – Dumfries
Magisterial District: PO – Potomac
Project Estimate: Contract Award
Estimate By: Engineering and Planning Division

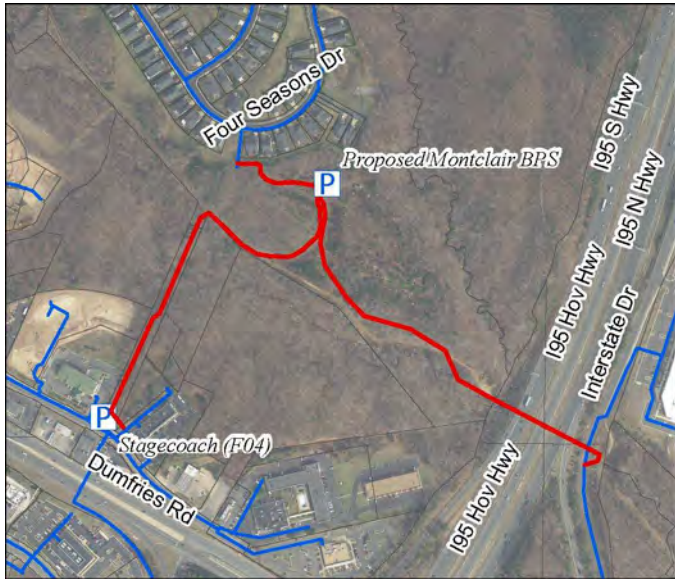
PROJECT DESCRIPTION

Project Description: Construction of a new 3 MGD booster pumping station expandable to 8 MGD with associated power and control accessories, including an emergency generator. This project also includes new 18-inch and 24-inch supply lines which shall cross Dewey’s Creek and I-95, and a new 16-inch discharge main from the new booster pumping station to Old Stage Road.

Project Benefit: This project shall provide auxiliary pumping capacity to the Cow Branch Booster Pumping Station, improve system reliability, as well as accommodate the anticipated build-out demands in the Montclair and Oak Ridge pressure zones. This project shall also enable the Old Stage Booster Pumping Station, which is outdated with limited capacity, to be removed from service.

Source Derivation: WRA East End Water System Technical Memorandum, 2001; Hazen and Sawyer PER, 2016; ACE D/B Team, 2021; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
6430	7800	1000	0	0	0	0	15230

Proposed Funding Sources	
Exp. Fund (02) – Availability Rates	35%
Commit. Fund (03) – Availability Rates	-
Repl. Fund (04) – User Rates	65%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Bull Run Mountain Well Upgrades
CIP Number: WSUP-111
JDE Number(s): 24WBHW0101
Location: Bull Run Mountain / Evergreen Well Systems
Pressure Zone: BH – Bull Run Mountain High, BW – Bull Run Mountain Low, EG - Evergreen
Sewershed: N/A
Magisterial District: GN – Gainesville
Project Estimate: PER
Estimate By: Engineering and Planning Division, Operations and Maintenance Division

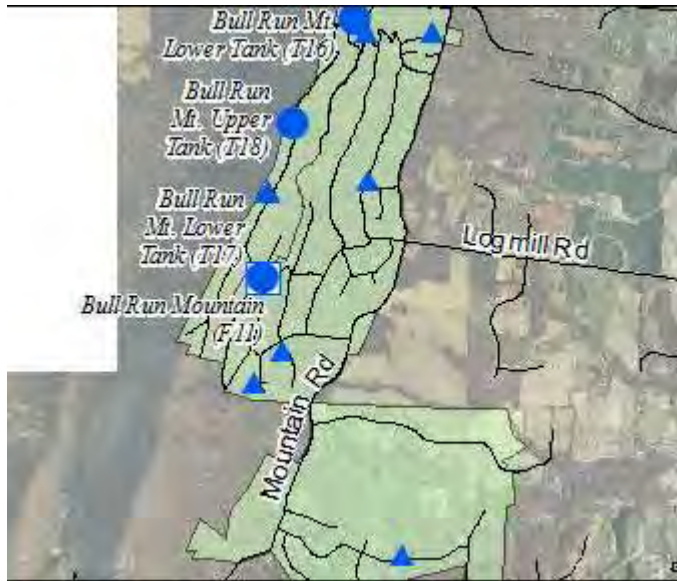
PROJECT DESCRIPTION

Project Description: The design and construction of well improvements in the Bull Run Mountain Well Systems for backup supply. The project scope consists of structural modifications for updated chemical feed equipment and the installation of disinfection facilities at various well sites; design of a replacement PRV vault to control flows and pressures between service zones; the investigation, design, and construction of new well sites, piping, and a future booster pump to increase capacity in the system.

Project Benefit: These modifications and improvements shall increase reliability and enhance system operations.

Source Derivation: Operations and Maintenance Division; Engineering and Planning Division; Bull Run Service Area Well Improvements PER – Dewberry (June 2020); Managed by the Operations and Maintenance Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
1739	200	650	237	0	0	0	2826

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Manassas Southside Booster Pumping Station, F18
CIP Number: WSUP-112
JDE Number(s): 22WMSF1851, 24WMSF1851
Location: Blooms Quarry Ln., Manassas
Pressure Zone: MS – Manassas Southside
Sewershed: YS – Yorkshire
Magisterial District: CO – Coles
Project Estimate: Contract Award
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Design and construction of modifications to the Manassas Southside Booster Pumping Station. Modifications to include: a third pump and new impellers to increase pumping capacity from 2 MGD to 4 MGD, pump control valves, and variable frequency drives (VFDs). A standby generator shall be provided, the HVAC system shall be modified for easier maintenance, and the SCADA and electrical systems shall be updated to current standards.

Project Benefit: The increased pumping capacity at the booster pumping station shall improve pumping efficiencies, provide better service and reliability to existing and future customers, and meet growth demands within the Manassas Southside pressure zone.

Source Derivation: Engineering and Planning Division; Operations and Maintenance Division; Manassas Southside Booster Pumping Station PER – Hazen and Sawyer (January 2018, Revision July 27, 2018); Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
1565	35	0	0	0	0	0	1600

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	50%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	50%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Capital Meter Program
CIP Number: WSUP-114
JDE Number(s): 22WCWZ0001, 24WCWZ0001
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Finance – Field Services

PROJECT DESCRIPTION

Project Description: The SA installs meters as part of new installation due to growth and to replace or rebuild existing meters. Owners/developers pay a fee to cover new meter installation costs, which are recorded to the Expansion Fund. The SA has over 95,000 meters to maintain, approximately 93% of which are residential that have a 15 year or 1.5-million-gallon lifespan. Larger meter lifespan is more variable and can be repaired or rebuilt as needed. Estimates for meter replacement account for age and consumption of active meters and are made for the following year. On average, 5,500 meters require repair or replacement annually.

Project Benefit: The goal of this project is to account for all new meter expenditures related to growth, approximately \$400,000 annually. Proper maintenance and timely replacement of meters reduces water loss and maximizes revenue by accurately capturing consumption. The annual cost of replacing failing meters is approximately \$1.375 million (equivalent to 5,500 meters at \$250 per meter).

Source Derivation: Finance – Customer Service Department; Managed by Finance – Field Services

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	1525	1525	1525	1525	1525	0	7625

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	20%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	80%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Unity Reed Booster Pumping Station, F14 and Discharge Main
CIP Number: WSUP-116
JDE Number(s): 22WGWM0901, 24WGWM0901
Location: 8814 Rixlew Ln., Manassas
Pressure Zone: GW - Gainesville
Sewershed: FB – Flat Branch
Magisterial District: BR - Brentsville
Project Estimate: PER
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: This project includes the design and construction of new and upgraded pumps and associated appurtenances, site work, electrical upgrades, new generator, new SCADA systems, and a control building to expand the capacity of the Unity Reed (F14) booster pumping station from 18 MGD to 24 MGD. The project also includes the design and construction of approximately 2,100 feet of 36-inch transmission main from the booster pumping station to Wellington Road and associated easement acquisition.

Project Benefit: The increased pumping capacity at the booster pumping station shall improve pumping efficiencies and provide better service and reliability to existing and future customers in the Gainesville pressure zone. The project shall also provide an additional supply from the discharge at the booster pumping station to improve reliability in the Gainesville pressure zone should there be a disruption in the existing 42-inch discharge main at the railroad crossing.

Source Derivation: Engineering and Planning Division; Gainesville Discharge Main PER - Michael Baker, July 2019; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
1170	500	6853	5803	0	0	0	14326

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	50%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	50%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Eastern Area Pressure Reducing Valves
CIP Number: WSUP-117
JDE Number(s): 24WFWV0101
Location: Multiple Meter Stations, Garfield BPS
Pressure Zone: WL – Woodbridge
Sewershed: BM – Belmont
Magisterial District: WB – Woodbridge
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

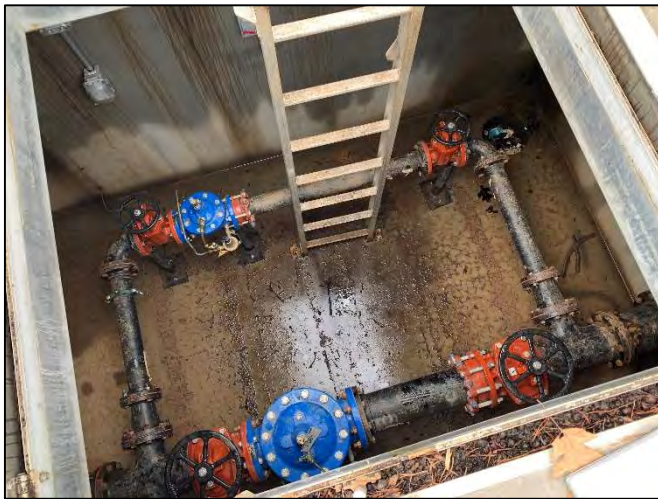
PROJECT DESCRIPTION

Project Description: Design and construction of three pressure control valves and associated piping in existing meter vaults and the Garfield Booster Pumping Station in the Woodbridge and Dumfries pressure zones. These control valves are required to regulate pressures during various pumping operations at Fairfax Water and enable the bypass of the Garfield Booster Pumping Station during normal operations.

Project Benefit: Pressure control in the Woodbridge and Dumfries pressure zones is required when Fairfax Water increases the delivery pressure in portions of the existing transmission system as part of the Occoquan River Crossing project (REG-1). These control valves will avoid over-pressurization in both pressure zones and allow the bypass of the Garfield Booster Pumping Station during normal operations to reduce pumping costs.

Source Derivation: Engineering and Planning Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
345	300	700	75	0	0	0	1420

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

WATER STORAGE PROJECTS



 **Service Authority**
Prince William County



Service Authority

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Water Storage Tank Rehabilitation Program
CIP Number: WST-110
JDE Number(s): Multiple
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Repair and rehabilitation of water storage tanks from defects including peeling paint, rust, pitting, and delaminating of the surface coat from the primer coat. In addition, the project shall install mixing systems as required while tanks undergo refurbishment. Other components that are upgraded as needed include lighting, fencing, control valves, and SCADA systems. The storage tanks scheduled for rehabilitation during the 5-year CIP period include Dominion Valley (T-30), Nottoway (T-28), Forest Park (T-25) and Cardinal (T-06). The timing and execution are subject to change based on operational needs and priorities.

Project Benefit: Preserve and extend the economic life of each water tank. In addition, the project shall prevent stagnation of water within the tank with the installation of mixing systems.

Source Derivation: Operations and Maintenance Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	40	1750	1750	1750	1348	0	6638

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Tank Re-Chlorination Program
CIP Number: WST-111
JDE Number(s): Multiple
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Residual Control System (RCS) is a management system that provides an intelligent, automated disinfectant boosting system that provides the ability to set, control, and maintain cost-effective chlorine residual levels in water storage tanks. In addition, the project shall install the management system, controls, and ancillary equipment. Other Components that are upgraded as needed are electrical equipment, tank mixing system, and thermal probes to monitor mixing. The storage tanks scheduled for an RCS system during this 5-year CIP period include Braemar (T-26), Haymarket (T-20), Manassas Southside (T-24) and Landfill (T-31). The timing and execution are subject to change based on operational needs and priorities.

Project Benefit: This project provides an important safeguard against the risk of subsequent contamination after treatment, a unique and significant benefit for public health.

Source Derivation: Operations and Maintenance Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	1315	1200	1200	1200	230	0	5145

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%



Service Authority



WATER TRANSMISSION PROJECTS

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Dawkins Branch Transmission Main
CIP Number: WAT-115
JDE Number(s): 22WBRM0101, 24WBRM0101, 22WGWM1301, 24WGWM1301
Location: University Blvd. between Sudley Manor Dr. and Devlin Rd.
Pressure Zone: GW – Gainesville
Sewershed: BR – Broad Run
Magisterial District: BR – Brentsville
Project Estimate: OPCC
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Design and construction of approximately 6,650 feet of 30-inch water main along University Boulevard from Sudley Manor Drive to the west side of Devlin Road. 4,300 feet of the water main is to be designed and constructed by the SA from Edmonston Drive to Devlin Road, and 2,350 feet is to be designed and constructed with the PWC University Boulevard roadway expansion between Sudley Manor Drive and Edmonston Drive.

Project Benefit: This project shall extend a major transmission main through the center of the Gainesville pressure zone to convey additional pump discharge from the Unity Reed, F14 Booster Pumping Station. This project shall increase the transmission capacity throughout the pressure zone and strengthen the supply to the Haymarket pressure zone.

Source Derivation: Gannett Fleming Western Zone Water Transmission Main Study, 1992; Managed by the Engineering and Planning Division, Project Management Office and Prince William County.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
529	1000	1500	0	0	2500	2237	7766

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	60%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	40%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Gainesville to Manassas South Connector
CIP Number: WAT-122
JDE Number(s): 22WMSM0101, 24WMSM0101
Location: Harry J Parish Blvd. to Pennsylvania Ave.
Pressure Zone: MS – Manassas Southside, GW – Gainesville
Sewershed: GD – Godwin Drive
Magisterial District: BR – Brentsville, CO – Coles
Project Estimate: OPCC
Estimate By: Engineering and Planning Division, CH2M, Hazen

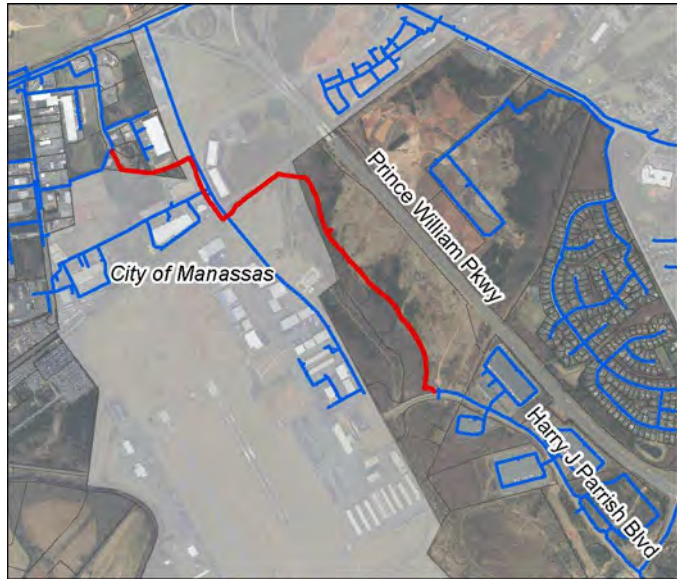
PROJECT DESCRIPTION

Project Description: Construction of approximately 6,500 feet of 16-inch water main to interconnect the Manassas Southside and Gainesville pressure zones. This project also includes the construction of a pressure control valve vault to regulate the flows and pressures between zones.

Project Benefit: Provides the capability to convey water between pressure zones at the same hydraulic gradient for increased reliability and redundancy. Additionally, this project shall provide a secondary route for the transmission of water from Fairfax Water to all areas surrounding the City of Manassas served by the SA.

Source Derivation: Engineering and Planning Division; WRA Water Supply and Distribution System Optimization Study, 2002; Managed by the Engineering and Planning Division and Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
820	0	0	0	378	2500	1556	5254

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	45%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	45%
Other Contrib. – Development Contributions	10%
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Possum Point Road Water Main – Phase 2
CIP Number: WAT-138
JDE Number(s): Not Assigned
Location: Howard St. to Summer Duck Dr., Town Limits to Possum Point Rd. terminus
Pressure Zone: DT – Dumfries
Sewershed: DM – Dumfries
Magisterial District: PO – Potomac
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of approximately 11,800 feet of existing, aged 12-inch water main with new 12-inch water main along Possum Point Road from Howard Street to Summer Duck Drive, and then from the Town of Dumfries limits to the terminus of Possum Point Road.

Project Benefit: Replacement of the existing water main that has corroded over time due to acidic soils resulting in numerous breaks over recent years shall improve system reliability and lower maintenance costs.

Source Derivation: Engineering and Planning Division; Managed by the Engineering and Planning Division and Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	0	0	408	2272	2000	0	4680

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Route 1 Transmission Main – Phase 1
CIP Number: WAT-181
JDE Number(s): 22WDMM0001, 24WDMM0001
Location: Rt. 1 from Garfield BPS to Rt. 234
Pressure Zone: DM – Dumfries
Sewershed: Multiple
Magisterial District: PO – Potomac and WB – Woodbridge
Project Estimate: Contract Award
Estimate By: Engineering and Planning Division

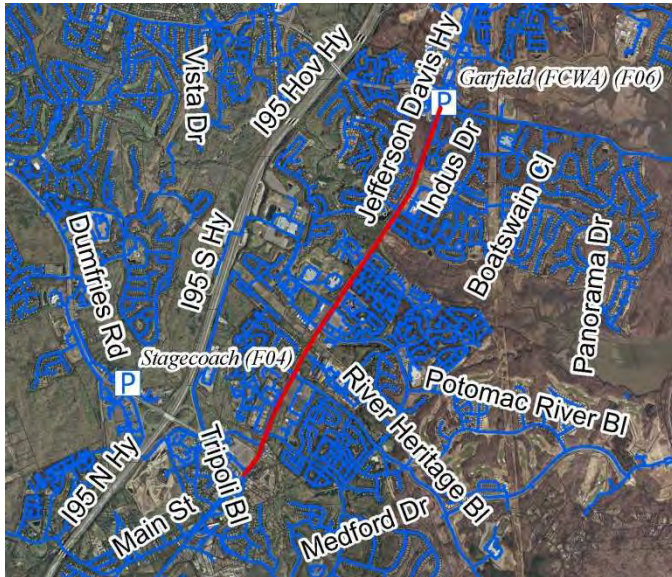
PROJECT DESCRIPTION

Project Description: Design and construction of approximately 13,500 feet of 30-inch water main along Route 1 from the Garfield Booster Pumping Station to Route 234.

Project Benefit: This project shall increase transmission capacity and reliability within the Dumfries pressure zone, increase pumping efficiency at the Garfield Booster Pumping Station, and enhance the transfer of water into the Montclair pressure zone and Potomac Shores area. This project shall also enable several existing, older concrete and cast iron mains that have experienced numerous breaks to be removed from service.

Source Derivation: Engineering and Planning Division; WRA East End Water System Technical Memo, 2001; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
12882	311	0	0	0	0	0	13193

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	50%
Repl. Fund (04) – User Rates	50%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Route 1 Transmission Main – Phase 2
CIP Number: WAT-182
JDE Number(s): 22WDMM0002, 24WDMM0002
Location: Rt. 1 from Rt. 234 to Fuller Heights Rd.
Pressure Zone: DM – Dumfries
Sewershed: DM – Dumfries and LC – Little Creek
Magisterial District: PO – Potomac
Project Estimate: Contract Award
Estimate By: Engineering and Planning Division

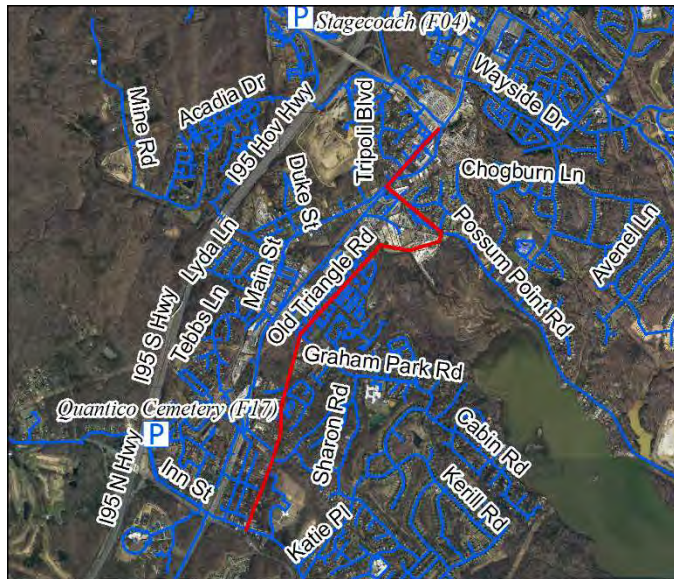
PROJECT DESCRIPTION

Project Description: Design and construction of approximately 8,750 feet of 24-inch water main along Route 1 from Route 234 to Graham Park Road, and 5,500 feet of 16-inch water main along Old Triangle Road from Graham Park Road to Fuller Heights Road.

Project Benefit: This project shall increase transmission capacity, reliability, and redundancy within the Dumfries pressure zone south of Route 234 and enable several existing older cast iron water mains that have experienced numerous breaks to be removed from service.

Source Derivation: Engineering and Planning Division; WRA East End Water System Technical Memo, 2001; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
11935	1481	0	0	0	0	0	13416

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	50%
Repl. Fund (04) – User Rates	50%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Western Area Resiliency - Rt 28 Bypass
CIP Number: WAT-183
JDE Number(s): Not Assigned
Location: FW Supply at Rt.28 to Unity Reed BPS
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Master Plan/PER
Estimate By: Engineering and Planning Division

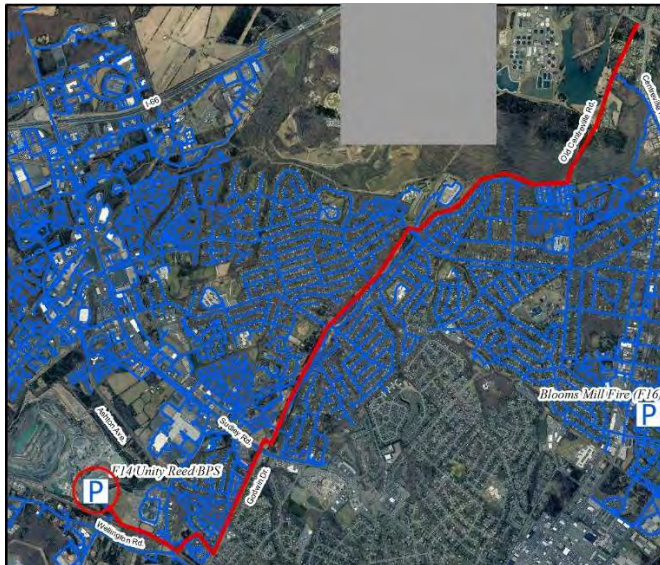
PROJECT DESCRIPTION

Project Description: Design and construction of approximately 26,000 feet of 42-inch water main from Rt. 28 in Fairfax County to the Unity Reed Booster Pumping Station. This project was recommended in the Master Plan as part of the redundancy/resiliency elements of the Levels of Service to mitigate the current single point of failure for the 42” transmission main that delivers water for the Western water system. The first phase consisting of about 19,000 feet, will be designed and constructed in conjunction with the proposed Route 28 Bypass road project from Rt. 28 near Ordway Road in Fairfax County to the intersection of Sudley Road and Godwin Road in Prince William County. The second phase consisting of about 7,000 feet, will continue the 42-inch water main from Sudley Road to the Unity Reed BPS.

Project Benefit: This project will provide redundancy to the SA’s Western Distribution System, enable the future rehabilitation of the existing 42-inch PCCP water main, and allow the new main to be operated at a higher gradient to bypass the Unity Reed BPS under certain demand and emergency conditions.

Source Derivation: B&C Master Plan, 2022; Managed by the Engineering and Planning Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	500	500	7500	14000	14000	4325	40825

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	50%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	50%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Sudley Road Water Main – Phase 3
CIP Number: WAT-184
JDE Number(s): 24WGMM0701
Location: Sudley Road from Godwin Drive to Thomas Drive
Pressure Zone: Greater Manassas
Sewershed: Flat Branch
Magisterial District: N/A, City of Manassas
Project Estimate: Engineer of Record/City of Manassas
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Design and construction of approximately 2,300 feet of 12-inch PVC water main, 145 feet of 8-inch PVC water main, 50 feet of 6-inch DIP water main and 105 feet of 4-inch PVC water main in Sudley Road from Godwin Drive to Thomas Drive to replace the existing 14-inch CIP water main in conjunction with the City of Manassas’ proposed road improvement project.

Project Benefit: This project replaces a portion of an existing cast iron pipe water main with PVC pipe in Sudley Road that is currently out of service due to several breaks resulting from corrosive soils. Restoring service in this area will provide redundancy and improve hydraulic capacity to existing customers.

Source Derivation: Engineering and Planning Division; Managed by the Engineering and Planning Division.

PROJECT PICTURE




PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
180	1000	1000	0	0	0	0	2180

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION		PROJECT DESCRIPTION	
Project Name:	Water Distribution Asset Replacement Program	Project Description:	Replacement of water distribution assets including water main, hydrants, service lines, meter crocks, and isolation valves. The assets scheduled for replacement during this 5-year CIP period include: water mains in Paxton Street, King George street, Willow Lane, Norfolk Street, Salem Street, Cabin Road, Hylton Avenue, Bayside Avenue and the replacement of hydrants and valves throughout the system. The timing and execution of these projects are subject to change based on operational needs and priorities.
CIP Number:	WAT-200	Project Benefit:	The replacement of water distribution assets will improve reliability, increase fire protection, reduce maintenance costs, and improve overall customer service.
JDE Number(s):	Multiple	Source Derivation:	Operations and Maintenance Division; Managed by the Engineering and Planning Division, Project Management Office and Operations and Maintenance Division.
Location:	County Wide		
Pressure Zone:	Multiple		
Sewershed:	Multiple		
Magisterial District:	Multiple		
Project Estimate:	Order of Magnitude		
Estimate By:	Engineering and Planning Division		

PROJECT PICTURE		PROJECT FUNDING																					
		Proposed Funding Sources																					
		<table border="1"> <thead> <tr> <th>PRE-FY24</th> <th>FY24</th> <th>FY25</th> <th>FY26</th> <th>FY27</th> <th>FY28</th> <th>POST- FY28</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td align="center">0</td> <td align="center">3500</td> <td align="center">3500</td> <td align="center">3500</td> <td align="center">3500</td> <td align="center">3500</td> <td align="center">0</td> <td align="center">17500</td> </tr> </tbody> </table>								PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL	0	3500	3500	3500	3500	3500
PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL																
0	3500	3500	3500	3500	3500	0	17500																
		Exp. Fund (02) – Availability Fees		-																			
		Commit. Fund (03) – Availability Fees		-																			
		Repl. Fund (04) – User Rates		100%																			
		Other Contrib. – Development Contributions		-																			
		PROJECT TOTAL		100%																			

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Bull Run Mountain Distribution System Improvements
CIP Number: WAT-201
JDE Number(s): Not Assigned
Location: Bull Run Mountain
Pressure Zone: BWU – Bull Run Upper, BWL – Bull Run Lower, EG – Evergreen
Sewershed: N/A
Magisterial District: GN – Gainesville
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

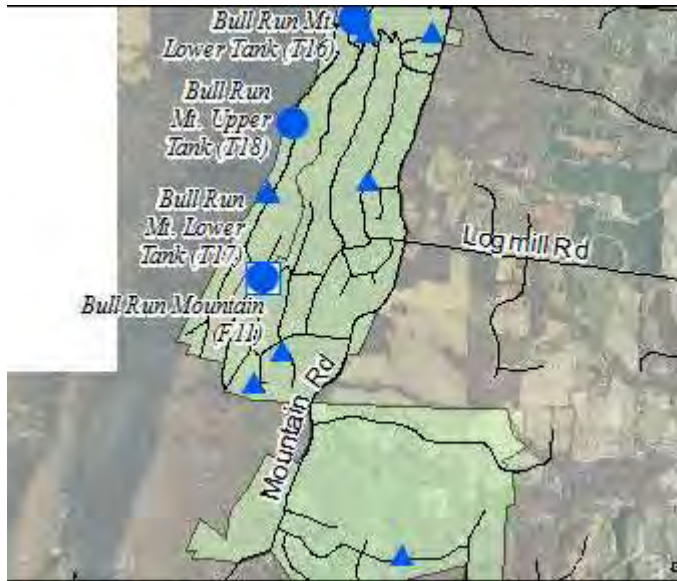
PROJECT DESCRIPTION

Project Description: Replacement and installation of water distribution assets including water mains, hydrants, service lines, meter crocks, and isolation valves. The assets scheduled for replacement during this 5-year CIP period include: water mains in Youngs Drive and Oak Lane, and valve replacements. The timing and execution are subject to change based on operational needs and priorities.

Project Benefit: Many of the existing assets are located in residential backyards or are in close proximity to various structures and have had numerous breaks. The replacement and relocation of water distribution assets shall improve reliability, reduce maintenance costs, increase operational efficiencies of the well sites, and improve overall customer service.

Source Derivation: Operations and Maintenance Division; Managed by the Engineering and Planning Division and Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	0	300	1000	1000	1000	0	3300

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

SEWAGE PUMPING STATION PROJECTS



Service Authority

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Generator Replacement Program
CIP Number: SPS-100
JDE Number(s): Not Assigned
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: This program upgrades or replaces aging diesel generators, transfer switches, and appurtenances at SA facilities.
Project Benefit: This program improves and maintains a reliable, resilient, and operational system by replacing aging generators and appurtenances. It eliminates the difficulty in obtaining replacement parts for old and outdated generators.
Source Derivation: Operations and Maintenance Division, Managed by the Operations and Maintenance Division.

PROJECT PICTURE



FY24 – FY28

PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	340	820	1070	1070	1070	0	4370

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Occoquan Forest Sewage Pumping Stations, OQL36 & OQL37
CIP Number: SPS-107
JDE Number(s): 24SOQL7501 (L36), 24SOQL3701 (L37)
Location: 10820 Split Rail Dr. and 6204 Ramblewood Tr., Manassas
Pressure Zone: HO – Hoadly
Sewershed: OQ – Occoquan Forest
Magisterial District: OC – Occoquan
Project Estimate: Contract Award
Estimate By: Engineering and Planning Division

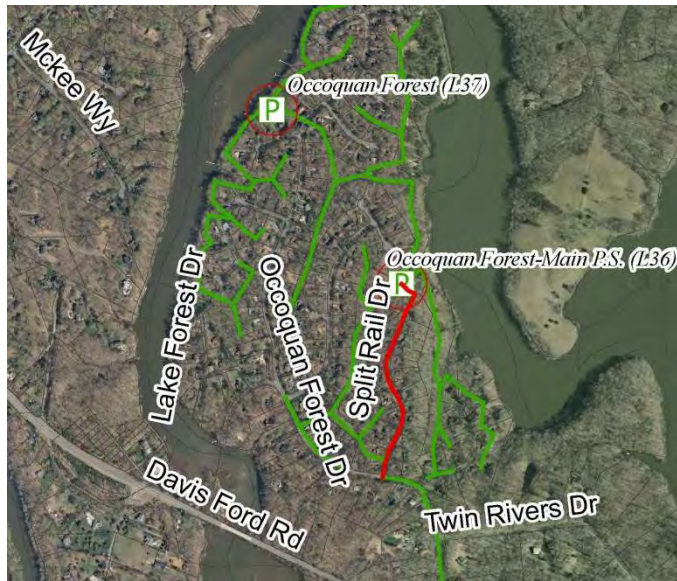
PROJECT DESCRIPTION

Project Description: The design and construction of the replacement of the antiquated Occoquan Forest Sewage Pumping Station OQL36, associated force main, and the rehabilitation of Sewage Pumping Station OQL37. This project also includes the installation of emergency generators and by-pass connections on the force mains.

Project Benefit: This project will provide improved reliable service to the Occoquan Forest sewershed in compliance with the PWC Comprehensive Plan and VDEQ regulations. In addition, it shall reduce maintenance costs, provide new emergency backup power supplies, and improve safety conditions at both sewage pumping stations.

Source Derivation: Engineering and Planning Division; Operations and Maintenance Division; Managed by the Project Management Office.

PROJECT PICTURE




PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
6022	472	0	0	0	0	0	6494

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION		PROJECT DESCRIPTION	
Project Name:	Nokesville Sewage Pumping Station, L20 and Force Main	Project Description:	The design and construction of the replacement of the antiquated Nokesville Sewage Pumping Station, L20, and associated force main. The new sewage pumping station shall be equipped with an emergency generator, a by-pass connection on the new force main, and new flow monitoring equipment.
CIP Number:	SPS-108	Project Benefit:	This project shall provide improved, reliable service to the Nokesville sewershed in compliance with the PWC Comprehensive Plan and VDEQ regulations. The project shall reduce maintenance expenses, improve reliability, provide emergency backup power supply, and improve safety conditions at the sewage pumping station.
JDE Number(s):	24SNKL7701	Source Derivation:	Engineering and Planning Division; Managed by the Project Management Office.
Location:	12829 Fitzwater Dr., Nokesville		
Pressure Zone:	N/A		
Sewershed:	NK – Nokesville		
Magisterial District:	BR - Brentsville		
Project Estimate:	Contract Award		
Estimate By:	Engineering and Planning Division		

PROJECT PICTURE		PROJECT FUNDING							
		PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
		2629	212	0	0	0	0	0	2841
		Proposed Funding Sources							
		Exp. Fund (02) – Availability Fees						-	
		Commit. Fund (03) – Availability Fees						-	
		Repl. Fund (04) – User Rates						100%	
		Other Contrib. – Development Contributions						-	
		PROJECT TOTAL						100%	

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Graham Park Sewage Pumping Station, L13
CIP Number: SPS-112
JDE Number(s): 24SMRL7601
Location: 3196 Shoreview Rd., Dumfries
Pressure Zone: DT – Dumfries
Sewershed: MR – Melrose
Magisterial District: PO – Potomac
Project Estimate: Contract Award
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of the existing antiquated Graham Park Sewage Pumping Station. The project shall include the installation of new submersible pumps with new controls, motors, emergency generator, by-pass connection on the force main, new flow metering, and SCADA equipment. The site layout shall also be improved to protect the facilities from storm surge flooding and new fencing around the premises shall be installed. Also included is the complete replacement of approximately 550 feet of existing 4-inch force main.

Project Benefit: Improve service to existing customers in the Graham Park sewershed in compliance with the PWC Comprehensive Plan and VDEQ regulations. This project shall reduce maintenance costs, provide emergency backup power supply, and improve safety conditions at the sewage pumping station.

Source Derivation: Operations and Maintenance Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
4767	62	0	0	0	0	0	4829

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Heritage Hunt Sewage Pumping Station, L52 and Force Main
CIP Number: SPS-113
JDE Number(s): 22SLBL5202, 24SLBL5202, 22SLBM9001, 24SLBM9001
Location: 6588 Alderwood Way, Gainesville
Pressure Zone: HM – Haymarket
Sewershed: LB – Little Bull Run
Magisterial District: GN – Gainesville
Project Estimate: Contract Award
Estimate By: Engineering and Planning Division

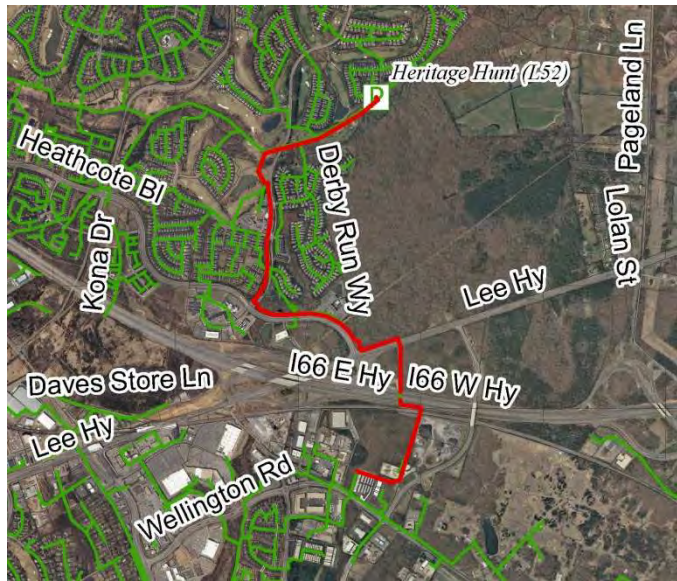
PROJECT DESCRIPTION

Project Description: Replacement of the Heritage Hunt Sewage Pumping Station to increase pumping capacity from 5 MGD to 8 MGD. The project shall include a manual screen, dual channel grinders, dry-pit submersible pumps and associated piping and valves, bioxide odor control system, new flowmeters, and a crane system. This project also includes the design and construction of approximately 10,250 feet of 24-inch force main from the station to the existing 24-inch force main south of I-66, parallel to the existing 10-inch and 16-inch force mains already in service.

Project Benefit: Continued access to public sewer service for residential and commercial developments in the Little Bull Run sewershed in conformance with the PWC Comprehensive Plan in effect through December 13, 2022. Ultimate development of the service area will exceed the capacity of the current station. Discharge capacity of the station will be increased to meet current and future development needs.

Source Derivation: Engineering and Planning Division; Dewberry Opinion of Probable Construction Cost, 2021; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
10715	17000	10000	6276	0	0	0	43991

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	50%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	50%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Belmont Sewage Pumping Station, L17 and Force Main

CIP Number: SPS-115

JDE Number(s): 22SBML0201, 24SBML0201

Location: 13760 Dabney Rd., Woodbridge

Pressure Zone: WL – Woodbridge

Sewershed: BM – Belmont

Magisterial District: WB – Woodbridge

Project Estimate: OPCC

Estimate By: Engineering and Planning Division

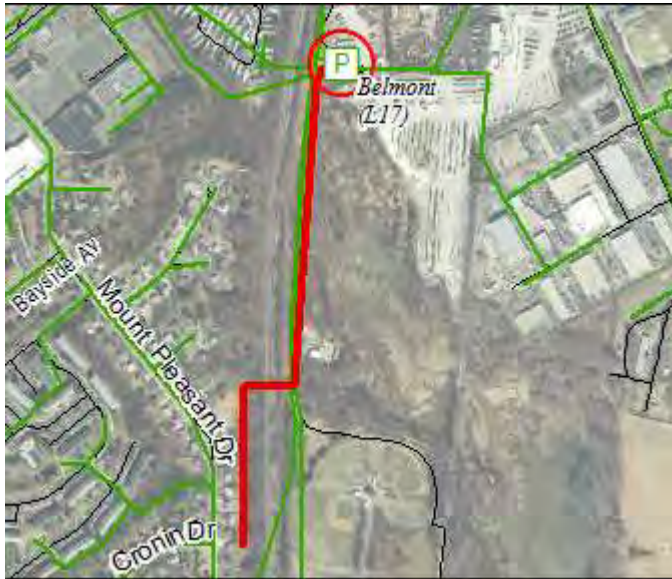
PROJECT DESCRIPTION

Project Description: Replacement of the existing Belmont Sewage Pumping Station to increase pumping capacity from 8 MGD to 12 MGD. This project will include a new influent channel, channel grinder, wet well, flow meters, odor control, SCADA, mechanical and electrical equipment, and a standby generator. This project also includes the evaluation of constructing a new parallel force main to improve overall pumping operations in the collection system.

Project Benefit: This project shall provide adequate pumping capacity to serve future development within the sewer shed in conformance with the PWC Comprehensive Plan. This project will also relieve capacity constraints in the existing 30-inch force main coming from the Occoquan Creek Sewage Pumping Station by conveying the Belmont Sewage Pumping Station flows directly into the Colchester Interceptor.

Source Derivation: GHD Belmont Sewage Pumping Station Preliminary Engineering Report, 2020; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
944	1000	800	2500	6000	5289	0	16533

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	30%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	70%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Hornbaker Sewage Pumping Station, L06 and Force Main
CIP Number: SPS-116
JDE Number(s): 24SOCL0601
Location: Sport & Health Dr., Woodbridge
Pressure Zone: WL – Woodbridge
Sewershed: OC – Occoquan Creek
Magisterial District: OC – Occoquan
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

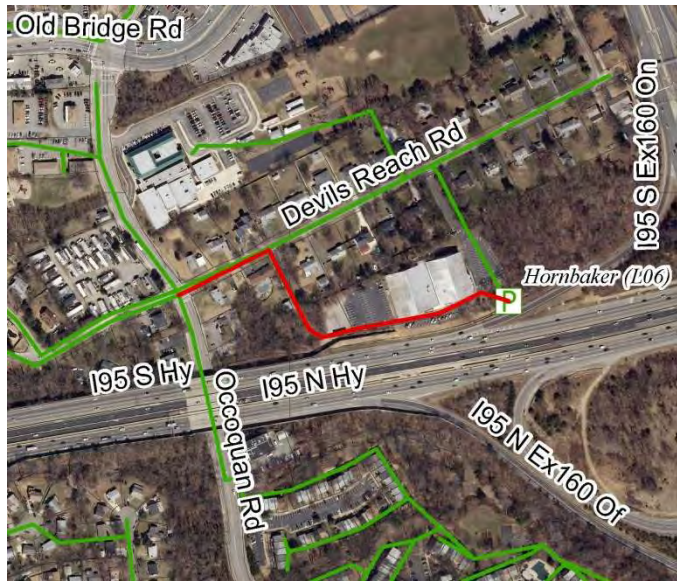
PROJECT DESCRIPTION

Project Description: Rehabilitation of the antiquated Hornbaker Sewage Pumping Station and construction of approximately 1,360 feet of 6-inch force main routed from the Hornbaker Sewage Pumping Station to Occoquan Road to replace the existing 6-inch force main that has experienced numerous breaks.

Project Benefit: This project shall improve service and reliability to existing customers in compliance with the PWC Comprehensive Plan and VDEQ regulations. The project shall reduce maintenance costs, improve reliability, and the new force main shall enhance operations and improve reliability of the pumping station.

Source Derivation: Engineering and Planning Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
200	513	3000	253	0	0	0	3966

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

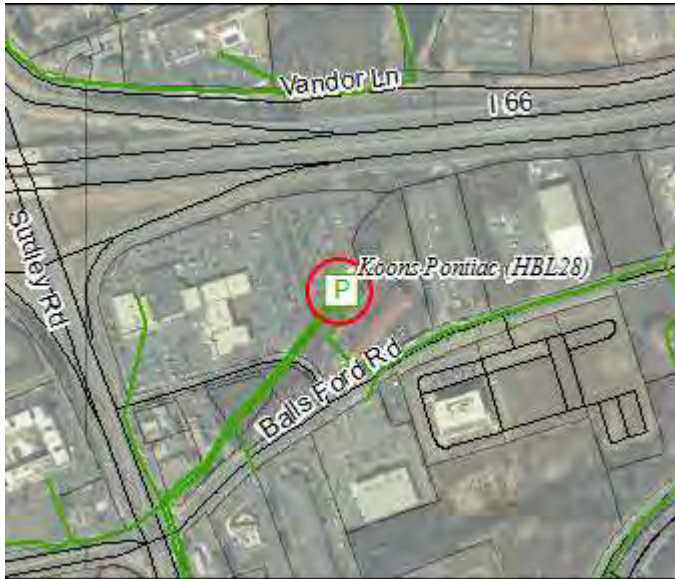
PROJECT INFORMATION

Project Name: Koon's Sewage Pumping Station, L28
CIP Number: SPS-118
JDE Number(s): 24SBUL0101
Location: 10640 Automotive Dr., Manassas
Pressure Zone: GW – Gainesville
Sewershed: BU – Bull Run
Magisterial District: GN – Gainesville
Project Estimate: PER
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of the Koon's Sewage Pumping Station to include new pumps and motors, grinder, wet well, meter/valve vault, HVAC, odor control, SCADA, mechanical and electrical equipment, standby generator, and perimeter fencing.
Project Benefit: This project shall improve service and reliability to existing and future customers within the sewershed and reduce maintenance costs.
Source Derivation: GHD Koon's Sewage Pumping Station Preliminary Engineering Report, 2020; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
586	1000	2238	1500	0	0	0	5324

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Spinnaker Court Sewage Pumping Station, L02 and Force Main
CIP Number: SPS-123
JDE Number(s): 24SHRL0101
Location: 2280 Spinnaker Ct., Woodbridge
Pressure Zone: LR – Lake Ridge
Sewershed: HR – Hooes Run
Magisterial District: OC – Occoquan
Project Estimate: PER
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of the Spinnaker Court Sewage Pumping Station to include new pumps and motors, grinder, wet well, meter/valve vault, HVAC, odor control, SCADA, mechanical and electrical equipment, standby generator, and perimeter fencing. Also included is the construction of approximately 500 feet of 6-inch force main to replace the existing 4-inch force main.

Project Benefit: Upgrade an antiqued sewage pumping station, which was built in 1970, to new standards to improve station operation, reliability, security and reduce maintenance costs.

Source Derivation: GHD Spinnaker Court Sewage Pumping Station Preliminary Engineering Report, 2020; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
609	1000	1430	1500	0	0	0	4539

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Occoquan Creek Sewage Pumping Station, L04 and Gravity Main

CIP Number: SPS-125

JDE Number(s): 24SOCL0701

Location: 13221 Marina Way, Woodbridge

Pressure Zone: WL – Woodbridge

Sewershed: OC – Occoquan Creek

Magisterial District: WB – Woodbridge

Project Estimate: Order of Magnitude

Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of the existing Occoquan Creek Sewage Pumping Station to a new location to include the installation of new higher capacity pumps and associated piping and valves, mechanical and electrical equipment, flow meters, SCADA system, standby generator, and security measures. This project also includes the design and construction of a new incoming 42-inch gravity main and provisions for emergency storage. This project is planned to be executed with a Project Labor Agreement.

Project Benefit: The project shall improve pump station operation, reliability, security, increase capacity for new customers, and reduce the risk of flooding by relocating the station further away from Occoquan Creek.

Source Derivation: GHD Occoquan Creek Sewage Pumping Station Preliminary Engineering Report, 2018; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
505	600	5745	6000	2539	0	0	15389

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	20%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	80%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION		PROJECT DESCRIPTION	
Project Name:	Piney Branch Sewage Pumping Station, L26 and Gravity Main	Project Description:	Demolition of the existing Piney Branch Sewage Pumping Station that is undersized and has reached the end of its service life and construction of approximately 6,600 feet of 24-inch gravity sewer main to combine the Piney Branch Sewershed with the Broad Run Sewershed. This project shall be constructed in conjunction with proposed future development using the Utility System Improvement Opportunity (USIO).
CIP Number:	SPS-126	Project Benefit:	Eliminate an antiqued sewage pumping station and provide a higher capacity gravity sewer main to provide reliable service to the combined sewersheds in compliance with VDEQ regulations.
JDE Number(s):	Not Assigned	Source Derivation:	Engineering and Planning Division; Managed by the Engineering and Planning Division.
Location:	Piney Branch SPS		
Pressure Zone:	GW – Gainesville		
Sewershed:	PB – Piney Branch, BR – Broad Run		
Magisterial District:	BR – Brentsville		
Project Estimate:	Order of Magnitude		
Estimate By:	Engineering and Planning Division		

PROJECT PICTURE		PROJECT FUNDING																							
		<table border="1"> <thead> <tr> <th>PRE-FY24</th> <th>FY24</th> <th>FY25</th> <th>FY26</th> <th>FY27</th> <th>FY28</th> <th>POST- FY28</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td align="center">1070</td> <td align="center">0</td> <td align="center">500</td> <td align="center">1000</td> <td align="center">1090</td> <td align="center">0</td> <td align="center">0</td> <td align="center">3660</td> </tr> </tbody> </table>								PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL	1070	0	500	1000	1090	0	0	3660
PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL																		
1070	0	500	1000	1090	0	0	3660																		
		<table border="1"> <thead> <tr> <th align="center" colspan="2">Proposed Funding Sources</th> </tr> </thead> <tbody> <tr> <td>Exp. Fund (02) – Availability Fees</td> <td align="right">60%</td> </tr> <tr> <td>Commit. Fund (03) – Availability Fees</td> <td align="center">-</td> </tr> <tr> <td>Repl. Fund (04) – User Rates</td> <td align="right">15%</td> </tr> <tr> <td>Other Contrib. – Development Contributions</td> <td align="right">25%</td> </tr> <tr> <td>PROJECT TOTAL</td> <td align="right">100%</td> </tr> </tbody> </table>								Proposed Funding Sources		Exp. Fund (02) – Availability Fees	60%	Commit. Fund (03) – Availability Fees	-	Repl. Fund (04) – User Rates	15%	Other Contrib. – Development Contributions	25%	PROJECT TOTAL	100%				
Proposed Funding Sources																									
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Commit. Fund (03) – Availability Fees	-																								
Repl. Fund (04) – User Rates	15%																								
Other Contrib. – Development Contributions	25%																								
PROJECT TOTAL	100%																								

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Hooes Run Sewage Pumping Station, L01 and Force Main
CIP Number: SPS-134
JDE Number(s): 24SHRL0201
Location: 2502 Old Bridge Rd., Woodbridge
Pressure Zone: LR – Lake Ridge
Sewershed: HR – Hooes Run
Magisterial District: OC – Occoquan
Project Estimate: OPCC
Estimate By: Engineering and Planning Division

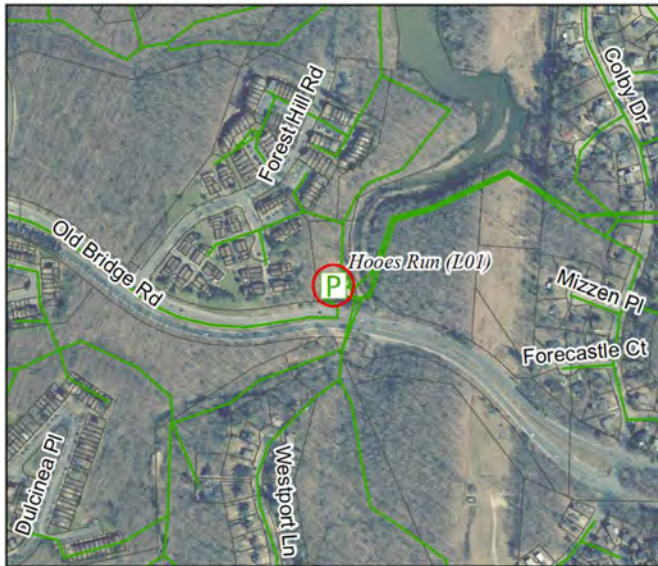
PROJECT DESCRIPTION

Project Description: Replacement of the existing 48-year-old Hooes Run Sewage Pumping Station to upgrade structural, mechanical (piping and pumping capacity), electrical, SCADA, HVAC system, and force main, and include security measures and emergency storage considerations.

Project Benefit: The project shall improve pump station operation, reliability, security, reduce maintenance costs and ensure projected long-term wastewater flows are satisfied.

Source Derivation: Engineering and Planning Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
213	600	3234	12000	11008	0	0	27055

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	35%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	65%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Yorkshire Sewage Pumping Station, L30 and Force Main
CIP Number: SPS-135
JDE Number(s): 24SYSL010
Location: 7415 Lake Dr., Manassas
Pressure Zone: GM – Greater Manassas/Yorkshire
Sewershed: YS – Yorkshire
Magisterial District: CO – Coles
Project Estimate: OPCC
Estimate By: Engineering and Planning Division

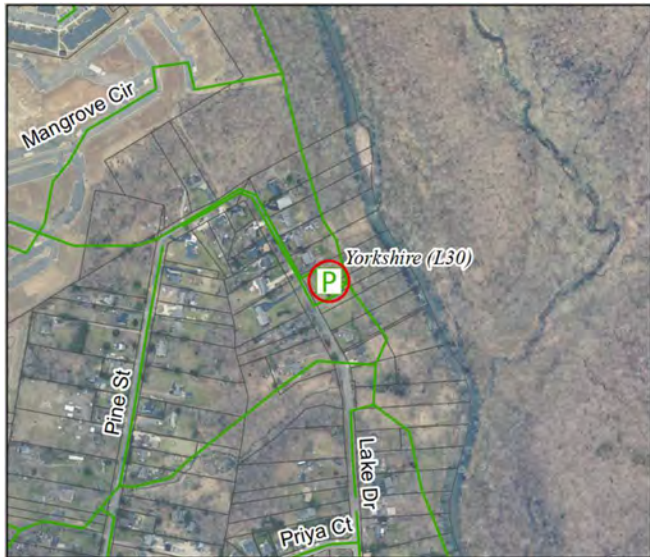
PROJECT DESCRIPTION

Project Description: Rehabilitation of the existing 40-year-old Yorkshire Sewage Pumping Station to upgrade structural, mechanical (piping and pumping capacity), electrical, SCADA, and HVAC systems as required, and include security measures and emergency storage considerations.

Project Benefit: The project shall improve pump station operation, reliability, security, reduce maintenance costs and ensure projected long-term wastewater flows are satisfied.

Source Derivation: Engineering and Planning Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
210	761	2500	2535	2500	0	0	8506

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	45%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	55%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Melrose Sewage Pumping Station, L10
CIP Number: SPS-136
JDE Number(s): 24SDML0201
Location: 3350 Melrose Ave., Triangle
Pressure Zone: DT – Dumfries/Triangle
Sewershed: MR – Melrose
Magisterial District: PO – Potomac
Project Estimate: OPCC
Estimate By: Engineering and Planning Division

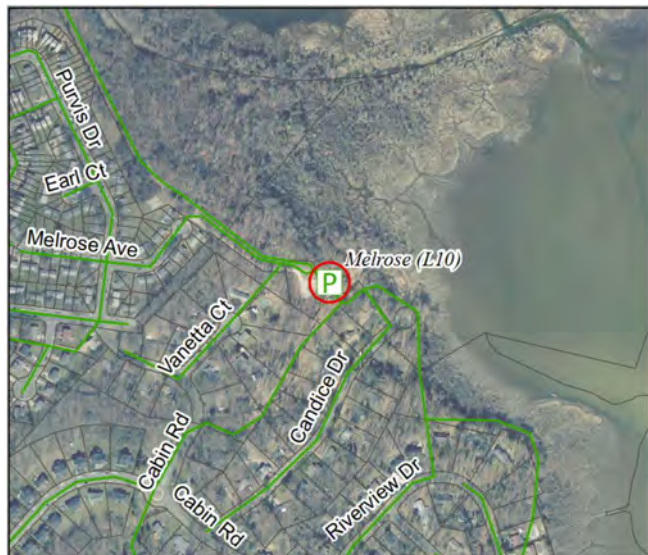
PROJECT DESCRIPTION

Project Description: Rehabilitation of the existing 47-year-old Melrose Sewage Pumping Station to include an increase in firm pumping capacity to meet current design standards, and to improve grinder, electrical, SCADA, and HVAC systems, plus security measures and emergency storage considerations.

Project Benefit: The project shall improve pump station operation, reliability, security, reduce maintenance costs and ensure projected long-term wastewater flows are satisfied.

Source Derivation: Engineering and Planning Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
208	708	2000	3353	2000	0	0	8269

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Dawson Landing Sewage Pumping Station, L51
CIP Number: SPS-137
JDE Number(s): 24SNEL0401
Location: 1599 Whistling Swan Way, Woodbridge
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco
Magisterial District: WB – Woodbridge
Project Estimate: OPCC
Estimate By: Engineering and Planning Division

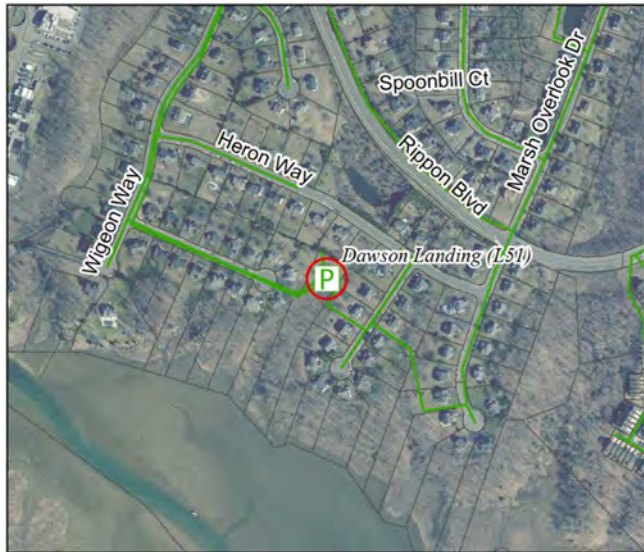
PROJECT DESCRIPTION

Project Description: Replacement of the existing 26-year-old Dawson Landing Sewage Pumping Station to upgrade structural, mechanical (piping and pumping capacity), electrical, SCADA, and HVAC systems as required, and include security measures and emergency storage considerations.

Project Benefit: The project shall replace defective pumps to improve pump station operation, reliability, security, reduce maintenance costs and ensure projected long-term wastewater flows are satisfied.

Source Derivation: Engineering and Planning Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
206	0	517	1000	3071	2000	0	6794

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Powell’s Creek Sewage Pumping Station, L08 and Force Main
CIP Number: SPS-138
JDE Number(s): 22SPCL0401 & 24SPCL0401
Location: 2750 Dettingen Place, Woodbridge
Pressure Zone: DT - Dumfries
Sewershed: PC – Powell’s Creek
Magisterial District: WB – Woodbridge
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

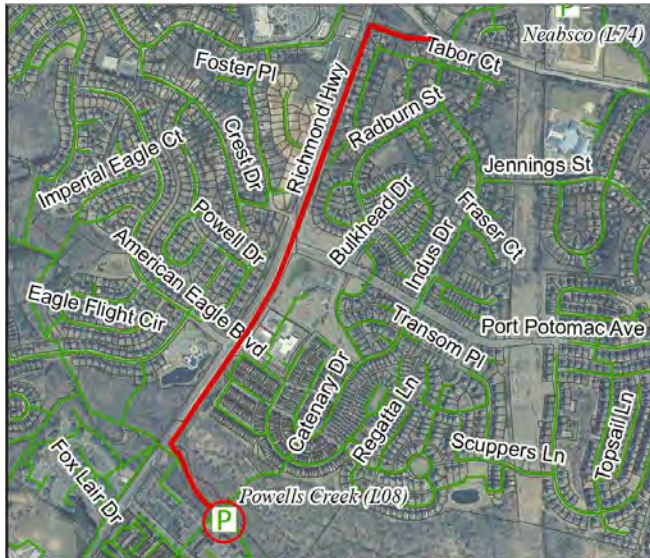
PROJECT DESCRIPTION

Project Description: Rehabilitation/replacement of the existing 25-year-old Powell’s Creek Sewage Pumping Station to upgrade structural, mechanical (piping and pumping capacity), electrical, SCADA, and HVAC systems as required, and include security measures and emergency storage considerations. Also included is the replacement of approximately 6,100 feet of existing 24-inch force main.

Project Benefit: The project shall improve pump station operation, reliability, security, reduce maintenance costs and ensure projected long-term wastewater flows are satisfied.

Source Derivation: Engineering and Planning Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
155	500	700	5000	8000	5645	0	20000

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	50%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	50%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: North Fork Sewage Pumping Station, L39
CIP Number: SPS-139
JDE Number(s): 222SNBL0301 & 24SNBL0301
Location: 14650 Otter Creek Court, Gainesville
Pressure Zone: HM – Haymarket
Sewershed: NB – North Branch
Magisterial District: BR – Brentsville
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

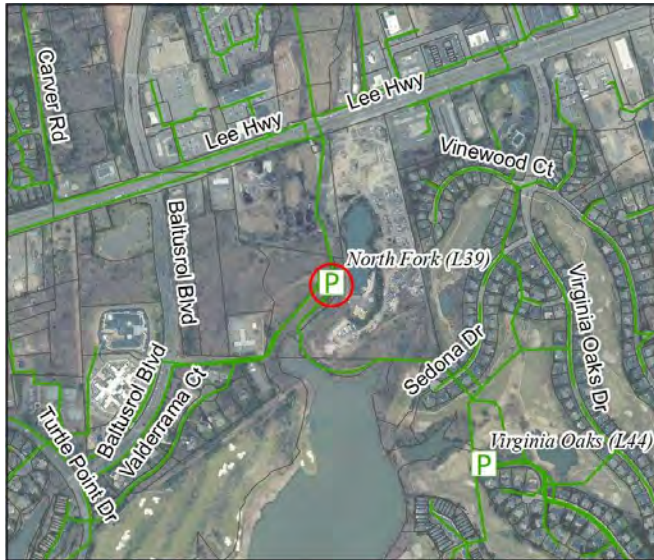
PROJECT DESCRIPTION

Project Description: Rehabilitation/replacement of the existing 30-year-old North Fork Sewage Pumping Station to upgrade structural, mechanical (piping and pumping capacity), electrical, SCADA, and HVAC systems as required, and include security measures and emergency storage considerations.

Project Benefit: The project shall improve pump station operation, reliability, security, reduce maintenance costs and ensure projected long-term wastewater flows are satisfied.

Source Derivation: Engineering and Planning Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
131	0	400	600	4000	6500	2369	14000

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	45%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	55%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Occoquan Plant Sewage Pumping Station, L14
CIP Number: SPS-140
JDE Number(s): 22SOSL0501 & 24SOSL0501
Location: 12715 Sea Ray Lane, Woodbridge
Pressure Zone: WL – Woodbridge
Sewershed: OS – Occoquan Plant
Magisterial District: OC – Occoquan
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

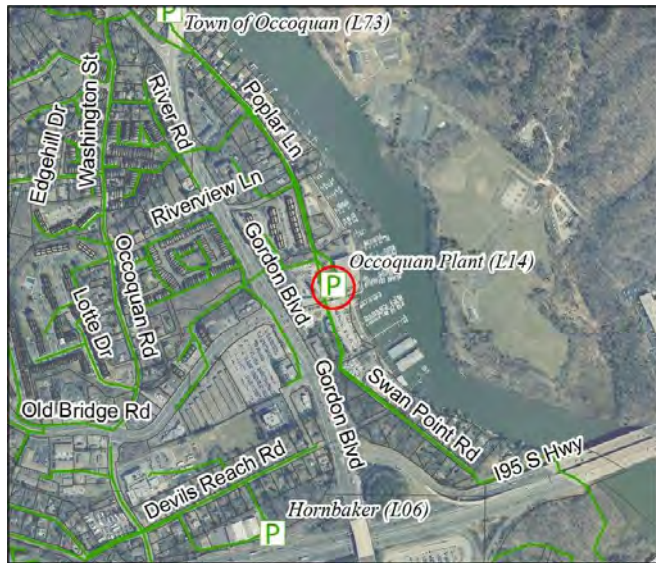
PROJECT DESCRIPTION

Project Description: Rehabilitation/replacement of the existing 12-year-old Occoquan Plant Sewage Pumping Station to upgrade structural, mechanical (piping and pumping capacity), electrical, SCADA, and HVAC systems as required, and include security measures and emergency storage considerations.

Project Benefit: The project shall improve pump station operation, reliability, security, reduce maintenance costs and ensure projected long-term wastewater flows are satisfied.

Source Derivation: Engineering and Planning Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
133	0	400	600	5000	7500	4867	18500

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	20%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	80%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Dewey’s Creek Sewage Pumping Station, L09
CIP Number: SPS-141
JDE Number(s): 22SDEL0201 & 24SDEL0201
Location: 17199 Jefferson Davis Hwy., Dumfries
Pressure Zone: DT – Dumfries
Sewershed: DE – Dewey’s Branch
Magisterial District: PO – Potomac
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

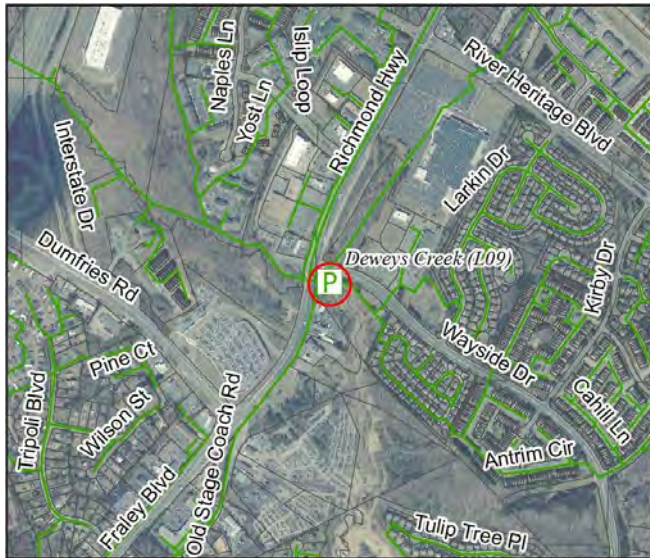
PROJECT DESCRIPTION

Project Description: Rehabilitation/replacement of the existing 49-year-old Dewey’s Creek Sewage Pumping Station to upgrade structural, mechanical (piping and pumping capacity), electrical, SCADA, and HVAC systems as required, and include security measures and emergency storage considerations.

Project Benefit: The project shall improve pump station operation, reliability, security, reduce maintenance costs and ensure projected long-term wastewater flows are satisfied.

Source Derivation: Engineering and Planning Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
136	0	400	600	5000	8000	5864	20000

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	15%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	85%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Featherstone Sewage Pumping Station, L16, and Force Main
CIP Number: SPS-142
JDE Number(s): 22SFSL0401 & 24SFSL0401
Location: 3458 Canal Road, Dumfries
Pressure Zone: DT – Dumfries
Sewershed: DM – Dumfries
Magisterial District: PO – Potomac
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Rehabilitation/replacement of the existing 44-year-old Featherstone Sewage Pumping Station to upgrade structural, mechanical (piping and pumping capacity), electrical, SCADA, and HVAC systems as required, and include security measures and emergency storage considerations.

Project Benefit: The project shall improve pump station operation, reliability, security, reduce maintenance costs and ensure projected long-term wastewater flows are satisfied.

Source Derivation: B&C Master Plan, 2022; Managed by the Engineering and Planning Division and Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
75	500	800	2200	7500	7500	28425	47000

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	45%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	55%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%



Service Authority

SEWAGE COLLECTION PROJECTS



PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Dumfries Force Main and Water Main
CIP Number: SEW-106
JDE Number(s): 24SDMM4502
Location: Dumfries
Pressure Zone: DT – Dumfries
Sewershed: DM – Dumfries
Magisterial District: PO – Potomac
Project Estimate: Contract Award
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement and relocation of approximately 4,000 feet of existing 16-inch force main and replacement of approximately 760 feet of existing 3-inch water main with new 6-inch DIP water main.

Project Benefit: The existing force main has experienced numerous breaks and presents a high risk of a major sanitary sewer overflow (SSO). The project shall increase pumping station efficiencies, improve flow capacity and reduce maintenance costs in the sewer system. This project shall also improve the water distribution system by replacing a smaller water main with a larger one and completing a system loop.

Source Derivation: Engineering and Planning Division; Operations and Maintenance Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST-FY28	TOTAL
4251	423	0	0	0	0	0	4674

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Sudley Road Sewer Main
CIP Number: SEW-157
JDE Number(s): 22SBUM0102
Location: Sudley Rd. at the intersection with Coverstone Dr.
Pressure Zone: GM – Greater Manassas
Sewershed: BR –Bull Run
Magisterial District: GN – Gainesville
Project Estimate: Contract Award
Estimate By: Engineering and Planning Division, Baker

PROJECT DESCRIPTION

Project Description: Design and construction of approximately 2,840 feet of 24-inch sanitary sewer main and manholes from Sudley Road to Williamson Boulevard to replace an existing 12-inch gravity sewer main.
Project Benefit: This project shall increase capacity along the Sudley Road corridor to accommodate future anticipated growth.
Source Derivation: Engineering and Planning Division; Managed by the Project Management Office.

PROJECT PICTURE




PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST-FY28	TOTAL
4628	718	0	0	0	0	0	5346

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	75%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	25%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

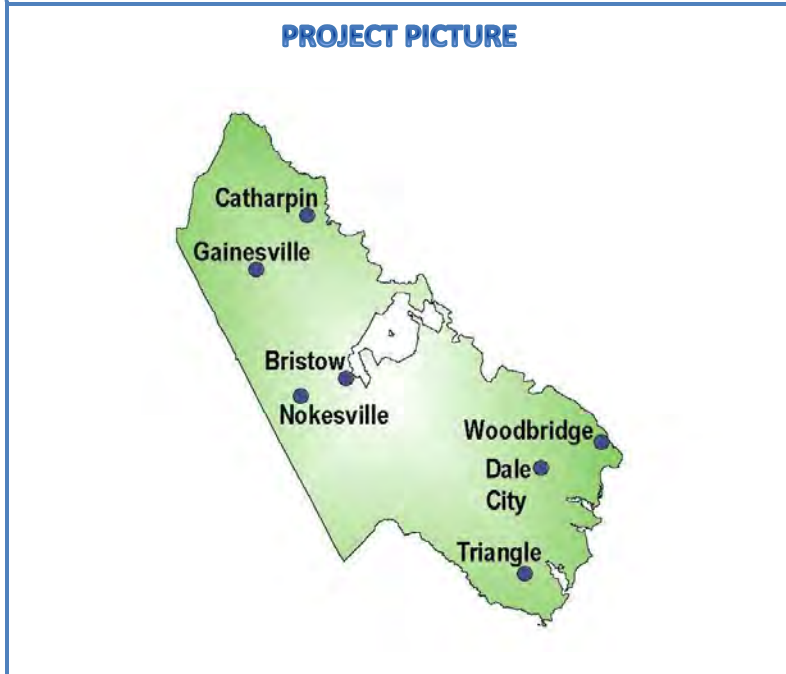
PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION		PROJECT DESCRIPTION	
Project Name:	I-66 Rest Area Sewer Main	Project Description:	Replacement of approximately 350 feet of existing 16-inch gravity sanitary sewer main with an 18-inch gravity sewer main inside a 30-inch casing pipe crossing under I-66.
CIP Number:	SEW-158	Project Benefit:	The existing gravity sanitary sewer main is showing signs of severe deterioration and has several sags. Replacement shall restore capacity, increase reliability, minimize the potential for a sanitary sewer overflow (SSO), and reduce inflow and infiltration.
JDE Number(s):	24SBRM0501	Source Derivation:	Operations and Maintenance Division; Managed by the Project Management Office.
Location:	Manassas, I-66 Rest Area		
Pressure Zone:	GM – Greater Manassas		
Sewershed:	BR – Bull Run		
Magisterial District:	GN – Gainesville		
Project Estimate:	Order of Magnitude		
Estimate By:	Engineering and Planning Division		

PROJECT PICTURE		PROJECT FUNDING																			
		PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST-FY28	TOTAL												
		65	274	561	1000	0	0	0	1900												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th align="center" colspan="2">Proposed Funding Sources</th> </tr> </thead> <tbody> <tr> <td>Exp. Fund (02) – Availability Fees</td> <td align="right">-</td> </tr> <tr> <td>Commit. Fund (03) – Availability Fees</td> <td align="right">-</td> </tr> <tr> <td>Repl. Fund (04) – User Rates</td> <td align="right">100%</td> </tr> <tr> <td>Other Contrib. – Development Contributions</td> <td align="right">-</td> </tr> <tr> <td>PROJECT TOTAL</td> <td align="right">100%</td> </tr> </tbody> </table>										Proposed Funding Sources		Exp. Fund (02) – Availability Fees	-	Commit. Fund (03) – Availability Fees	-	Repl. Fund (04) – User Rates	100%	Other Contrib. – Development Contributions	-	PROJECT TOTAL	100%
Proposed Funding Sources																					
Exp. Fund (02) – Availability Fees	-																				
Commit. Fund (03) – Availability Fees	-																				
Repl. Fund (04) – User Rates	100%																				
Other Contrib. – Development Contributions	-																				
PROJECT TOTAL	100%																				

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION		PROJECT DESCRIPTION	
Project Name:	Sewer Collection Rehabilitation & Replacement Program	Project Description:	Rehabilitation, replacement and/or stabilization of sewer collection system facilities including sewer main and manhole re-lining, isolation and air-release valve repair and replacement, sewer lateral repairs, and other miscellaneous system repairs. Facilities scheduled for rehabilitation during this 5-year CIP period include the re-lining of sewer main in Milroy Drive, Rippon Landing, Old Triangle Road, Old Bridge Road, Oakwood Drive, Yorktown Drive, Smoketown Road and Paxton Road, in addition to miscellaneous manhole rehabilitation and service line repairs. The timing and execution are subject to change based on operational needs and priorities.
CIP Number:	SEW-200	Project Benefit:	The rehabilitation or replacement of sewer collection system facilities will reduce maintenance costs, reduce inflow and infiltration, and extend the life of the assets.
JDE Number(s):	Multiple	Source Derivation:	Operations and Maintenance Division; Managed by the Operations and Maintenance Division.
Location:	County Wide		
Pressure Zone:	Multiple		
Sewershed:	Multiple		
Magisterial District:	Multiple		
Project Estimate:	Order of Magnitude		
Estimate By:	Operations and Maintenance Division		



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST-FY28	TOTAL
0	600	600	600	600	600	0	3000

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

WATER RECLAMATION FACILITY PROJECTS



Service Authority

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Ongoing Renewal and Replacement
CIP Number: WRF-123
JDE Number(s): Multiple
Location: H.L. Mooney AWRF
Pressure Zone: WL - Woodbridge
Sewershed: NE – Neabsco
Magisterial District: WB - Woodbridge
Project Estimate: Order of Magnitude
Estimate By: Environmental Services and Water Reclamation Division

PROJECT DESCRIPTION

Project Description: On-going major updating, restoration, and replacement projects for management of the H.L. Mooney AWRF to maintain and extend useful life of assets and address regular wear and asset aging.
Project Benefit: Maintain operations, permit compliance, and plant resilience.
Source Derivation: Environmental Services and Water Reclamation Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
1442	400	400	400	400	400	6200	9642

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	30%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	70%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Dynamic Hydraulic Model and Instrumentation

CIP Number: WRF-126

JDE Number(s): 24NMPP0801, 22NMPP0801

Location: H.L. Mooney AWRF

Pressure Zone: WL - Woodbridge

Sewershed: NE – Neabsco

Magisterial District: WB - Woodbridge

Project Estimate: Order of Magnitude

Estimate By: Environmental Services and Water Reclamation Division

PROJECT DESCRIPTION

Project Description: A full-plant hydraulic simulation model representing existing facilities and controls will be developed for the H.L. Mooney AWRF. The project includes data collection, installation of metering, model development and calibration, and a PER for hydraulic improvements. The hydraulic modeling is phased: the first phase from plant inlet through primary clarifiers, and then from bioreactor basins to the outfall. The first phase is complete.

Project Benefit: The model facilitates selection of physical plant improvements to meet hydraulic capacity needs and addresses potential to overflow.

Source Derivation: Environmental Services and Water Reclamation Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
665	0	100	200	300	0	0	1265

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	30%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	70%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: FBI and Solids Building Repairs and Modifications
CIP Number: WRF-131
JDE Number(s): 22NMPP1201, 24NMPP1201
Location: H.L. Mooney AWRF
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco
Magisterial District: WB – Woodbridge
Project Estimate: Order of Magnitude
Estimate By: Environmental Services and Water Reclamation Division

PROJECT DESCRIPTION

Project Description: Repair and refurbish of the existing Solids Building and Fluidized Bed Incinerator (FBI) equipment, including design and installation of new or replacement equipment from the gravity thickeners to the ash basins. Projects will include a condition assessment, solids equipment upgrades, ash basin improvements, new heat exchanger, ducts and plenums, and Solids Building modifications, repairs, and refurbishment.

Project Benefit: Necessary for operational resilience and regulatory compliance for solids handling.

Source Derivation: Environmental Services and Water Reclamation Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
1864	480	600	1650	1650	650	0	6894

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	30%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	70%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Bioreactor Basin Improvements
CIP Number: WRF-134
JDE Number(s): 24SMPQ0101
Location: H.L. Mooney AWRF
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco
Magisterial District: WB – Woodbridge
Project Estimate: Order of Magnitude
Estimate By: Environmental Services and Water Reclamation Division

PROJECT DESCRIPTION

Project Description: Major bioreactor basin equipment renewal including, but not limited to, mixers, meters, diffusers, baffles, gates, pumps, and blowers. Modification to the bioreactor basin equipment, instrumentation and controls, and engineering evaluations and pilot testing, to improve such things as, but not limited to, mixed liquor settling, improve process monitoring and control, adjust biological reactions, and reduce chemical dosages. Upgrades to blowers including, but not limited to, technology, motors, and various blower components and technology.

Project Benefit: Increased operational resilience, permit compliance, and maximization of treatment capacity in existing infrastructure.

Source Derivation: Environmental Services and Water Reclamation Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
1672	320	345	500	500	500	0	3837

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	30%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	70%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Facility Wide Improvements – Design-Build Project
CIP Number: WRF-138
JDE Number(s): 22SMPP0012, 24SMPP0012
Location: H.L. Mooney AWRF
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco
Magisterial District: WB – Woodbridge
Project Estimate: Order of Magnitude
Estimate By: RK&K

PROJECT DESCRIPTION

Project Description: Project includes improvements to several areas of the plant including: primary clarifier and facility odor control upgrades; primary clarifier collection equipment upgrades; primary clarifier electrical improvements; equalization basin modifications; influent flow diversion structure; UV Building – additional UV equipment; yard valve replacement; methanol storage addition; lime system upgrades; ferric system improvements; secondary clarifier improvements; plant structural protection and refurbishment; polymer system replacement; solids facilities improvements; headworks capacity improvements; Featherstone SPS force main improvements; and refurbishment of the freight elevators in the Control & Process and Solids Handling Buildings.

Project Benefit: This project will provide improved plant resiliency, level of service, and allow the plant to continue to meet its NPDES permit requirements.

Source Derivation: Environmental Services and Water Reclamation Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

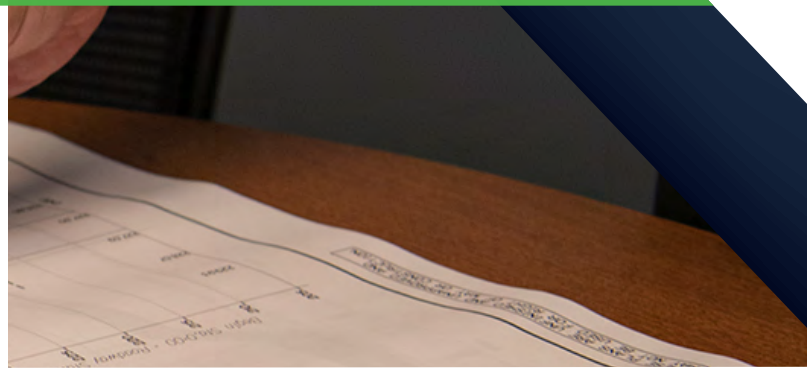
PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
16083	17000	48150	49186	46000	46000	0	222419

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	30%
Repl. Fund (04) – User Rates	70%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%



Service Authority

MISCELLANEOUS PROJECTS



PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Water and Sewer Utility System Improvement Opportunity (USIO)
CIP Number: MISC-100
JDE Number(s): Multiple
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: This project provides the funding for the SA to participate in the design and construction of water and sewer infrastructure and appurtenances in conjunction with new development and VDOT/County road projects. This project also covers the cost to increase pipe sizes in accordance with the utility system requirements and studies to provide additional capacity and improve system operations and efficiencies. The funding for this program is allocated evenly between the Expansion and Replacement funds to account for the undefined betterments; however, each project shall be evaluated independently to determine the appropriate funding allocation.

Project Benefit: This project provides for a more efficient and effective way for the timely extension of infrastructure and improvement of system operations.

Source Derivation: Engineering and Planning Division; Managed by the Engineering and Planning Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	1440	1600	1600	1600	1600	0	7840

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	50%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	50%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Water & Sewer Facilities Security Enhancements
CIP Number: MISC-101
JDE Number(s): 24NCWU0004, 74WHOF0001, 74NLR50001
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: To mitigate risks and potential threats identified in the Vulnerability Assessment performed on the SA water distribution and sewer collection facilities by installing or upgrading security features or equipment at various SA owned and operated facilities throughout PWC. Security enhancements include, but are not limited, to fencing, security cameras, card readers, security gates, signage, security guards, bollards, locks, barriers, berms, lighting, alarms, and IT enhancements.

Project Benefit: This project will provide protection against unauthorized entry, vandalism, and/or destruction of facilities. The enhancements will serve to minimize potential threats to the water distribution, sewer collection systems, wastewater treatment facility and help prevent endangerment of employees and the general public. This project will comply with the Federal Mandate for security audit and security enhancement program.

Source Derivation: Federal Mandate of Vulnerability Study for Utility Systems, Operations and Maintenance; Managed by the Operations and Maintenance Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	585	410	420	450	410	0	2275

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Wellington Road Operations Center Expansion
CIP Number: MISC-102
JDE Number(s): 12NWCH0001, 14NWCH0001
Location: Virginia Meadows Industrial Park
Pressure Zone: GW – Gainesville
Sewershed: BR – Broad Run
Magisterial District: BR – Brentsville
Project Estimate: Order of Magnitude
Estimate By: RDA, Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Design and construction of approximately a 26,000 square foot Operations Center Building with a 13,000 square foot mezzanine and storage sheds on the Wellington Operations Center property. Proposed site improvements include the relocation of an existing storm water management pond for better space utilization, more parking spaces, and additional fuel and material storage. Additionally, the project shall assess the flow of traffic around the facility and propose improvements as necessary.

Project Benefit: Improve working conditions and efficiency by providing additional space for construction vehicles, materials, fuel for emergency response, day-to-day maintenance, repair, and inspection operations. The project will also improve the flow of traffic through the property.

Source Derivation: Engineering and Planning Division, Operations and Maintenance Division, General Conditions Facility Assessment, 2009; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
629	1500	4500	6500	3533	0	0	16662

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	50%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	50%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Facilities Renewals and Upgrades

CIP Number: MISC-103

JDE Number(s): 24NWCU0002, 74NGWH0001, 24NSCU0102

Location: County Wide

Pressure Zone: Multiple

Sewershed: Multiple

Magisterial District: Multiple

Project Estimate: Order of Magnitude

Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Space improvements to accommodate staff needs at the Spittle Building and for improvements and modifications at other facilities owned by the SA.

Project Benefit: This project will improve the functionality of SA facilities by providing additional space for the expansion of staff, change of functions at facilities, reduce energy costs, and ensure a safe and comfortable work environment for SA staff.

Source Derivation: Engineering and Planning Division; Managed by the Operations and Maintenance Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
159	200	200	200	200	200	200	1359

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Administrative Office Space Expansion
CIP Number: MISC-112
JDE Number(s): 12NSCH0009, 14NSCH0009
Location: TBD
Pressure Zone: TBD
Sewershed: TBD
Magisterial District: TBD
Project Estimate: PER
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Space planning, design and construction of additional office space to accommodate the current and future space needs of the SA. This project will recommend potential location for expansions.

Project Benefit: This project shall improve the functionality of SA facilities by providing additional space for staff, reduce energy costs, and ensure a safe and comfortable work environment for SA staff.

Source Derivation: Engineering and Planning Division; Managed by the Engineering and Planning Division and Project Management Office.

PROJECT PICTURE




PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
951	135	600	500	3500	6000	9100	20786

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	50%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	50%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION		PROJECT DESCRIPTION	
Project Name:	System Wide Master Plan	Project Description:	Preparation of a comprehensive, system-wide master plan that includes sewer collection, wastewater treatment, water distribution, and water source and supply options. This study covers the evaluation of existing systems and shall provide recommendations on system improvements necessary to meet future projected demands and regulatory requirements. This project accounts for the capitalized portion of the Master Plan cost with the balance covered in the operational budget. Also included is an addendum to evaluate changes to the PWC Comprehensive Plan in December 2022.
CIP Number:	MISC-114	Project Benefit:	The goal of this study is to establish long range utility needs in order to maintain service levels to existing customers and to plan for meeting future growth and demand.
JDE Number(s):	22NCWE0101	Source Derivation:	Engineering and Planning Division, Environmental Services and Water Reclamation Division; Managed by the Engineering and Planning Division and Project Management Office.
Location:	County Wide		
Pressure Zone:	Multiple		
Sewershed:	Multiple		
Magisterial District:	Multiple		
Project Estimate:	Contract Award		
Estimate By:	Engineering and Planning Division		

PROJECT PICTURE		PROJECT FUNDING																			
		PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL												
		600	185	0	0	0	250	0	1035												
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Proposed Funding Sources																					
Exp. Fund (02) – Availability Fees	100%																				
Commit. Fund (03) – Availability Fees	-																				
Repl. Fund (04) – User Rates	-																				
Other Contrib. – Development Contributions	-																				
PROJECT TOTAL	100%																				

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: English Gardens Property Building & Site Improvements
CIP Number: MISC-116
JDE Number(s): 12NCWH0101, 14NCWH0101
Location: 14195 Dumfries Rd.
Pressure Zone: OR – Oak Ridge
Sewershed: PC – Powells Creek
Magisterial District: CO – Coles
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Design and construction of a new centralized auxiliary and operations building with associated infrastructure, plus the demolition of an existing onsite building.
Project Benefit: This project will improve the functionality of SA facilities by providing additional and redefined space for staff and ensure a safe and comfortable work environment for SA staff.
Source Derivation: Engineering and Planning Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
88	850	1850	8000	12027	29054	0	51869

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	50%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	50%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Studies and PER's – Organization Wide
CIP Number: MISC-117
JDE Number(s): Multiple
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: This project provides the funding for studies and preliminary engineering reports (PER's) organization-wide to evaluate existing business systems or facility assets, and provide recommendations on improvements, upgrades, or replacements as necessary to increase efficiencies, improve employee safety, meet future projected demands, or satisfy regulatory requirements.

Project Benefit: The goal of these studies is to identify alternatives for improvements to move into detailed design to maintain service levels to existing customers and to plan for meeting future growth and demand.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	700	700	700	700	700	0	3500

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	50%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	50%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

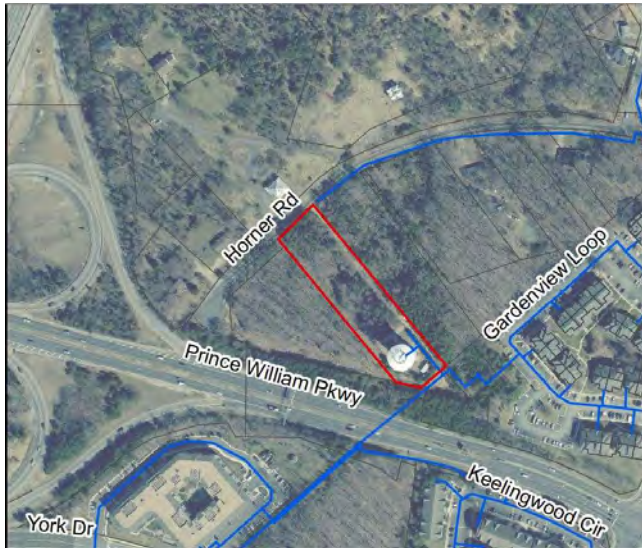
PROJECT INFORMATION

Project Name: Nottoway Tank Site Development
CIP Number: MISC-118
JDE Number(s): 22WLRT0201, 24WLRT0201
Location: 2011 Horner Road, Woodbridge
Pressure Zone: Lake Ridge
Sewershed: Belmont
Magisterial District: WD - Woodbridge
Project Estimate: Order of Magnitude
Estimate By: Project Management Office

PROJECT DESCRIPTION

Project Description: Site preparation and construction to accommodate material storage on the Nottoway Tank site property. This project includes general site and security improvements.
Project Benefit: Improve working efficiency by providing additional operational space for stored materials for emergency response, day-to-day maintenance, repair, and general east end operations.
Source Derivation: Operations and Maintenance Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	200	600	0	0	0	0	800

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	50%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	50%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Vehicle Replacement Program
CIP Number: MISC-200
JDE Number(s): Multiple
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: The SA operates and maintains a fleet of vehicles in order to provide service to its customers. In addition, the SA evaluates each vehicle annually and retains vehicles that are still in good condition regardless of the replacement criteria. Vehicles identified for replacement over the next two years include tandem-axle flat beds, small high-side dump trucks, closed-circuit television vehicles, hydro-excavator trucks, sport utility vehicles, and various equipped full and mid-sized pick-up trucks.

Project Benefit: This program provides guidelines for vehicle replacement that balances safety, reliability, capital costs, and maintenance costs.

Source Derivation: Operations and Maintenance Division; Managed by the Operations and Maintenance Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	1983	1075	1400	1400	1665	0	7523

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Mechanical Equipment Replacement Program

CIP Number: MISC-201

JDE Number(s): Multiple

Location: County Wide

Pressure Zone: Multiple

Sewershed: Multiple

Magisterial District: Multiple

Project Estimate: Order of Magnitude

Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Replacement of single equipment unit items with a cost value of \$5,000 or greater required for SA operations to perform duties and fulfill customer requirements. These items include but are not limited to pumping units, channel grinders, HVAC units, variable frequency drives, and reduced voltage solid state starters.

Project Benefit: Reaching performance targets, compliance with regulatory requirements, maximization of the return on capital, and increased stakeholder value.

Source Derivation: Operations and Maintenance Division; Managed by the Operations and Maintenance Division.

PROJECT PICTURE




PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	2210	3176	2866	2489	2670	0	13411

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION		PROJECT DESCRIPTION	
Project Name:	Computer and Other Replacement Program	Project Description:	Purchase or replacement of single computers or other miscellaneous unit items with a cost value of \$5,000 or greater required for SA operations to perform duties, fulfill customer requirements and enhance the cybersecurity programs. These items include software, server and network hardware, network storage, phone systems, copiers and printers, and SCADA servers.
CIP Number:	MISC-202	Project Benefit:	Replaces hardware and other miscellaneous capital equipment that is approaching the end of its service life within the next 15 months.
JDE Number(s):	Multiple	Source Derivation:	Management and Budget Division; Information Technology Division; Managed by the Information Technology Division.
Location:	County Wide		
Pressure Zone:	Multiple		
Sewershed:	Multiple		
Magisterial District:	Multiple		
Project Estimate:	Order of Magnitude		
Estimate By:	Management and Budget Division		

PROJECT PICTURE		PROJECT FUNDING																					
		Proposed Funding Sources																					
		<table border="1"> <thead> <tr> <th>PRE-FY24</th> <th>FY24</th> <th>FY25</th> <th>FY26</th> <th>FY27</th> <th>FY28</th> <th>POST- FY28</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td align="center">0</td> <td align="center">1200</td> <td align="center">1200</td> <td align="center">1550</td> <td align="center">1550</td> <td align="center">600</td> <td align="center">0</td> <td align="center">6100</td> </tr> </tbody> </table>								PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL	0	1200	1200	1550	1550	600
PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL																
0	1200	1200	1550	1550	600	0	6100																
		Exp. Fund (02) – Availability Fees		-																			
		Commit. Fund (03) – Availability Fees		-																			
		Repl. Fund (04) – User Rates		100%																			
		Other Contrib. – Development Contributions		-																			
		PROJECT TOTAL		100%																			

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION		PROJECT DESCRIPTION	
Project Name:	Major Facility Rehabilitation Program	Project Description:	Major rehabilitation of mechanical, electrical, roofing, HVAC, and structural components at existing sewage pumping stations and water booster stations.
CIP Number:	MISC-203	Project Benefit:	Preserves and extends the economic life of each facility. In addition, this project improves the functionality of SA facilities by maintaining operational integrity and reliability.
JDE Number(s):	Multiple	Source Derivation:	Operations & Maintenance Division; Managed by the Project Management Office.
Location:	County Wide		
Pressure Zone:	Multiple		
Sewershed:	Multiple		
Magisterial District:	Multiple		
Project Estimate:	Order of Magnitude		
Estimate By:	Project Management Office		

PROJECT PICTURE		PROJECT FUNDING																					
		Proposed Funding Sources																					
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PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL																
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Proposed Funding Sources																							
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Commit. Fund (03) – Availability Fees	-																						
Repl. Fund (04) – User Rates	100%																						
Other Contrib. – Development Contributions	-																						
PROJECT TOTAL	100%																						

INFORMATION TECHNOLOGY PROJECTS



Service Authority

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: JD Edwards Upgrade
CIP Number: IT-105
JDE Number(s): 14NSCG0109
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Information Technology Division

PROJECT DESCRIPTION

Project Description: As part of the SA's Organizational Strategic Plan and IT's Strategic Plan, this project involves upgrades and custom design features to the JD Edwards system.
Project Benefit: This project will add mobile capabilities, reporting capabilities, budget forecasting, and Procure to Pay functionality.
Source Derivation: Information Technology Division; Managed by the Information Technology Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
829	0	250	250	0	0	0	1329

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Cayenta – CIS
CIP Number: IT-106
JDE Number(s): 14NSCG0110
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Information Technology Division

PROJECT DESCRIPTION

Project Description: As part of the SA’s Organizational Strategic Plan and IT’s Strategic Plan, this project involves upgrading Cayenta to Version 9 and replacing the Customer Self Service system components and deploying new customer-focused functionality.

Project Benefit: This project shall improve the SA customer experience by replacing the current bill-pay site with a modern, mobile-ready, customer portal. Additionally, the project includes upgrades to the Cayenta CIS for improved system reliability and capabilities.

Source Derivation: Information Technology Division; Managed by the Information Technology Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
402	250	0	250	200	0	0	1102

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Computerized Maintenance Management System (CMMS) Implementation

CIP Number: IT-107

JDE Number(s): 14NAAG0112

Location: County Wide

Pressure Zone: Multiple

Sewershed: Multiple

Magisterial District: Multiple

Project Estimate: Order of Magnitude

Estimate By: Information Technology Division

PROJECT DESCRIPTION

Project Description: This project expands the implementation of Cityworks to provide inventory management for SA warehousing processes and work order management functionality for H.L. Mooney AWRF assets.

Project Benefit: Implementation of Cityworks to manage work performed on assets at H.L. Mooney AWRF shall place maintenance performed on the SA's collection, distribution, and facility assets in a single GIS-centric business system which improves operational insights and reporting to support data-driven decision making.

Source Derivation: Information Technology Division, Operations and Maintenance Division; Managed by the Information Technology Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
532	1450	560	620	125	0	0	3287

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Document Management System Implementation
CIP Number: IT-110
JDE Number(s): Not Assigned
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Information Technology Division

PROJECT DESCRIPTION

Project Description: As part of the SA's Organizational Strategic Plan and IT's Strategic Plan, this project will develop a SA-wide central document repository.

Project Benefit: A document management system shall provide a governed, central repository to store the organization's documents and improve document retrieval. Additionally, the Document Management System will provide improved control of document versioning and collaboration.

Source Derivation: Information Technology Division; Managed by the Information Technology Division.

PROJECT PICTURE



FY24 – FY28

PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
200	1560	420	275	125	0	0	2580

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Vertical Asset Data Development
CIP Number: IT-117
JDE Number(s): 14NAAG0240
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Data Management Division

PROJECT DESCRIPTION

Project Description: Development of a GIS vertical asset register in support of work-order management (CMMS) and Asset Management Analytics. This project includes discovery, planning, database development, and data capture.

Project Benefit: GIS vertical asset data shall enable effective use of the SA's CMMS system for assets located within the H.L. Mooney AWRF and WWF facilities. Additionally, vertical asset data shall enable data-driven asset management planning.

Source Derivation: Data Management Division; Managed by the Data Management Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
248	365	50	0	0	0	0	663

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: System Integration
CIP Number: IT-118
JDE Number(s): 14NAAG0230
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Data Management Division

PROJECT DESCRIPTION

Project Description: This project modernizes existing legacy, point-to-point system integrations to Dell Boomi in alignment with the SA technology strategy and reduces total cost of ownership.

Project Benefit: Successful implementation of mature analytics that support data-driven decision making relies on the ability to efficiently access critical data stored in multiple business systems across the enterprise. This project shall provide a scalable, consistent approach to integrating business systems, automate manual workflows, and improve analytics and reporting capabilities.

Source Derivation: Data Management Division; Managed by the Data Management Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
1338	75	150	75	37	0	0	1675

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Asset Management Analytics
CIP Number: IT-121
JDE Number(s): 14NAAG0280
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Data Management Division

PROJECT DESCRIPTION

Project Description: Development of the frameworks, standards, processes, and tools necessary for data-driven asset management planning.
Project Benefit: Enterprise-wide asset management analytics affords the SA the ability to plan work from an organization-wide perspective, understand cross-divisional dependencies and priorities, and develop data-driven asset management plans.
Source Derivation: Data Management Division; Managed by the Data Management Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
222	215	600	175	0	0	0	1212

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Project Management Information System (PMIS) Implementation
CIP Number: IT-122
JDE Number(s): 14NAAG0290
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Information Technology Division

PROJECT DESCRIPTION

Project Description: Continue implementation of a Project Management Information System (PMIS) to automate procurement and contracts workflows, document and project management, and financial reporting associated with construction related projects. Work performed under this project shall expand system functionality delivered as part of PMIS Implementation Phase I.

Project Benefit: A PMIS shall provide a systematic approach to managing projects across all phases of the project life cycle from planning to project close-out. A PMIS will also afford the SA the ability to manage project documentation, schedules, and costs more efficiently.

Source Derivation: Information Technology Division; Managed by the Information Technology Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
1474	175	475	127	64	0	0	2315

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	30%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	70%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Network Security Upgrades
CIP Number: IT-125
JDE Number(s): 14NSCG0401
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Information Technology Division

PROJECT DESCRIPTION

Project Description: As part of PWCSA’s Organizational Strategic Plan and IT’s Strategic Plan, this project will enhance the operational technology and IT network cybersecurity by deploying specific security technology to improve resiliency and defenses.

Project Benefit: This project will implement technology to improve cybersecurity defenses and add additional resiliency to the current solution.

Source Derivation: Information Technology Division; Managed by the Information Technology Division.

PROJECT PICTURE



FY24 – FY28

PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	150	150	100	100	0	0	500

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: SCADA System Upgrade
CIP Number: IT-126
JDE Number(s): 14NCWC0101
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Information Technology Division

PROJECT DESCRIPTION

Project Description: As part of the SA's Organizational Strategic Plan and IT's Strategic Plan, this project involves planning, design, deployment, and owner services for the replacement of the SA's legacy SCADA system.

Project Benefit: This project replaces obsolete SCADA equipment with current technology for improved SCADA system reliability and security, automation of manual processes, and real-time monitoring and reporting.

Source Derivation: Information Technology Division; Managed by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
2161	4838	5283	5068	5262	0	0	22612

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Web Content Management System Migration
CIP Number: IT-128
JDE Number(s): Multiple
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Information Technology Division

PROJECT DESCRIPTION

Project Description: This project shall migrate content on the SA’s three complex websites (pwcsa.org, h2olab.org, and the “SA Splash” Intranet) to the upgraded Content Management System (CMS) and modernize design of the public-facing website.

Project Benefit: Migrating content on the SA’s three websites to the newer version of the CMS is imperative as technical service of the current version of the software will be discontinued in November 2022. Websites running on older versions of the platform may be flagged as insecure during third-party scans. The newer version of CMS will strengthen the security of the websites and enhance front-end users’ experiences.

Source Derivation: Information Technology Division; Managed by the Information Technology Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
166	209	0	0	0	0	0	375

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Enterprise Resource Planning
CIP Number: IT-129
JDE Number(s): Not Assigned
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: Order of Magnitude
Estimate By: Information Technology Division

PROJECT DESCRIPTION

Project Description: This project will provide an integrated, modern financial information system, Customer Billing Information System and its related business software stack.
Project Benefit: The new integrated Financial and Customer Service Systems will provide self-service to both internal users and ratepayers, comply with the National Institute of Standards and Technology Guidelines and improve data security.
Source Derivation: Information Technology Division; Managed by the Information Technology Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	0	2500	5000	3500	0	0	11000

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	100%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%



Service Authority



REGIONAL UTILITY PROJECTS

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Occoquan River Crossing
CIP Number: REG-1
JDE Number(s): 22WFWM8104, 24WFWM8104
Location: Eastern PWC, Occoquan River
Pressure Zone: Eastern Water System
Sewershed: Multiple
Magisterial District: Multiple
Project Estimate: OPCC
Estimate By: Fairfax Water and the Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Design and construction of dual 700-foot long 42-inch steel water mains within a 400-foot long tunnel, 2,400 feet of 36-inch water main for redundancy to an existing transmission main, and an additional finished water pump at Fairfax Water’s Griffith Water Treatment Plant to facilitate a new subaqueous crossing of the Occoquan River. This project also includes the replacement of a deficient segment of existing 24-inch water main and a new interconnection near Horner Road along the transmission main corridor in Prince William County. This project will connect transmission facilities on either side of the river that supply the SA’s Eastern Water System and three proposed Eastern Area control valve vaults.

Project Benefit: This new transmission main will replace the aging, pressure restricted 30-inch concrete pipe that has been in service for over 60 years. This transmission main shall also increase capacity and enhance system reliability and availability for SA customers in the Eastern Water System.

Source Derivation: Engineering and Planning Division; Managed by Fairfax Water and coordinated at the Service Authority by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
6617	12566	12566	0	0	0	0	31749

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	30%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	70%
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: UOSA Expansion – Project 60
CIP Number: REG-2
JDE Number(s): Not assigned
Location: Fairfax County
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: N/A
Project Estimate: Order of Magnitude
Estimate By: UOSA

PROJECT DESCRIPTION

Project Description: This project is for the SA’s portion of costs associated with the planned expansion of sewage treatment capacity from 54 MGD to 60 MGD at the UOSA AWRF plant in Fairfax County. The capacity increase is based on growth projections in conformance with the land use policies in the PWC Comprehensive Plan prior to the December 2022 revisions. Costs cover adding secondary treatment capacity, adding sidestream ammonia treatment, and expansion of chlorination and dechlorination facilities.

Project Benefit: The goal of this project is to accommodate the continued increase in wastewater flows from new commercial and residential development in the areas tributary to this regional AWRF.

Source Derivation: UOSA Master Plan, 2020; Managed by UOSA and coordinated by the Project Management Office.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY24	FY24	FY25	FY26	FY27	FY28	POST- FY28	TOTAL
0	0	3100	7900	24400	24400	24400	84200

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	-
Commit. Fund (03) – Availability Fees	100%
Repl. Fund (04) – User Rates	-
Other Contrib. – Development Contributions	-
PROJECT TOTAL	100%

**CAPITAL IMPROVEMENT PROGRAM
FISCAL YEARS 2024 - 2028**



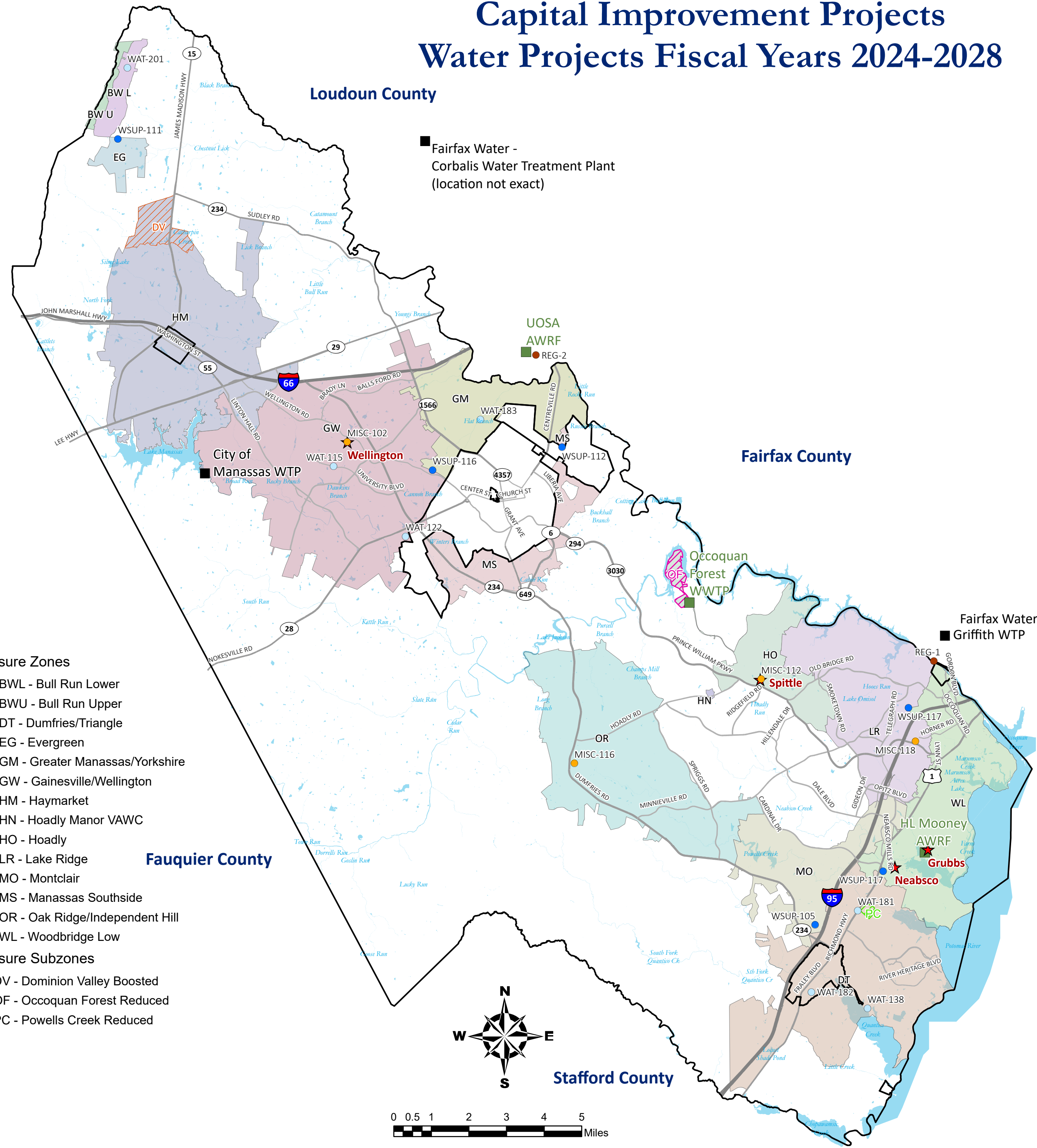
Service Authority
Prince William County

SECTION C

PROJECT MAPS

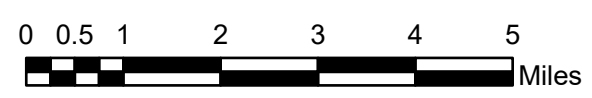
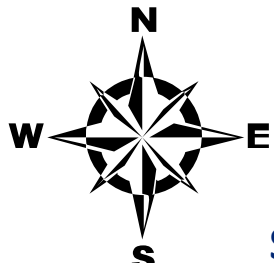
Capital Improvement Projects

Water Projects Fiscal Years 2024-2028



■ Fairfax Water - Corbalis Water Treatment Plant (location not exact)

- Pressure Zones**
- BWL - Bull Run Lower
 - BWU - Bull Run Upper
 - DT - Dumfries/Triangle
 - EG - Evergreen
 - GM - Greater Manassas/Yorkshire
 - GW - Gainesville/Wellington
 - HM - Haymarket
 - HN - Hoadly Manor VAWC
 - HO - Hoadly
 - LR - Lake Ridge
 - MO - Montclair
 - MS - Manassas Southside
 - OR - Oak Ridge/Independent Hill
 - WL - Woodbridge Low
- Pressure Subzones**
- DV - Dominion Valley Boosted
 - OF - Occoquan Forest Reduced
 - PC - Powells Creek Reduced



- Regional Utility Projects (REG)**
- REG-1 Occoquan River Crossing
 - REG-2 UOSA Expansion - Project 60
- Information Technology Projects (IT)**
- IT-105 JD Edwards Upgrade
 - IT-106 Cayenta - CIS
 - IT-107 Computerized Maintenance Management System (CMMS) Implementation
 - IT-110 Document Management System Implementation
 - IT-117 Vertical Asset Data Development
 - IT-118 System Integration
 - IT-121 Asset Management Analytics
 - IT-122 Project Management Information System (PMIS) Implementation
 - IT-125 Network Security Upgrades
 - IT-126 SCADA System Upgrade
 - IT-128 Web Content Management System Migration

- Miscellaneous Projects (MISC)**
- MISC-100 Water and Sewer Utility System Improvement Opportunity (USIO)
 - MISC-101 PWCSA Water & Sewer Facility Security Enhancements
 - MISC-102 Wellington Road Operations Center Expansion
 - MISC-103 PWCSA Facilities Renewals and Upgrades
 - MISC-112 Administrative Office Space Expansion
 - MISC-114 System Wide Master Plan
 - MISC-116 English Gardens Property Building & Site Improvements
 - MISC-117 Studies and PER's - Organization Wide
 - MISC-118 Nottoway Tank Site Development
 - MISC-200 Vehicle Replacement Program
 - MISC-201 Mechanical Equipment Replacement Program
 - MISC-202 Computer and Other Replacement Program
 - MISC-203 Major Facility Rehabilitation Program

- Water Supply Projects (WSUP)**
- WSUP-103 Water Meter Vault Improvements
 - WSUP-105 Montclair/Four Seasons Water System Improvements
 - WSUP-111 Bull Run Mountain Well Upgrades
 - WSUP-112 Manassas Southside Booster Pumping Station Upgrades
 - WSUP-114 Capital Meter Program
 - WSUP-116 Unity Reed (F14) Booster Pumping Station and Discharge Main
 - WSUP-117 Eastern Area Pressure Reducing Valves

- Water Storage Projects (WST)**
- WST-110 Water Storage Tank Rehabilitation Program
 - WST-111 Tank Re-Chlorination Program

- Water Transmission Projects (WAT)**
- WAT-115 Dawkins Branch Transmission Main
 - WAT-122 Gainesville to Manassas South Connector
 - WAT-138 Possum Point Road Water Main - Phase 2
 - WAT-181 Rt. 1 Transmission Main - Phase 1
 - WAT-182 Rt. 1 Transmission Main - Phase 2
 - WAT-183 Western Area Resiliency - Rt. 28 Bypass
 - WAT-200 Water Distribution Asset Replacement Program
 - WAT-201 Bull Run Mountain Distribution System Improvements

Capital Improvement Projects

Sewer Projects Fiscal Years 2024-2028



- Sewer Sheds**
- BM - Belmont
 - BR - Broad Run
 - BU - Bull Run
 - CB - Cabin Branch
 - CC - Catharpin Creek
 - DE - Deweys Branch
 - DM - Dumfries
 - FB - Flat Branch
 - FS - Featherstone
 - GD - Godwin Drive
 - HB - Holkums Branch
 - HR - Hooes Run
 - HS - Harbor Station
 - LB - Little Bull Run
 - LC - Little Creek
 - MR - Melrose
 - NB - North Branch
 - NE - Neabsco
 - NK - Nokesville
 - OC - Occoquan Creek
 - OQ - Occoquan Forest
 - OS - Occoquan Plant
 - OT - Occoquan Town
 - PB - Piney Branch
 - PC - Powells Creek
 - PU - Purcell Branch
 - RU - Russia Branch
 - WA - Airport
 - YB - Youngs Branch
 - YS - Yorkshire

- Regional Utility Projects (REG)**
- REG-1 Occoquan River Crossing
 - REG-2 UOSA Expansion - Project 60
- Information Technology Projects (IT)**
- IT-105 JD Edwards Upgrade
 - IT-106 Cayenta - CIS
 - IT-107 Computerized Maintenance Management System (CMMS) Implementation
 - IT-110 Document Management System Implementation
 - IT-117 Vertical Asset Data Development
 - IT-118 System Integration
 - IT-121 Asset Management Analytics
 - IT-122 Project Management Information System (PMIS) Implementation
 - IT-125 Network Security Upgrades
 - IT-126 SCADA System Upgrade
 - IT-128 Web Content Management System Migration
 - IT-129 Enterprise Resource Planning
- Miscellaneous Projects (MISC)**
- MISC-100 Water and Sewer Utility System Improvement Opportunity (USIO)
 - MISC-101 PWCSA Water & Sewer Facility Security Enhancements
 - MISC-102 Wellington Road Operations Center Expansion
 - MISC-103 PWCSA Facilities Renewals and Upgrades
 - MISC-112 Administrative Office Space Expansion
 - MISC-114 System Wide Master Plan
 - MISC-116 English Gardens Property Building & Site Improvements
 - MISC-117 Studies and PER's - Organization Wide
 - MISC-200 Vehicle Replacement Program
 - MISC-201 Mechanical Equipment Replacement Program
 - MISC-202 Computer and Other Replacement Program
 - MISC-203 Major Facility Rehabilitation Program
- Sewage Pumping Station Projects (SPS)**
- SPS-100 Generator Replacement Program
 - SPS-107 Replace Occoquan Forest Sewage Pumping Stations, OQL36 & OQL37
 - SPS-108 Nokesville Sewage Pumping Station, L20
 - SPS-112 Graham Park Sewage Pumping Station, L13
 - SPS-113 Heritage Hunt Sewage Pumping Station, L52 and Force Main
 - SPS-115 Belmont Sewage Pumping Station, L17 Replacement and Force Main Extension
 - SPS-116 Hornbaker Sewage Pumping Station, L06 and Force Main
 - SPS-118 Koon's Sewage Pumping Station, L28
 - SPS-123 Spinnaker Court Sewage Pumping Station, L02 and Force Main
 - SPS-125 Occoquan Creek Sewage Pumping Station, L04 and Gravity Main
 - SPS-126 Piney Branch Sewage Pumping Station, L26 and Gravity Main
 - SPS-134 Hooes Run Sewage Pumping Station, L01 and Force Main
 - SPS-135 Yorkshire Sewage Pumping Station, L30 and Force Main
 - SPS-136 Melrose Sewage Pumping Station, L10
 - SPS-137 Dawson Landing Sewage Pumping Station, L51
 - SPS-138 Powell's Creek Sewage Pumping Station, L08 and Force Main
 - SPS-139 North Fork Sewage Pumping Station, L39
 - SPS-140 Occoquan Plant Sewage Pumping Station, L14
 - SPS-141 Dewey's Creek Sewage Pumping Station, L09
 - SPS-142 Featherstone Sewage Pumping Station, L16 and Force Main
- Sewer Collection Projects (SEW)**
- SEW-106 Dumfries Force Main and Water Main
 - SEW-157 Sudley Road Sewer Main
 - SEW-158 I-66 Rest Area Sewer Main
 - SEW-200 Sewer Collection Rehabilitation & Replacement Program
- Water Reclamation Facilities Projects (WRF)**
- WRF-123 Ongoing Renewal and Replacement
 - WRF-126 Dynamic Hydraulic Model and Instrumentation
 - WRF-131 FBI and Solids Building Repairs and Modifications
 - WRF-134 Bioreactor Basin Improvements
 - WRF-138 Facility Wide Improvements - Design-Build Project

