



FY20-FY24

Capital Improvements Program

Approved
June 13, 2019



SA
Service Authority
Prince William County

**Resolution: 19-06-23
June 13, 2019**

**APPROVAL OF CAPITAL IMPROVEMENTS PROGRAM
FOR FISCAL YEARS 2020-2024**

WHEREAS, the Service Authority staff provided the Board of Directors on May 9, 2019 a draft of the Capital Improvements Program for FY 2020-FY 2024; and,

WHEREAS, the Board of Directors has reviewed the projects proposed in the draft Capital Improvements Program; and,

WHEREAS, the final Capital Improvements Program for FY 2020-FY 2024 does not have substantive changes from the draft;

NOW, THEREFORE, BE IT RESOLVED that the Prince William County Service Authority Board of Directors hereby approves the final Capital Improvements Program for FY 2020-FY 2024 and authorizes it for distribution.

Motion: Mrs. Eagles
Second: Mr. Vanegas
Ayes : Eagles, Vanegas, Kooyoomjian, Ruecker, Rutherford, Voggenreiter
Absent : Allen

**CAPITAL IMPROVEMENTS PROGRAM
FISCAL YEARS 2020 - 2024**



Service Authority
Prince William County

*Approved
June 13, 2019*

CAPITAL IMPROVEMENTS PROGRAM

FISCAL YEARS 2020 – 2024



Service Authority
Prince William County

BOARD OF DIRECTORS

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Vacant, Member

Dean E. Dickey, General Manager

Leslie Griffith, Deputy General Manager/CFO

CAPITAL IMPROVEMENTS PROGRAM FISCAL YEARS 2020-2024

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CAPITAL IMPROVEMENTS PROGRAM

PURPOSE

Beginning in fiscal year 2020, The Capital Improvement Program (CIP) will be submitted on a bi-annual basis, consistent with the approach for the operating budget, 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 to schedule funding and resources.

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. The General Manager may adjust the timing and spending schedule for projects as needed. 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. Project funds are encumbered through the Purchase Order process. As projects can span several fiscal years, unspent encumbered funds are rolled-over at the end of each fiscal year. The CIP is updated on a regular basis to reflect the latest project estimates and spending schedules.

CIP DOCUMENT FORMAT

The CIP is presented for a five-year cycle for Fiscal Years 2020 through 2024 in four sections: Section A (Program Summary), Section B (Project Data Sheets), Section C (Future Projects), and Section D (Facilities and 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 FY20, 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 that are predominately or exclusively developer driven are not included in the document, unless the project comprises a system improvement in which the Service Authority has financial participation.

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 source projects are presented under this category.
Water Storage Projects (WST)	Tanks maintain stable water system pressure, provide fire and reserve storage, and provide water during peak demands that exceed supply, transmission capacity or pumping capacity.
Water Transmission Projects (WAT)	Water main projects are presented under this category. Transmission mains are pipes sized to transmit large volumes of water to regional demand areas. Distribution mains are pipes sized to provide water service and fire protection to localized areas.
Sewage Pumping Stations Projects (SPS)	Sewage pumping stations pump sewage from a low point in one gravity sewer shed to another gravity sewer shed for conveyance to either the UOSA or H.L. Mooney water reclamation facilities. Many SPS projects include the installation of a by-pass connection on the force main. A by-pass connection is used when work on either the pumps or wet well facilities of the sewage pumping station are required. A by-pass connection enables the Service Authority to continue handling the waste water flows while maintenance is performed on the pump station.
Sewage Collection System Projects (SEW)	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 Advanced Water Reclamation Facility (AWRF) are presented in this section.
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 Financial and Accounting software upgrades, Supervisory Control and Data Acquisition (SCADA) upgrades and modifications, Geographic Information System (GIS) improvements and hydraulic modeling studies.
Regional Utility Projects (REG)	Major expansion or upgrade projects 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 Plant. This category also includes a new Occoquan River crossing to increase 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 located 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.
Criteria	The project prioritization criteria rating (1 – 5) is identified. Refer to Table 3 “CIP Project Prioritization Criteria” below for an explanation of the CIP prioritization process and criteria ratings.
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.
Project Estimates	Identifies the Division within the Service Authority and/or Engineering Consultant that prepared the cost estimate.
	An "Order of Magnitude" is an estimate made with only the benefit of concepts, maps without detailed engineering 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) are utilized.

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

Data Sheet Field	Description
Project Estimates	This nomenclature and description is standard engineering cost estimating practice by the Association of Cost Engineers.
	For accounting purposes, any projects not resulting in a capital asset or any costs which do not meet the accounting criteria to be capitalized will be reclassified from capital to expense, as a year-end closing adjustment.
Proposed Funding Sources	This section provides the 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, or Developer or Other Source Financial Contribution.
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. Staff feels that 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.

Section C – Future Projects Beyond FY2024

This section provides a list of identified “out-year” projects, where expenditures are anticipated to start beyond FY2024.

Section D – Facilities and Project Maps

This section provides overall county maps showing the location of the projects, giving the “big picture” of the Capital Improvements Program. This section also includes maps delineating the Pressure Zones and Sewersheds in the County. 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. Facility schematics are also provided for both the East and West Water and Sewer Facilities.

CIP PROJECT PRIORITIZATION

All CIP Projects are categorized according to the following Board approved CIP Project Prioritization Criteria. The process involved round table prioritization sessions with the Engineering and Planning, Operations and Maintenance Divisions and other Divisions as required. Each proposed CIP project was discussed and evaluated according to which criteria applied. Using the outcomes of this review process in conjunction with consideration of available funding, the fiscal year scheduling was set, as reflected in Section A (CIP Program Summary).

Subsequently, each project has been noted with the criteria it fulfills on its data sheet. Table 3 below defines the CIP Project Prioritization Criteria.

Table 3 - CIP Project Prioritization Criteria

Criteria #	Description	Project Objectives
1	<p>Project Criticality Projects addressing imminent:</p> <ul style="list-style-type: none"> • Life safety emergencies • Public health emergencies • Legal liability • Threats to SA operations 	Increases Fire Protection, Improves Water Quality, Eliminates Contamination, Improves Security and/or Safety, Regulatory Compliance Requirements
2	<p>Environmental Sustainability Projects contributing to natural resources and environmental:</p> <ul style="list-style-type: none"> • Protection • Restoration • Impact reduction 	LEED Certification, Protection of Public Health, Responsible Management of Resources, Reduction of Impacts on Surrounding Communities
3	<p>Financial Stewardship Projects offering:</p> <ul style="list-style-type: none"> • Cost effective solutions • Revenue potential • Outside funding and partnership availability • Impact on operational costs 	Produces Additional Revenues, Eligible for Grant Assistance, Enhances Economic Development, Master Plan Utility Adjustments (MPUA), Reduces Maintenance Expenses
4	<p>Community Vitality Projects contributing to:</p> <ul style="list-style-type: none"> • Social justice and equity • Economic growth • Cultural and recreational opportunities 	Brings Service to New Customers, In-Line with Economic Development, Improves Level of Service, Serves a Large Number of People
5	<p>Strategic Plan Alignment Projects supporting:</p> <ul style="list-style-type: none"> • Critical program or service delivery • Customer service improvements • Operational cost savings • Scheduled replacement • Workforce improvement 	Provides Cost Effective Services, Addresses Critical Assets or Business Efficiencies, Shows Value, Reduces Risk

FISCAL YEAR 2020 Summary of CIP Projects

The following is a list of Projects slated for study, design or construction during Fiscal Year 2020.

<i>WATER SUPPLY PROJECTS</i>		
CIP Number	PROJECT NAME	PROJECT LOCATION
WSUP-103	Water Meter Vault Improvements	Commercial Meter Vault Locations
WSUP-105	Montclair Water Booster Pumping Station	17361 Four Seasons Drive, Dumfries
WSUP-111	Bull Run Mountain Well Upgrades	Bull Run Upper & Lower and Evergreen Pressure Zones
WSUP-112	Manassas Southside Booster Pumping Station Modifications	Blooms Quarry Lane, Manassas
WSUP-114	Capital Meter Program - Expansion	County Wide
WSUP-115	Capital Meter Program - Replacement	County Wide

<i>WATER STORAGE PROJECTS</i>		
CIP Number	PROJECT NAME	PROJECT LOCATION
WST-104	Potomac Shores Water Storage Tank	River Heritage Boulevard
WST-110	Water Storage Tank Maintenance Program	T-26

<i>WATER TRANSMISSION PROJECTS</i>		
CIP Number	PROJECT NAME	PROJECT LOCATION
WAT-100	County Wide - Emergency Capital Work	County Wide
WAT-101	County Wide - Water System Assessments	County Wide
WAT-104	Potomac Shores Parkway Transmission Main	Rt. 234/Rt. 1 Intersection, Rt. 1 to River Heritage Blvd.
WAT-109	Montclair Booster Station Water Main	I-95 Crossing
WAT-111	Oakridge Pressure Zone Supplemental Supply from Forest Park BPS	Dumfries Rd. from Forest Park BPS to Fincastle Dr.
WAT-112	Stonewall Jackson BPS – Additional Discharge Main	8814 Rixlew La., Manassas
WAT-115	Dawkins Branch Transmission Main	University Blvd. from Sudley Manor Dr. to Devlin Rd.
WAT-116	Montclair Pressure Zone Improvements-Rt 234	Brittany to First Mt Zion Baptist Church, Mt. Zion and Fortuna Shopping Center
WAT-122	Gainesville-Wellington to Manassas Southside Connector	Rt. 28 Corridor to Godwin Dr.
WAT-123	Piney Branch Transmission Main	Devlin Rd. to Gainesville Tank
WAT-129	Route 1 Water Main Reinforcement, North	Route 1, From Featherstone Road to Annapolis Way

WATER TRANSMISSION PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
WAT-137	Possum Point Road Water Main Replacement - Phase 1	Summer Duck Drive to Town Limits
WAT-162	Galt Court Water Main Replacement	Galt Court
WAT-164	Curtis Dr. Water Main Extension	Curtis Drive to Main Street Dumfries
WAT-172	Rose Hill Circle Water Main Replacement	Rose Hill Circle, Dumfries
WAT-173	Bethel Road Water Main	Token Valley Road
WAT-181	Route 1 Transmission Main – Garfield BPS to Route 234	Route 1
WAT-182	Rt. 1 Trans. Main - Rt. 234 to Fuller Heights Rd.	Route 1
WAT-183	Montclair BPS Discharge Transmission Main	From Montclair BPS to Old Stage Rd.

SEWAGE PUMPING STATION PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
SPS-100	Generator Replacement - Program 1	L10 (Melrose), L04 (Occoquan Creek), and L15 (Airport) SPSs
SPS-104	Install New Air Release Valves on Force Mains	County Wide
SPS-107	Replace Occoquan Forest Sewage Pumping Stations, OQL36 and OQL37	10820 Split Rail Dr. and 6204 Ramblewood Tr, Manassas
SPS-108	Replace Old Nokesville Sewage Pumping Station, L20	12829 Fitzwater Drive, Nokesville
SPS-109	Featherstone Lift Station Flood Protection Assessment, L16	15023 Farm Creek Road, Woodbridge
SPS-111	Replace Holiday Inn Sewage Pumping Station, L29	10550 Vandor Lane, Manassas
SPS-112	Replace Graham Park Sewage Pumping Station, L13	3196 Shoreview Road, Dumfries
SPS-113	Heritage Hunt Sewage Pumping Station, L52, Force Main	Heritage Hunt SPS Force Main
SPS-114	Replace Heritage Hunt Sewage Pumping Station, L52	6588 Alderwood Way, Gainesville
SPS-115	Upgrade Belmont Sewage Pumping Station, L17 & Force Main Extension	13760 Dabney Rd., Woodbridge
SPS-116	Replace Hornbaker Sewage Pumping Station, L06, Force Main	13010 Sport and Health Drive, Woodbridge
SPS-117	Replace Hornbaker Sewage Pumping Station, L06	Horn Baker Sewage Pumping Station, Devil's Reach Road
SPS-118	Replace Koon's Sewage Pumping Station, L28	10640 Automotive Dr., Manassas
SPS-119	Replace Airport Sewage Pumping Station Pumps, L15	12331 Cotton Mill Drive, Woodbridge
SPS-123	Replace Spinnaker Court Sewage Pumping Station, L02	2280 Spinnaker Ct., Woodbridge
SPS-125	Occoquan Creek Sewage Pumping Station Rehabilitation, L04	13221 Marina Way, Woodbridge

<i>SEWAGE PUMPING STATION PROJECTS</i>		
CIP Number	PROJECT NAME	PROJECT LOCATION
SPS-127	Dumfries Lift Station Flood Protection, L18	3458 Canal Road, Dumfries
SPS-129	Occoquan Plant Lift Station Flood Protection, L14	12715 Sea Ray Ln., Woodbridge
SPS-133	Featherstone Sewage Pumping Station, L16 Force Main Assessment	From Featherstone SPS (L16) to HL Mooney Plant

<i>SEWAGE COLLECTION PROJECTS</i>		
CIP Number	PROJECT NAME	PROJECT LOCATION
SEW-100	County Wide - Emergency Capital Work	County Wide
SEW-106	Dumfries Force Main Replacement	Dumfries
SEW-107	Cow Branch Trunk Sewer Replacement	I-95 to Neabsco SPS
SEW-115	Little Creek Sewershed Rehabilitation	Little Creek Sewershed
SEW-118	Flat Branch Sewershed Rehabilitation/CIPP Lining-Rixlew Lane	Rixlew La. Between Sudley Rd. and Ashton Ave.
SEW-123	Hooes Run Sewer Rehabilitation/CIPP Lining – Colby Drive	Colby Dr. & Spinnaker Ct.
SEW-128	Belmont Sewer Rehabilitation/CIPP Lining – Section 2B	Marumscos Hills Section 2B
SEW-129	Belmont Sewer Rehabilitation/CIPP Lining – Section 2A	Marumscos Hills Section 2A
SEW-130	Belmont Sewer Rehabilitation/CIPP Lining – Section 1	Marumscos Hills Section 1
SEW-142	Rose Hill Circle Sewer Main Replacement	Rose Hill Circle, Dumfries
SEW-152	East End Sewer Equalization Study	East End Sewer System
SEW-154	Dumfries Sewershed Rehabilitation/Williamstown Easement	Easement off Graham Park and Milroy Dr.
SEW-156	Replacement of Rt. 29 Crossing at Old Carolina Rd.	Rt. 29 and Old Carolina Rd.
SEW-157	Sudley Rd. Sewer Main Replacement & Upgrade	Sudley Rd. south of I-66

WATER RECLAMATION FACILITY PROJECTS

CIP Number	PROJECT NAME	PROJECT LOCATION
WRF-100	Capital Emergency Projects	H.L. Mooney AWRP
WRF-110	Corrosion Control	H.L. Mooney AWRP
WRF-113	Incineration Backup	H.L. Mooney AWRP
WRF-114	Occoquan Forest WWTP Closure and Site Restoration	H.L. Mooney AWRP
WRF-116	Control and Process Bldg. Renovations	H.L. Mooney AWRP
WRF-118	Equalization Tank	H.L. Mooney AWRP
WRF-122	Hydraulic Improvements	H.L. Mooney AWRP
WRF-123	Ongoing Renewal and Replacement	H.L. Mooney AWRP
WRF-124	New Solids Treatment	H.L. Mooney AWRP
WRF-125	Influent Flow Diversion Structure	H.L. Mooney AWRP
WRF-126	Dynamic Hydraulic Model and Instrumentation	H.L. Mooney AWRP
WRF-127	Switchgear Building Protection	H.L. Mooney AWRP
WRF-131	FBI Repairs and Modifications	H.L. Mooney AWRP
WRF-132	Alkalinity Addition Equipment Replacement	H.L. Mooney AWRP
WRF-134	Bioreactor Basin Improvements	H.L. Mooney AWRP
WRF-138	Facility Wide Improvement – Design-Build Project	H.L. Mooney AWRP
WRF-141	Fuel Facilities Improvements	H.L. Mooney AWRP
WRF-142	Replace/Upgrade Freight Elevators	H.L. Mooney AWRP
WRF-144	Plant Variable Frequency Drives and Associated Electrical Upgrades	H.L. Mooney AWRP
WRF-145	Plant Capacity Increase	H.L. Mooney AWRP
WRF-147	Plant-Wide Buildings Roof Replacement	H.L. Mooney AWRP
WRF-150	Mooney Featherstone Force Main Repair/Replacement	H.L. Mooney AWRP

MISCELLANEOUS PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
MISC-100	Water and Sewer Master Plan Utility Adjustments (MPUA)	County Wide
MISC-101	PWCSA Water and Sewer Facility Security Enhancements	County Wide
MISC-103	PWCSA Facilities Renewals and Upgrades	County Wide
MISC-104	Spittle Complex Improvements	Spittle Building
MISC-105	Upgrade Spittle Complex Electrical Service	Spittle Building
MISC-112	Spittle Office Building Addition	Spittle Complex

INFORMATION TECHNOLOGY PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
IT-102	SCADA System - Owner Services	County Wide
IT-103	SCADA System - Construction Phase	County Wide
IT-105	JD Edwards Upgrade	County Wide
IT-107	Computerized Maintenance Management System (CMMS) Upgrade/Replacement	County Wide
IT-110	Document Management System	County Wide
IT-114	Business Analytics Dashboard Development	County Wide
IT-116	Hydraulic Model Development	County Wide
IT-117	Vertical Asset Data Management	County Wide
IT-118	System Integration	County Wide
IT-121	Asset Management Analytics	County Wide
IT-122	Integrated Utility Planning and Prioritization	County Wide
IT-123	Data Governance	County Wide

REGIONAL UTILITY PROJECTS		
CIP Number	PROJECT NAME	PROJECT LOCATION
FW-1	Fairfax Water Capacity Agreements	Fairfax Water Corbalis Water Treatment Plant
UOSA-1	UOSA CIP- Debt Services	UOSA
WAT-192	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
AT&T	American Telephone and Telegraph Company
AWRF	Advanced Water Reclamation Facility
BAKER	Michael Baker International, Inc. (Engineers)
BI	Business Intelligence
BNR	Biological Nitrogen Removal
BOCS	Board of County Supervisors
BPS	Booster Pumping Station
CBA	Chesapeake Bay Agreement
CCL	Christopher Consultants, LLC (Engineers)
CDM	Camp, Dresser and McKee, Inc (Engineers)
CIP	Capital Improvements 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)
DIP	Ductile Iron Pipe
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
GFI	Gannett, Fleming, Inc. (Engineers)
GIS	Geographic Information System
GLA	G. L. Associates

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	Home Owner Association
HP	Horsepower
HVAC	Heating Ventilation Air Conditioning
I&I	Inflow and Infiltration
IT	Information Technology
LFC	Local Facilities Charge
LS	Lift Station (Sewer)
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
MSL	Mean Sea Level
MWH	MWH Global Consulting Firm (Engineers)
N-S RWY	Norfolk-Southern Railway Company
O&M	Operations and Maintenance Division
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
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
TDH	Total Dynamic Head
UOSA	Upper Occoquan Service Authority
UV	Ultraviolet
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 (Now AWRF)

Project Engineers/Managers

AN	Astrid Nelson
BP	Brandon Pfleckl
DJM	Debbie Maxwell
DG	David Guerra
DP	Don Pannell
DS	Doug Shoop
EH	M. Elena Herrera

Project Engineers/Managers (Cont.)

EK	Ed Kovalchuk
GP	Glenn Pearson
JP	Jim Pflugshaupt
RLW	Rob Wilson
SSB	Samer Beidas
SK	Samantha Kearney

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

Magisterial Districts

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

**CAPITAL IMPROVEMENTS PROGRAM
FISCAL YEARS 2020 - 2024**



Service Authority
Prince William County

SECTION A

PROGRAM SUMMARY

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENTS PROGRAM, FISCAL YEARS 2020-2024**

FUNDING SOURCE SUMMARY

	TOTAL EXPENDITURES (\$1,000's)	PROPOSED SPENDING SCHEDULE (\$1,000's)						
		PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
WATER SUPPLY PROJECTS (WSUP)								
Exp Fund 002	8348	378	1021	1939	3602	1008	400	0
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	23614	1438	3531	5509	9444	2218	1475	0
Other	0	0	0	0	0	0	0	0
TOTAL	31962	1816	4552	7448	13046	3225	1875	0
WATER STORAGE PROJECTS (WST)								
Exp Fund 002	9062	700	1300	4000	3062	0	0	0
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	6857	200	1200	1200	1529	1528	1200	0
Other	0	0	0	0	0	0	0	0
TOTAL	15919	900	2500	5200	4591	1528	1200	0
WATER TRANSMISSION PROJECTS (WAT)								
Exp Fund 002	31862	4231	2076	2272	8235	7837	6512	699
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	91040	5910	7103	6731	22018	20508	20602	8167
Other	6423	2078	1145	941	224	1277	616	142
TOTAL	129325	12219	10324	9944	30477	29622	27730	9009
SEWAGE PUMPING STATION PROJECTS (SPS)								
Exp Fund 002	16644	1594	701	1292	9957	3099	0	0
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	50170	7419	7288	9795	19577	6092	0	0
Other	663	0	0	0	663	0	0	0
TOTAL	67477	9013	7989	11087	30197	9191	0	0
SEWER COLLECTION PROJECTS (SEW)								
Exp Fund 002	5394	324	905	3016	1049	101	0	0
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	18746	2456	4921	4593	2643	3134	500	500
Other	0	0	0	0	0	0	0	0
TOTAL	24139	2780	5825	7608	3692	3234	500	500
WATER RECLAMATION FACILITY PROJECTS (WRF)								
Exp Fund 002	91392	1340	2875	2460	4043	4247	2440	73988
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	209715	3066	6999	9168	14926	15085	8715	151757
Other	0	0	0	0	0	0	0	0
TOTAL	301107	4406	9874	11627	18969	19332	11155	225744
MISCELLANEOUS PROJECTS (MISC)								
Exp Fund 002	20201	415	1278	5008	3875	3188	2000	4438
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	27910	1850	1878	5628	4875	6642	2600	4438
Other	0	0	0	0	0	0	0	0
TOTAL	48111	2266	3155	10635	8749	9830	4600	8876
INFORMATION TECHNOLOGY (IT)								
Exp Fund 002	0	0	0	0	0	0	0	0
Fund 003	0	0	0	0	0	0	0	0
Rep Fund 004	47791	13184	7913	10733	8655	6085	1221	0
Other	0	0	0	0	0	0	0	0
TOTAL	47791	13184	7913	10733	8655	6085	1221	0
REGIONAL UTILITY PROJECTS (REG)								
Exp Fund 002	40419	36842	308	402	1274	1274	319	0
Fund 003	70637	63986	1250	1012	897	811	586	2094
Rep Fund 004	181481	111232	8923	10269	12042	11173	6666	21178
Other	0	0	0	0	0	0	0	0
TOTAL	292537	212060	10481	11683	14213	13258	7570	23272
TOTAL EXPANSION FUND 002	223322	45825	10464	20387	35097	20753	11670	79125
TOTAL COMMITMENT FUND 003	70637	63986	1250	1012	897	811	586	2094
TOTAL REPLACEMENT FUND 004	657323	146754	49753	63625	95708	72465	42979	186039
TOTAL DEVELOPER/OTHER FUND	7086	2078	1145	941	887	1277	616	142
GRAND TOTAL OF ALL CIP PROJECTS	958368	258644	62613	85965	132589	95305	55851	267401

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WATER SUPPLY PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
WSUP-103	Water Meter Vault Improvements	805	0	0	805	0	280	125	100	100	100	100	0
WSUP-104	Dale Blvd 16-inch Water Meter Vault	445	0	0	445	0	0	0	109	336	0	0	0
WSUP-105	Montclair Water Booster Pumping Station	11003	3851	0	7152	0	894	1500	4000	4609	0	0	0
WSUP-110	Herbert Drive Water Booster Pumping Station Modifications	3659	1647	0	2012	0	0	0	309	2000	1350	0	0
WSUP-111	Bull Run Mountain Well Upgrades	4744	0	0	4744	0	455	877	1155	2257	0	0	0
WSUP-112	Manassas Southside Booster Pumping Station Upgrades	2431	851	0	1580	0	187	275	0	1969	0	0	0
WSUP-114	Capital Meter Program - Expansion	2000	2000	0	0	0	0	400	400	400	400	400	0
WSUP-115	Capital Meter Program - Replacement	6875	0	0	6875	0	0	1375	1375	1375	1375	1375	0
TOTAL: WATER SUPPLY PROJECTS		31962	8348	0	23614	0	1816	4552	7448	13046	3225	1875	0

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WATER STORAGE PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY21	FY-22	FY-23	FY-24	BEYOND FY-24
WST-104	Potomac Shores Water Storage Tank	9062	9062	0	0	0	700	1300	4000	3062	0	0	0
WST-107	Conversion of Storage Tanks to Pumped Storage	657	0	0	657	0	0	0	0	329	328	0	0
WST-110	Water Storage Tank Maintenance Program	6200	0	0	6200	0	200	1200	1200	1200	1200	1200	0
TOTAL: WATER STORAGE PROJECTS		15919	9062	0	6857	0	900	2500	5200	4591	1528	1200	0

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WATER TRANSMISSION PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
WAT-100	County Wide - Emergency Capital Work	1200	360	0	840	0	0	200	200	200	200	200	200
WAT-101	County Wide - Water System Assessments	1800	0	0	1800	0	0	300	300	300	300	300	300
WAT-104	Potomac Shores Parkway Transmission Main	2849	1140	0	1709	0	438	100	100	1397	814	0	0
WAT-105	Somersworth Drive Loop Closure	1246	0	0	1246	0	0	0	187	1059	0	0	0
WAT-106	West Long View Dr. Water Main Replacement	1856	0	0	1856	0	0	0	203	1653	0	0	0
WAT-107	Brightwood Transmission Main Replacement	2009	1205	0	804	0	0	0	251	1000	758	0	0
WAT-108	I-95 Crossing at Dale Boulevard	1986	1192	0	794	0	0	0	249	1000	737	0	0
WAT-109	Montclair Booster Station Transmission Main	3468	1214	0	2254	0	436	400	1200	1432	0	0	0
WAT-111	Oakridge Pressure Zone Supplemental Supply from Forest Park BPS	2450	735	0	1715	0	85	164	190	0	914	1097	0
WAT-112	Stonewall Jackson BPS - Additional Discharge Main	3033	0	0	3033	0	217	126	210	620	1860	0	0
WAT-113	Herbert Drive Booster Pump Station Transmission Mains	465	93	0	372	0	0	0	60	405	0	0	0
WAT-115	Dawkins Branch Transmission Main	5216	3130	0	2086	0	420	574	1000	3222	0	0	0
WAT-116	Montclair Pressure Zone Improvements - Route 234	1586	0	0	1586	0	397	785	404	0	0	0	0
WAT-117	Montclair Pressure Zone Improvements - Pattie Elem. & Lakecrest	825	0	0	825	0	0	0	0	0	119	706	0
WAT-118	Nottoway Tank to Marumsco Creek Transmission Main	3258	652	0	2118	489	0	0	0	200	209	2849	0

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WATER TRANSMISSION PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
WAT-119	Montclair Pressure Zone - Additional Feed to T-25 & F-19	172	0	0	172	0	0	0	0	0	35	137	0
WAT-120	Cardinal Drive Transmission Main	1095	0	0	1095	0	0	0	0	201	894	0	0
WAT-121	Galveston Ct Loop Closure	748	0	0	748	0	0	0	0	0	165	583	0
WAT-122	Gainesville to Manassas South Connector	4067	1830	0	1830	407	153	387	0	539	2988	0	0
WAT-123	Piney Branch Transmission Main	6815	2726	0	2726	1363	200	250	0	700	4735	930	0
WAT-125	Poplar Lane Water Main	3996	0	0	3996	0	0	0	0	0	0	456	3540
WAT-126	Hoadly Pump Station - Additional Supply Main	807	0	0	807	0	0	0	0	0	0	110	697
WAT-127	Cow Branch Discharge Main - River Rock Way	857	171	0	686	0	0	0	151	706	0	0	0
WAT-129	Route 1 Water Main Reinforcement, North	6931	1733	0	1733	3466	3167	1882	1882	0	0	0	0
WAT-137	Possum Point Road Water Main Replacement - Phase 1	3716	0	0	3716	0	87	2361	518	750	0	0	0
WAT-138	Possum Point Road Water Main Replacement - Phase 2	4680	0	0	4680	0	0	0	510	2170	2000	0	0
WAT-143	Sudley Rd 14-inch Replacement, Loop Closure and Realignment	6733	0	0	6733	0	0	0	0	453	429	3000	2851
WAT-147	"G" Street Water Main Replacement and Upgrade	1626	0	0	1626	0	112	0	0	0	505	1009	0
WAT-149	Green Valley-Garfield Transmission Main - Phase 2	1231	616	0	616	0	0	0	143	1088	0	0	0
WAT-150	Cow Branch to Nottoway Transmission Main	1145	0	0	1145	0	0	0	159	986	0	0	0
WAT-151	Antioch Road Water Main Loop Closure	5835	2626	0	2626	584	4390	0	0	0	0	24	1421
WAT-152	Old Bridge Road Loop Closures	793	0	0	793	0	0	0	0	112	681	0	0

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WATER TRANSMISSION PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
WAT-153	Airport Tank Area System Improvements	1067	0	0	1067	0	0	0	145	922	0	0	0
WAT-154	Smoketown Road Loop Closures	355	0	0	355	0	0	0	0	61	294	0	0
WAT-156	Caton Hill Road Loop Closures	191	0	0	191	0	0	0	0	0	24	167	0
WAT-157	Dumfries Road - Vistabrooke Loop Closures	1136	114	0	1022	0	0	0	0	143	993	0	0
WAT-159	Flintlock Terrace Water Main Replacement	377	0	0	377	0	0	0	0	0	44	333	0
WAT-161	Old Stage Road Water Main Replacement	241	0	0	241	0	0	0	241	0	0	0	0
WAT-162	Galt Court Water Main Replacement	593	0	0	593	0	274	319	0	0	0	0	0
WAT-163	Wharf Lane Distribution System Improvements	323	0	0	323	0	0	0	38	285	0	0	0
WAT-164	Curtis Drive Water Main Extension	603	0	0	603	0	23	280	300	0	0	0	0
WAT-166	Bayvue Apartments Water System Replacement	840	0	0	840	0	0	0	86	754	0	0	0
WAT-167	Hoadly Pressure Zone Improvements - Pennington Lane	1005	0	0	1005	0	0	0	140	865	0	0	0
WAT-170	Davis Ford Road Water Main Loop Closure	414	0	0	414	0	0	0	0	48	366	0	0
WAT-172	Rose Hill Circle Water Main Replacement	244	0	0	244	0	170	74	0	0	0	0	0
WAT-173	Bethel Road Water Main	462	0	0	347	116	0	462	0	0	0	0	0
WAT-174	Frances Drive Water Main Replacement	614	0	0	614	0	0	0	75	539	0	0	0
WAT-175	Carter Lane Water Main Replacement	1616	0	0	1616	0	0	0	0	150	800	666	0
WAT-176	Lynn Street Water Main Replacement	1349	0	0	1349	0	0	0	300	500	549	0	0

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WATER TRANSMISSION PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
WAT-179	Hoadly Road Interconnection	4340	868	0	3472	0	0	0	0	695	2000	1645	0
WAT-181	Rt. 1 Trans. Main - Garfield BPS to Rt. 234	10363	5182	0	5182	0	580	500	0	2500	2500	4283	0
WAT-182	Rt. 1 Trans. Main - Rt. 234 to Fuller Heights Rd.	11393	5697	0	5697	0	493	500	0	2500	2500	5400	0
WAT-183	Montclair BPS Discharge Transmission Main	1402	421	0	981	0	500	200	702	0	0	0	0
WAT-184	Colchester Road Water Main Replacement	726	0	0	726	0	0	0	0	0	76	650	0
WAT-185	Dawson Court Water Main Replacement	170	0	0	170	0	0	0	0	22	148	0	0
WAT-187	Edgewood Drive Water Main Replacement	1700	0	0	1700	0	0	0	0	0	185	1515	0
WAT-188	Youngs Drive Water Main Replacement	2770	0	0	2770	0	0	0	0	300	800	1670	0
WAT-193	Godwin Drive Water Main Extension	537	161	0	376	0	77	460	0	0	0	0	0
	TOTAL: WATER TRANSMISSION PROJECTS	129325	31862	0	91040	6423	12219	10324	9944	30477	29622	27730	9009

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SEWAGE PUMPING STATION PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
SPS-100	Generator Replacement Program	600	0	0	600	0	0	200	200	200	0	0	0
SPS-104	Install Air Release Valves on Force Mains	1975	0	0	1975	0	1385	200	200	190	0	0	0
SPS-107	Replace Occoquan Forest Sewage Pumping Stations, OQL36 & OQL37	5157	0	0	5157	0	928	1850	2379	0	0	0	0
SPS-108	Replace Old Nokesville Sewage Pumping Station, L20	2198	0	0	2198	0	189	618	1391	0	0	0	0
SPS-109	Featherstone Sewage Pumping Station (L16), Flood Protection	1430	0	0	1430	0	225	75	0	1130	0	0	0
SPS-110	Hooes Run Sewage Pumping Station (L01) - Architectural and Energy Improvements	2116	0	0	2116	0	0	0	100	572	1444	0	0
SPS-111	Replace Holiday Inn Sewage Pumping Station, L29	2731	0	0	2731	0	2177	554	0	0	0	0	0
SPS-112	Replace Graham Park Sewage Pumping Station, L13	3301	0	0	3301	0	650	1000	1651	0	0	0	0
SPS-113	Heritage Hunt Sewage Pumping Station, L52, Force Main	9380	6566	0	2814	0	1444	752	1000	6184	0	0	0
SPS-114	Replace Heritage Hunt Sewage Pumping Station, L52	16532	6613	0	9919	0	1459	250	1000	6076	7747	0	0
SPS-115	Upgrade Belmont Sewage Pumping Station, L17 & Force Main Extension	5206	1562	0	3644	0	0	150	440	4616	0	0	0
SPS-116	Replace Hornbaker Sewage Pumping Station, L06, & Force Main	4528	0	0	4528	0	160	0	440	3928	0	0	0
SPS-118	Replace Koon's Lift Station, L28	1559	312	0	1247	0	0	150	300	1109	0	0	0
SPS-119	Replace Airport Sewage Pumping Station Pumps, L15	2836	0	0	2836	0	389	1615	832	0	0	0	0

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SEWAGE PUMPING STATION PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
SPS-120	Replace Pumps at Oak Ridge Sewage Pumping Station, L49	900	0	0	900	0	0	0	178	722	0	0	0
SPS-121	Replace Pumps at Dawson's Landing Sewage Pumping Station, L51	900	0	0	900	0	0	0	178	722	0	0	0
SPS-123	Replace Spinnaker Court Sewage Pumping Station, L02	1652	0	0	1652	0	0	150	300	1202	0	0	0
SPS-125	Occoquan Creek Sewage Pumping Station Rehabilitation, L04	269	0	0	269	0	0	75	194	0	0	0	0
SPS-126	Piney Branch Sewage Pumping Station Demolition & Gravity Sewer Extension	2652	1591	0	398	663	0	0	0	2652	0	0	0
SPS-127	Dumfries Lift Station Flood Protection, L18	228	0	0	228	0	0	75	153	0	0	0	0
SPS-129	Occoquan Plant Lift Station Flood Protection Assessment, L14	226	0	0	226	0	0	75	151	0	0	0	0
SPS-133	Featherstone Sewage Pumping Station (L16), Force Main Assessment	1101	0	0	1101	0	7	200	0	894	0	0	0
TOTAL: SEWAGE PUMPING STATION PROJECTS		67477	16644	0	50170	663	9013	7989	11087	30197	9191	0	0

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SEWER COLLECTION PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
SEW-100	County-Wide Emergency Capital Work	3000	0	0	3000	0	0	500	500	500	500	500	500
SEW-105	Redirect Colchester Road Sewer @ Randall Dr. to Everett Av.	663	0	0	663	0	0	0	86	577	0	0	0
SEW-106	Dumfries Force Main Replacement	3338	0	0	3338	0	794	1500	1044	0	0	0	0
SEW-107	Cow Branch Trunk Sewer Replacement	1812	453	0	1359	0	0	260	150	1000	402	0	0
SEW-115	Little Creek Sewershed Manhole Rehabilitation	603	0	0	603	0	302	301	0	0	0	0	0
SEW-118	Flat Branch Sewershed Rehabilitation/ CIPP Lining - Rixlew Ln	229	0	0	229	0	0	229	0	0	0	0	0
SEW-123	Hooes Run Sewer Rehabilitation/ CIPP Lining - Colby Drive	371	0	0	371	0	0	371	0	0	0	0	0
SEW-126	Dewey's Creek Sewer Rehabilitation/ L-18 Outfall Route 1	145	0	0	145	0	0	0	0	0	145	0	0
SEW-128	Belmont Sewer Rehabilitation/ CIPP Lining - Section 2B	1430	0	0	1430	0	1045	385	0	0	0	0	0
SEW-129	Belmont Sewer Rehabilitation/ CIPP Lining - Section 2A	599	0	0	599	0	0	599	0	0	0	0	0
SEW-130	Belmont Sewer Rehabilitation/ CIPP Lining - Section 1	426	0	0	426	0	0	426	0	0	0	0	0
SEW-142	Rose Hill Circle Sewer Main Replacement	244	0	0	244	0	170	74	0	0	0	0	0
SEW-144	Lakeridge Sewer Rehabilitation/ CIPP Lining- Deepford Dr to Woodfern Ct	1357	0	0	1357	0	0	0	1357	0	0	0	0
SEW-145	Woodbridge Sewer Rehabilitation/ CIPP Lining- Horner Road	999	0	0	999	0	0	0	999	0	0	0	0
SEW-147	Dumfries Sewer Rehabilitation/7 manholes - Old Stage Rd	100	0	0	100	0	0	0	100	0	0	0	0

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SEWER COLLECTION PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
SEW-149	Lake Ridge Sewer Rehabilitation/CIPP Lining – Old Bridge Road	274	0	0	274	0	0	0	0	274	0	0	0
SEW-152	East End Sewer Equalization Study	315	158	0	158	0	290	25	0	0	0	0	0
SEW-153	Dumfries Sewershed Rehabilitation/Woodland Dr & Sharon Rd	542	0	0	542	0	0	0	0	542	0	0	0
SEW-154	Dumfries Sewershed Rehabilitation/Williamstown Easement	328	0	0	328	0	0	328	0	0	0	0	0
SEW-155	Little Creek Sewershed Rehabilitation/Old Triangle Rd.	394	0	0	394	0	0	0	394	0	0	0	0
SEW-156	Replacement of Old Carolina and Rte 29 Crossing	577	577	0	0	0	0	577	0	0	0	0	0
SEW-157	Sudley Road Sewer Main Replacement & Upgrade	4206	4206	0	0	0	179	250	2978	799	0	0	0
SEW-158	Rippon Landing/CIPP Lining Sections S1A, S1B and S5A	782	0	0	782	0	0	0	0	0	782	0	0
SEW-160	Town of Occoquan/CIPP Lining	377	0	0	377	0	0	0	0	0	377	0	0
SEW-161	Lake Ridge/CIPP Oakwood Drive	591	0	0	591	0	0	0	0	0	591	0	0
SEW-162	Marumsco Hills/CIPP Lining Maurice Dr	437	0	0	437	0	0	0	0	0	437	0	0
TOTAL: SEWER COLLECTION PROJECTS		24139	5394	0	18746	0	2780	5825	7608	3692	3234	500	500

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WATER RECLAMATION FACILITY PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
WRF-100	Capital Emergency Projects	2565	0	0	2565	0	0	513	513	513	513	513	0
WRF-101	Land Improvements	7529	0	0	7529	0	522	0	0	1421	0	0	5586
WRF-105	Denitrification Filters	1532	0	0	1532	0	0	0	0	142	1255	135	0
WRF-110	Corrosion Control	1339	402	0	937	0	556	150	150	150	150	183	0
WRF-113	Incineration Backup	5198	1559	0	3639	0	533	250	500	1250	1250	315	1100
WRF-114	Ocoquan Forest WWTP Closure & Site Restoration	1889	0	0	1889	0	303	317	1269	0	0	0	0
WRF-116	Control & Process Building Renovations	5584	1675	0	3909	0	790	4321	473	0	0	0	0
WRF-118	Peak Flow Management Facilities	12093	12093	0	0	0	0	250	250	250	0	0	11343
WRF-122	Hydraulic Improvements	2705	812	0	1894	0	0	150	150	150	202	1245	808
WRF-123	Ongoing Renewal and Replacement	9499	0	0	9499	0	5	500	1619	2500	2500	2375	0
WRF-124	New Solids Treatment	73182	21955	0	51227	0	0	250	0	0	0	0	72932
WRF-125	Influent Flow Diversion Structure	607	607	0	0	0	382	225	0	0	0	0	0
WRF-126	Dynamic Hydraulic Model and Instrumentation	1003	301	0	702	0	317	200	300	186	0	0	0
WRF-127	Switchgear Building Protection	1471	441	0	1030	0	404	425	642	0	0	0	0
WRF-129	Refurbish Operations Support Facility	6309	1893	0	4416	0	0	0	0	0	0	0	6309
WRF-131	FBI Repairs and Modifications	3337	1001	0	2336	0	0	150	500	1500	887	300	0
WRF-134	Bioreactor Basin Improvements	9132	2740	0	6392	0	538	500	500	1486	1250	1250	3608

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENTS PROGRAM, FISCAL YEARS 2020 - 2024**

WATER RECLAMATION FACILITY PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
WRF-137	Old Administration Building Rehabilitation	1518	455	0	1063	0	0	0	0	0	0	0	1518
WRF-138	Facility Wide Improvement - Design-Build Project	81454	24436	0	57018	0	56	750	1000	1000	1000	1944	75704
WRF-139	Electrical Resiliency	7977	2393	0	5584	0	0	0	250	400	500	350	6477
WRF-140	Plant Lighting Improvement	1000	300	0	700	0	0	0	0	0	0	0	1000
WRF-141	Fuel Facilities Improvements	1500	450	0	1050	0	0	250	500	750	0	0	0
WRF-142	Replace/Upgrade Freight Elevators	3087	0	0	3087	0	0	68	611	1500	908	0	0
WRF-143	Septage Receiving Facility Upgrades	1285	386	0	900	0	0	0	0	0	0	0	1285
WRF-144	Plant Variable Frequency Drives and Associated Electrical Upgrades	6339	1902	0	4437	0	0	150	750	1439	4000	0	0
WRF-145	Plant Capacity Increase	17292	5188	0	12104	0	0	250	500	750	750	500	14542
WRF-146	Upgrade Odor Control Systems	8194	2458	0	5736	0	0	0	150	850	0	0	7194
WRF-147	Plant-Wide Buildings Roof Replacement	7020	2106	0	4914	0	0	125	500	1950	1200	1295	1950
WRF-148	Upgrades to In-Plant Pump Station Equipment	8194	2458	0	5736	0	0	0	0	0	250	750	7194
WRF-149	Pretreatment Facilities Upgrades	7194	2158	0	5036	0	0	0	0	0	0	0	7194
WRF-150	Mooney Featherstone Force Main Repair/Replacement	4079	1224	0	2855	0	0	80	500	782	2717	0	0
TOTAL: WATER RECLAMATION FACILITY PROJECTS		301107	91392	0	209715	0	4406	9874	11627	18969	19332	11155	225744

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENTS PROGRAM, FISCAL YEARS 2020 - 2024**

MISCELLANEOUS PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
MISC-100	Water and Sewer Master Plan Utility Adjustments (MPUA)	2500	2500	0	0	0	0	500	500	500	500	500	0
MISC-101	PWCSA Water & Sewer Facility Security Enhancements	3000	0	0	3000	0	0	600	600	600	600	600	0
MISC-102	Wellington Road Operations Center Expansion	5150	2575	0	2575	0	69	0	300	2405	2376	0	0
MISC-103	PWCSA Facilities Renewals and Upgrades	3448	0	0	3448	0	948	500	500	500	500	500	0
MISC-104	Spittle Complex Improvements	17163	8581	0	8581	0	103	55	500	1629	3000	3000	8876
MISC-105	Upgrade Spittle Complex Electrical Service	2259	0	0	2259	0	267	0	20	300	1672	0	0
MISC-106	Spittle Building HVAC Energy Improvements	1502	0	0	1502	0	220	0	0	100	1182	0	0
MISC-112	Spittle Office Building Addition	13089	6545	0	6545	0	659	1500	8215	2715	0	0	0
	TOTAL: MISCELLANEOUS PROJECTS	48111	20201	0	27910	0	2266	3155	10635	8749	9830	4600	8876

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENTS PROGRAM, FISCAL YEARS 2020 - 2024**

INFORMATION TECHNOLOGY PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
IT-102	SCADA System - Owner Services	3150	0	0	3150	0	1150	300	700	500	500	0	0
IT-103	SCADA System - Construction Phase	19939	0	0	19939	0	4158	2000	5000	5000	3781	0	0
IT-105	JD Edwards Upgrade	980	0	0	980	0	380	600	0	0	0	0	0
IT-106	Cayenta - CIS	830	0	0	830	0	330	0	0	0	0	500	0
IT-107	Computerized Maintenance Management System (CMMS) Upgrade/Replacement	8400	0	0	8400	0	1860	1917	1650	1380	1093	500	0
IT-110	Document Management System	720	0	0	720	0	0	100	370	250	0	0	0
IT-114	Business Analytics Dashboard Development	1012	0	0	1012	0	0	305	316	230	161	0	0
IT-116	Hydraulic Modeling Development	3177	0	0	3177	0	2760	274	143	0	0	0	0
IT-117	Vertical Asset Data Development	2211	0	0	2211	0	586	489	598	370	168	0	0
IT-118	System Integration	2570	0	0	2570	0	355	615	615	382	382	221	0
IT-121	Asset Management Analytics	999	0	0	999	0	540	184	200	75	0	0	0
IT-122	Integrated Utility Planning and Prioritization	1998	0	0	1998	0	468	715	715	100	0	0	0
IT-123	Data Governance	1805	0	0	1805	0	597	414	426	368	0	0	0
TOTAL: INFORMATION AND TECHNOLOGY PROJECTS		47791	0	0	47791	0	13184	7913	10733	8655	6085	1221	0

**PRINCE WILLIAM COUNTY SERVICE AUTHORITY
CAPITAL IMPROVEMENTS PROGRAM, FISCAL YEARS 2020-2024**

REGIONAL UTILITY PROJECTS

CIP Number	PROJECT NAME	ESTIMATED PROJECT COST	PROPOSED FUNDING SOURCES				PROPOSED SPENDING SCHEDULE						
		(\$1,000's)	E 002	003	R 004	OTHER	PRE FY-20	FY-20	FY-21	FY-22	FY-23	FY-24	BEYOND FY-24
FW-1	Fairfax Water Capacity Agreement	116120	37158	55738	23224	0	115131	822	167	0	0	0	0
UOSA-1	UOSA CIP	165547	0	14899	150648	0	96929	9509	10354	9965	9010	6508	23272
WAT-192	Occoquan River Crossing	10870	3261	0	7609	0	0	150	1162	4248	4248	1062	0
TOTAL: REGIONAL UTILITY PROJECTS		292537	40419	70637	181481	0	212060	10481	11683	14213	13258	7570	23272

**CAPITAL IMPROVEMENTS PROGRAM
FISCAL YEARS 2020 - 2024**



Service Authority
Prince William County

SECTION B

PROJECT DATA SHEETS



Service Authority

Prince William County



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
Criteria: 1, 2, 3, 4, 5
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 and Finance – Field Services; Managed By Finance – Field Services

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
280	125	100	100	100	100	0	805

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: Dale Boulevard 16-inch Water Meter Vault
CIP Number: WSUP-104
JDE Number(s): Not Assigned
Location: Southside of Dale Blvd. and I-95, end of Fairfax Water’s transmission main
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco
Magisterial District: WB – Woodbridge
Criteria: 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

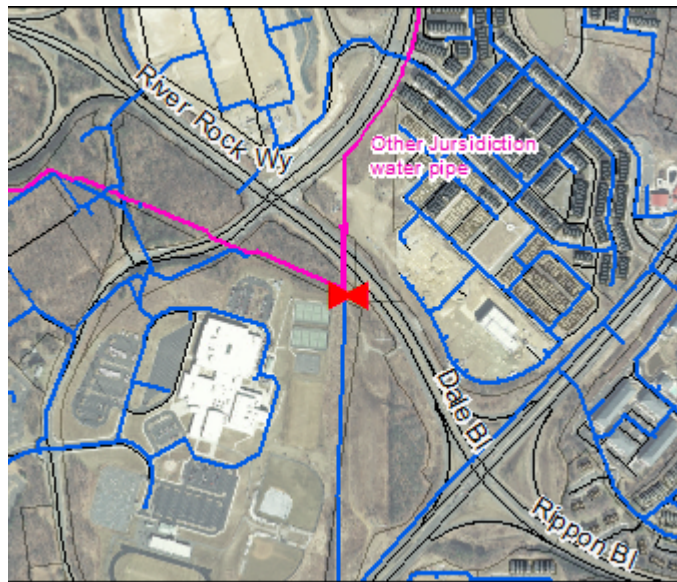
PROJECT DESCRIPTION

Project Description: Installation of a new 16-inch water meter vault, piping, and related appurtenances on the south side of Dale Boulevard at the end of the Fairfax Water owned transmission facilities. A constructability assessment will be required to determine the optimal location of the vault.

Project Benefit: This project will enable interconnections further south along the Route 1 corridor to improve system capacity and reliability within the Woodbridge Low pressure zone. Additionally, this project will allow smaller, less effective meter vaults to be removed from service.

Source Derivation: Engineering and Planning, Operations and Maintenance Divisions; Managed By Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	109	336	0	0	0	445

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 Water Booster Pumping Station
CIP Number: WSUP-105
JDE Number(s): 22WMOF2201, 24WMOF2201
Location: 17361 Four Seasons Dr., Dumfries
Pressure Zone: MO – Montclair
Sewershed: DM – Dumfries
Magisterial District: PO – Potomac
Criteria: 1, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division and Hazen and Sawyer

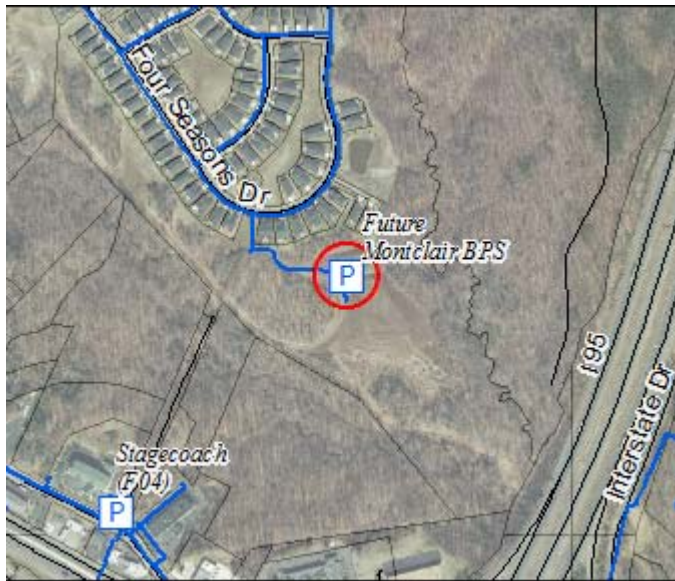
PROJECT DESCRIPTION

Project Description: Construction of a new booster pumping station with associated power and control accessories, including an emergency generator. The supply line for the new station will be the Montclair Booster Station Transmission Main (WAT-109) which will cross Dewey's Creek and I-95.

Project Benefit: This project will provide auxiliary pumping capacity to the Cow Branch Water 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 will 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; Managed By Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
894	1500	4000	4609	0	0	0	11003

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: Herbert Drive Water Booster Pumping Station Modifications
CIP Number: WSUP-110
JDE Number(s): Not Assigned
Location: 13065 Lupine Tn., Woodbridge
Pressure Zone: LR – Lake Ridge
Sewershed: OC – Occoquan Creek
Magisterial District: OC – Occoquan
Criteria: 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

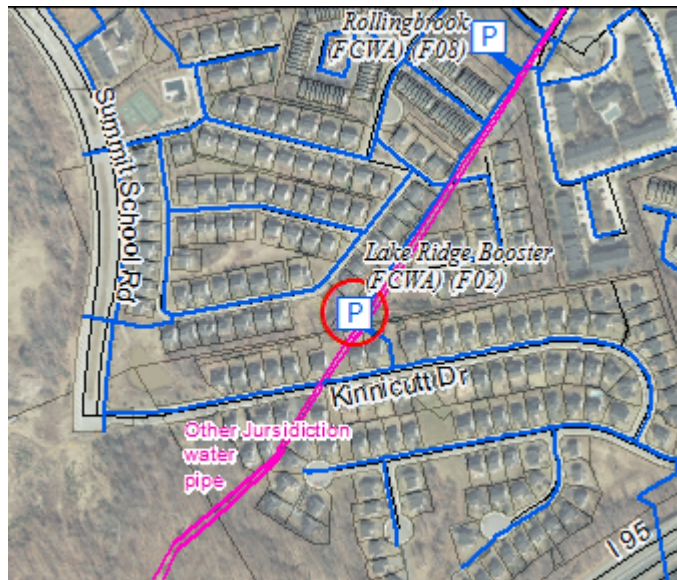
PROJECT DESCRIPTION

Project Description: Evaluation, replacement and upgrade of the Herbert Drive Booster Pumping Station to include increasing pumping capacity, repairing structural deficiencies, updating the electrical supply and controls, and installing a generator. Additional land will be required.

Project Benefit: The pump station was constructed in 1967 and the current pumps are old and need replaced as one has a cracked casing. This project will improve the station’s efficiency, pumping capacity, and reliability to supply the Lake Ridge Pressure Zone.

Source Derivation: Operations and Maintenance, Engineering and Planning Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	309	2000	1350	0	0	3659

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: 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
Sewershed: None
Magisterial District: GN – Gainesville
Criteria: 1, 4
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning, Operations and Maintenance Divisions

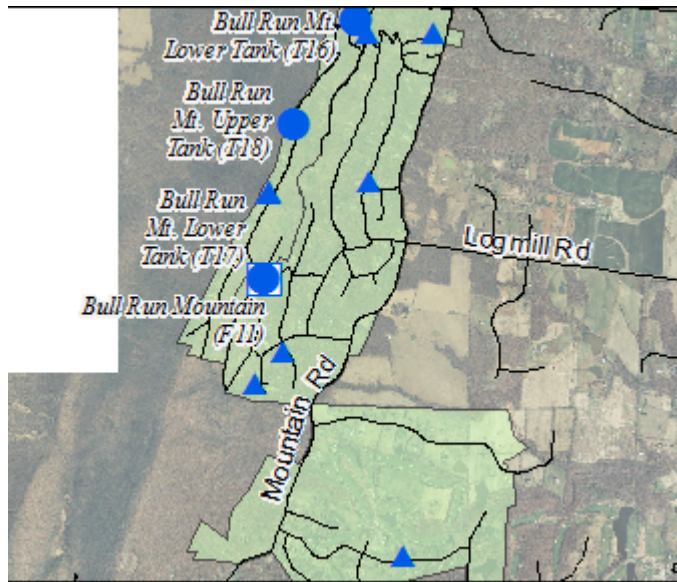
PROJECT DESCRIPTION

Project Description: The evaluation, design, and construction of improvements in the Bull Run Mountain Well Systems to continue to meet demands. 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 booster pump to increase capacity in the system.

Project Benefit: These modifications and improvements will increase reliability and enhance system operations, and ensure there is adequate capacity to meet future demands.

Source Derivation: Operations and Maintenance, Engineering and Planning Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
455	877	1155	2257	0	0	0	4744

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 Modifications
CIP Number: WSUP-112
JDE Number(s): 22WMSF1851, 24SMWF1851
Location: Blooms Quarry Ln., Manassas
Pressure Zone: MS – Manassas Southside
Sewershed: YS – Yorkshire
Magisterial District: CO – Coles
Criteria: 1, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Design of the selected modifications and upgrades to the Manassas Southside Booster Pumping Station including a new 3rd pump, new impellers, pump control valves, and VFDs. A standby generator will be selected, the HVAC system will be modified for easier maintenance, and the SCADA and electrical systems will be updated to current standards.

Project Benefit: The increased pumping capacity at the booster pumping station will improve pumping efficiencies and provide better service and reliability to existing and future customers within the Manassas Southside Pressure Zone.

Source Derivation: Engineering and Planning, Operations and Maintenance Divisions; Managed By Engineering and Planning. Manassas Southside Booster Pumping Station PER - Hazen & Sawyer (January 2018, Revision July 27, 2018)

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
187	275	0	1969	0	0	0	2431

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: Capital Meter Program – Expansion
CIP Number: WSUP-114
JDE Number(s): 22WCWZ0001
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Finance – Field Services

PROJECT DESCRIPTION

Project Description: Field Services and Engineering staff installs new meters as a result of growth. Owners / Developers pay a meter fee at the time of certification. These offsetting revenues are recorded to the Expansion Fund. Once installed, meters are maintained and/or replaced under the Replacement Fund program (WSUP-115). The SA began capitalizing the meter program for accounting purposes in FY10.

Project Benefit: The goal of this project is to properly account for all new meter expenditures related to growth for asset capitalization purposes.

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

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	400	400	400	400	400	0	2000

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: Capital Meter Program – Replacement
CIP Number: WSUP-115
JDE Number(s): 24WCWZ0001
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Finance – Field Services

PROJECT DESCRIPTION

Project Description: At present, the SA has over 90,000 water meters to maintain through the Capital Meter Program. Approximately 93% of the meters are residential ¾-inch meters that have a life expectancy of 15 years or 1.5 MG of consumption. The life of larger meters is more variable and they are often repaired or rebuilt. Each year, the Field Services Department looks at the age and consumption of each meter to estimate replacements and repairs for the next year. On average, 7,500 meters are repaired or replaced annually. The SA began capitalizing the meter program for accounting purposes in FY10.

Project Benefit: Proper maintenance and timely replacement of meters minimizes water loss and maximizes revenue by accurately capturing consumption. In addition, the meter reading process is more efficient as manual and touch-read meters reach their useful life and are exchanged for radio read meters. The Service Authority currently has less than 1% manual read meters, 8% touch read meters, and 92% radio read meters.

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

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	1375	1375	1375	1375	1375	0	6875

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
Prince William County



Water Storage Projects

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Potomac Shores Water Storage Tank
CIP Number: WST-104
JDE Number(s): 22WDTT3501
Location: Dumfries Pressure Zone
Pressure Zone: DT – Dumfries
Sewershed: DM – Dumfries
Magisterial District: PO – Potomac
Criteria: 1, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Design and construction of a 2 MG elevated steel water storage tank in the Potomac Shores community of the Dumfries Pressure Zone. An easement for the tank site, access road, and water main were proffered with the new middle school in Potomac Shores.

Project Benefit: This tank will help maintain system pressures, improve reliability, and increase fire flows to the area by providing additional equalization, emergency, and fire protection storage.

Source Derivation: Engineering and Planning Division; Managed By Engineering and Planning Division. Hazen and Sawyer PER (Cherry Hill Elevated Water Storage Tank) October 2016.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
700	1300	4000	3062	0	0	0	9062

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: Conversion of Storage Tanks to Pumped Storage
CIP Number: WST-107
JDE Number(s): Not Assigned
Location: 7509 Bethlehem Rd., Manassas
Pressure Zone: GW – Gainesville/Wellington
Sewershed: BR – Broad Run
Magisterial District: GN – Gainesville
Criteria: 1, 2, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering Division

PROJECT DESCRIPTION

Project Description: Evaluation and study of several existing storage tanks operated by the SA to determine the feasibility of converting them to pumped storage. Certain tank styles limit the amount of water that flows through the tank during normal operation, which could result in excessive water age. The following storage tanks are recommended for evaluation: Airport (T03), Cardinal Drive / Montclair North (T06), Battery Heights (T04), Locust Shade (T29), Nottoway (T28), and Potomac Mills (T23). The study will also include recommendations on the design, permitting, and construction of any upgrades.

Project Benefit: Improve water quality and system pressures by installing pumps to promote better turnover and prevent water stagnation within storage tanks while also increasing system pressures.

Source Derivation: Engineering and Planning, Operations and Maintenance Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	329	328	0	0	657

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: Water Storage Tank Maintenance Program
CIP Number: WST-110
JDE Number(s): Not Assigned
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Management 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, this project will 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 this 5-year CIP period include Manassas Southside (T24), Braemar (T26), Interstate (T22), Dominion Valley (T30), and Nottoway (T28). 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 will prevent stagnation of water within the tank with the installation of mixing systems.

Source Derivation: Engineering and Planning, Operations and Maintenance Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
200	1200	1200	1200	1200	1200	0	6200

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
Prince William County



Water Transmission Projects

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION		PROJECT DESCRIPTION	
Project Name:	County Wide – Emergency Capital Work	Project Description:	This project allows for emergency replacement and/or construction of water mains county-wide that could arise during the fiscal year.
CIP Number:	WAT-100	Project Benefit:	The goal of this project is to maintain a reliable and operational system, and to account for emergency rehabilitation and/or replacements within a reasonable time frame. This project will improve fire flow, reliability, and service to the customers.
JDE Number(s):	Multiple	Source Derivation:	Engineering and Planning Division
Location:	County Wide		
Pressure Zone:	Multiple		
Sewershed:	Multiple		
Magisterial District:	Multiple		
Criteria:	1, 2, 3, 4, 5		
Project Estimate:	Order of Magnitude		
Estimate By:	Engineering and Planning Division		



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	200	200	200	200	200	200	1200

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 DESCRIPTION	
Project Name:	County Wide – Water System Assessment	Project Description:	This project will conduct water system assessments of the Eastern & Western Prince William County pressure zones to determine the internal and external condition of the piping network for the purpose of identifying locations which require repairs, replacements and/or rehabilitation. The assessment will also include water age and quality evaluations as well as a vulnerability analysis of the aging infrastructure within each pressure zone.
CIP Number:	WAT-101	Project Benefit:	The goal of this project is to identify opportunities to be proactive in the management of PWCSA’s assets as well as proactive in the protection of public health.
JDE Number(s):	Multiple	Source Derivation:	Engineering and Planning Division
Location:	County Wide		
Pressure Zone:	Multiple		
Sewershed:	Multiple		
Magisterial District:	Multiple		
Criteria:	1, 2, 3, 4, 5		
Project Estimate:	Order of Magnitude		
Estimate By:	Engineering and Planning Division		



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	300	300	300	300	300	300	1800

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: Potomac Shores Parkway Transmission Main
CIP Number: WAT-104
JDE Number(s): 22WDTM8602, 24WDTM8602
Location: Rt. 234/Rt. 1 Intersection, Rt. 1 to River Heritage Blvd.
Pressure Zone: DT – Dumfries
Sewershed: DM – Dumfries
Magisterial District: PO – Potomac
Criteria: 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Design and construction of approximately 7,450 feet of 16-inch and 1,140 feet of 12-inch water main along the future Potomac Shores Parkway from Route 1 to River Heritage Boulevard.
Project Benefit: This project will increase the transmission capacity and reinforce the existing network grid within the Dumfries pressure zone as well as serve new development in Potomac Shores. Coordinating the construction of water main with the proposed road projects will save in pavement restoration costs and minimize traffic disruptions.
Source Derivation: Engineering and Planning Division; Managed By RK&K

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
438	100	100	1397	814	0	0	2849

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

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Somersworth Drive Loop Closure
CIP Number: WAT-105
JDE Number(s): Not Assigned
Location: Between Bull Run Rd. and Old Centerville Rd.
Pressure Zone: GM – Greater Manassas
Sewershed: FB – Flat Branch
Magisterial District: CO – Coles
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 2,260 feet of 16-inch water main to replace an existing older 12-inch DIP along Somersworth Drive. This project will also include the installation of a new PRV vault.
Project Benefit: This project provides enhanced connectivity between two Fairfax Water supply points to the Western system. This project will also improve fire flow, service and reliability, and eliminate a single point of failure.
Source Derivation: Engineering and Planning Division and Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	187	1059	0	0	0	1246

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

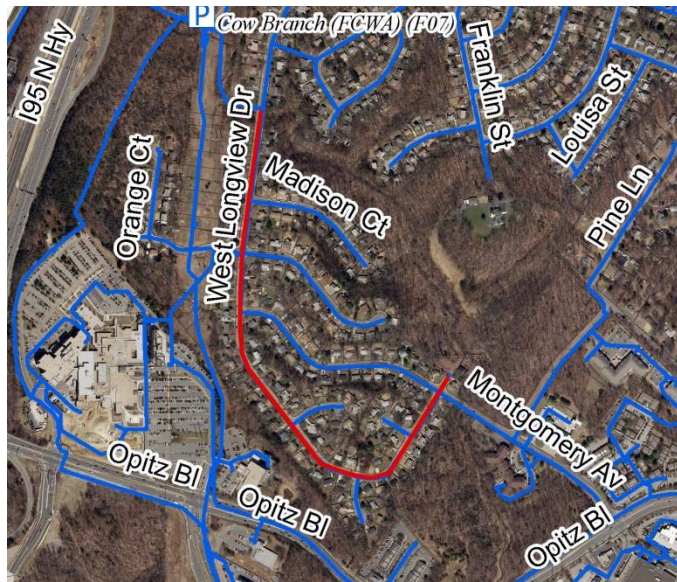
PROJECT INFORMATION

Project Name: West Long View Drive Water Main Replacement
CIP Number: WAT-106
JDE Number(s): Not Assigned
Location: West Longview Dr.
Pressure Zone: LR – Lake Ridge
Sewershed: NE – Neabsco
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of approximately 4,000 feet of an existing 10-inch cast iron pipe with 12-inch DIP along West Long View Drive.
Project Benefit: Improve system reliability, service to customers, fire flow capability, and reduce maintenance costs. This project will also provide additional reliability to the Hospital.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	203	1653	0	0	0	1856

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

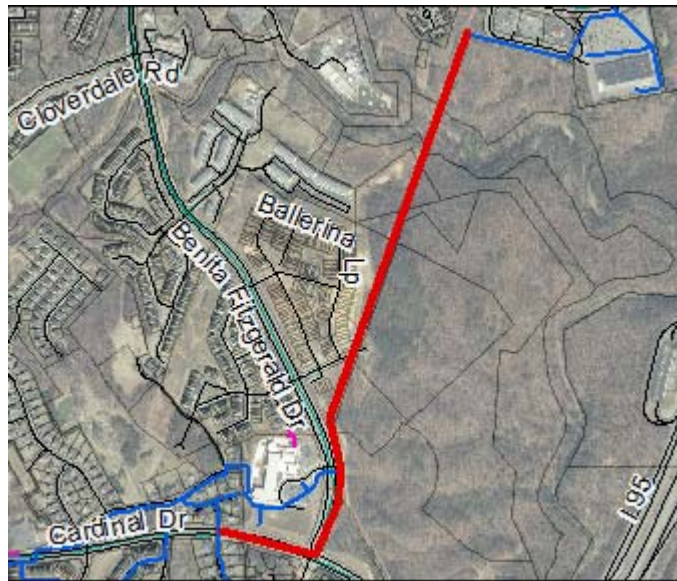
PROJECT INFORMATION

Project Name: Brightwood Transmission Main Replacement
CIP Number: WAT-107
JDE Number(s): Not Assigned
Location: Brightwood Forest
Pressure Zone: MO – Montclair
Sewershed: NE – Neabsco
Magisterial District: NE – Neabsco
Criteria: 3, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 5,225 feet of 24-inch water transmission main to replace and relocate the existing 16-inch water main that traverses the new Brightwood Ridge Development.
Project Benefit: Increase hydraulic capacity to a densely developing corridor and improve system reliability within the Montclair Pressure Zone.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	251	1000	758	0	0	2009

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

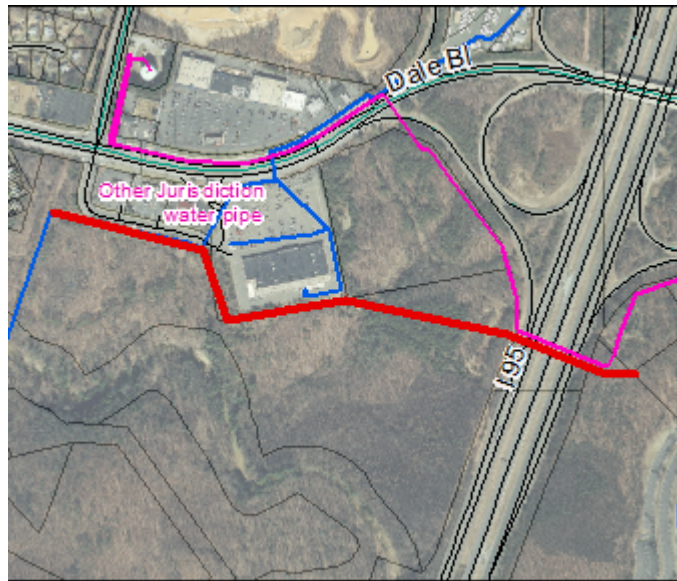
PROJECT INFORMATION

Project Name: I-95 Crossing at Dale Boulevard
CIP Number: WAT-108
JDE Number(s): Not Assigned
Location: I-95 Crossing to Brightwood Ridge
Pressure Zone: MO – Montclair
Sewershed: NE – Neabsco
Magisterial District: NE – Neabsco
Criteria: 3, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 3,440 feet of 24-inch water main from the existing 24-inch main on the east side of I-95 through or adjacent to the Prince William County War Museum to connect to the proposed transmission main in Brightwood Ridge (WAT-107).
Project Benefit: Increase hydraulic capacity to a densely developing corridor and improve system reliability within the Montclair Pressure Zone.
Source Derivation: WRA East End Water System Technical Memorandum, 2001

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	249	1000	737	0	0	1986

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

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Montclair Booster Station Transmission Main
CIP Number: WAT-109
JDE Number(s): 22WMOM8101, 24WMOM8101
Location: I-95 Crossing
Pressure Zone: MO – Montclair
Sewershed: DE – Deweys Branch Lift Station
Magisterial District: PO – Potomac
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

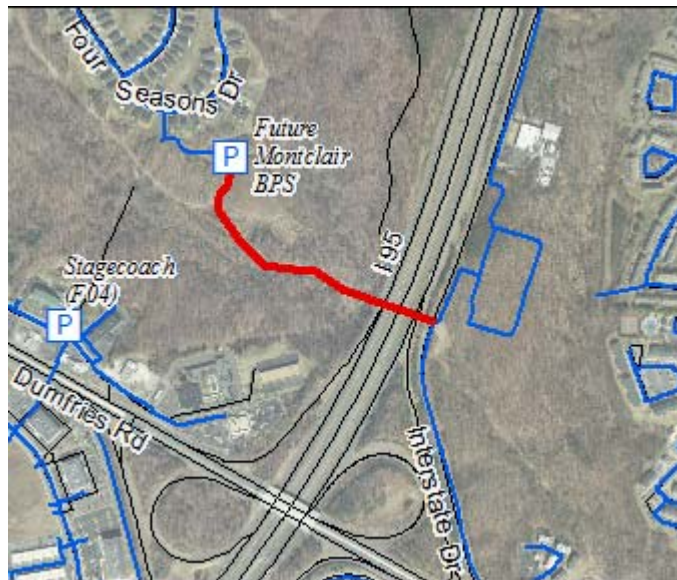
PROJECT DESCRIPTION

Project Description: Construction of approximately 1,000 feet of 24-inch water main and 3,000 feet of 16-inch water main from Interstate Drive crossing under I-95 to the new Montclair Booster Pumping Station (WSUP-105). Exact sizing of the water main will be determined as part of the design/build contract.

Project Benefit: Provides the supply to the new Montclair Water Booster Pumping Station which serves the Montclair Pressure Zone. The pumping station and transmission main projects will provide a second supply source to the Montclair and Oak Ridge Pressure Zones and increase the reliability of the Montclair system.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
436	400	1200	1432	0	0	0	3468

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: Oakridge Pressure Zone Supplemental Supply From Forest Park BPS

CIP Number: WAT-111

JDE Number(s): 22WORM0501

Location: Dumfries Rd. from Forest Park BPS to Fincastle Dr.

Pressure Zone: OR – Oak Ridge

Sewershed: PC – Powell’s Creek

Magisterial District: PO – Potomac

Criteria: 1, 2, 3, 4, 5

Project Estimate: Order of Magnitude

Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 3,950 feet of 16-inch water main along Dumfries Road and Carrs Brooke Way from the 16-inch discharge line at the Forest Park Booster Pumping Station to the 16-inch water main at the intersection of Carrs Brooke Way and Fincastle Drive.

Project Benefit: This project will provide an additional supply main from the Forest Park Booster Pumping Station discharge main and improved reliability in the Oak Ridge Pressure Zone should there be a break in the single existing 16-inch supply main along Dumfries Road.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
85	164	190	0	914	1097	0	2450

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: Gainesville Pressure Zone Additional Discharge Main from F14
CIP Number: WAT-112
JDE Number(s): 24WGWM0901
Location: 8814 Rixlew Lane, Manassas
Pressure Zone: GW – Gainesville
Sewershed: FB – Flat Branch
Magisterial District: BR – Brentsville
Criteria: 1, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 2,300 feet of 30-inch water main parallel to the existing 42-inch water main and the railroad tracks. This main will connect the Stonewall Jackson Booster Pumping Station (F14) to the Gainesville Pressure Zone. The preliminary engineering report will determine if upgrades to the booster pumping station and suction main are required. More detailed cost estimates will be available at the completion of the report.

Project Benefit: Provides an additional supply from the discharge at Stonewall Jackson (F14) Booster Pumping Station to improve reliability in the Gainesville Pressure Zone should there be a break in the single existing 42-inch discharge main at the railroad crossing.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
217	126	210	620	1860	0	0	3033

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: Herbert Drive BPS Transmission Main
CIP Number: WAT-113
JDE Number(s): Not Assigned
Location: Summit School to I-95 crossing
Pressure Zone: LR – Lake Ridge
Sewershed: OC – Occoquan Creek
Magisterial District: OC – Occoquan
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

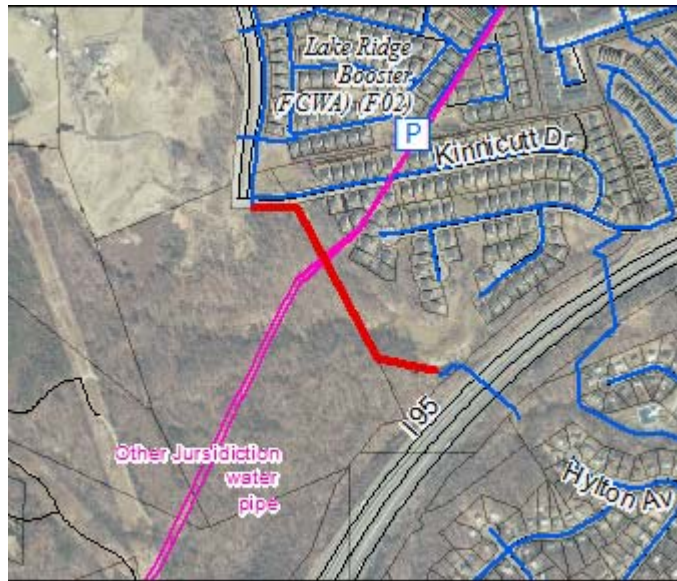
PROJECT DESCRIPTION

Project Description: Construction of approximately 1,520 feet of 16-inch water main to connect the existing 16-inch water main in Summit School Drive to the existing dry 18-inch water main crossing under I-95 at Marumsco Creek.

Project Benefit: This project will extend the discharge mains from Herbert Drive Booster Pumping Station toward the Nottoway Tank to connect to the future main from the Nottoway Tank to Marumsco Creek (WAT-118). This project will ultimately improve reliability, redundancy, and service to existing customers as well as increase transmission capacity within the Lake Ridge Pressure Zone.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	60	405	0	0	0	465

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: Dawkins Branch Transmission Main
CIP Number: WAT-115
JDE Number(s): 22WBRM0101, 24WBRM0101
Location: Sudley Manor Dr. to Devlin Rd. via University Blvd.
Pressure Zone: GW – Gainesville
Sewershed: BR – Broad Run
Magisterial District: BR – Brentsville
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

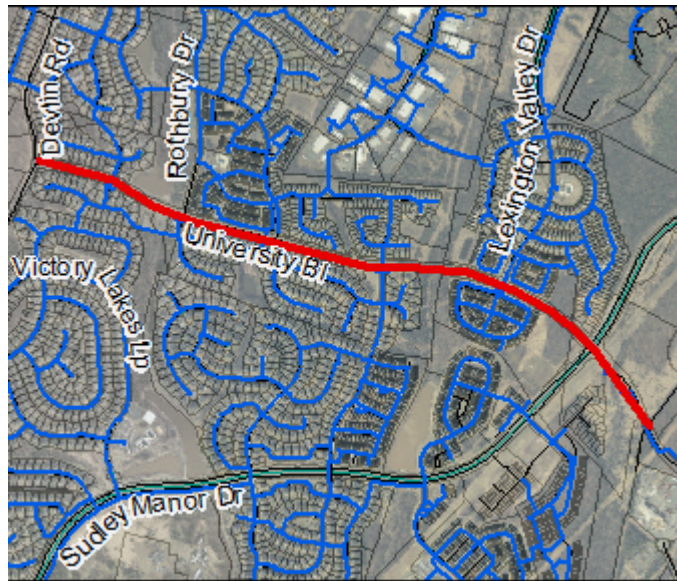
PROJECT DESCRIPTION

Project Description: Construction of approximately 4,150 feet of 30-inch water main along University Drive from PWC project tie-in at Edmonston Drive to the west side of Devlin Road.

Project Benefit: This project will extend a major transmission main through the center of the Gainesville/Wellington Pressure Zone to convey additional pump discharge from the Stonewall Jackson Booster Pumping Station westward. This project will 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

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
420	574	1000	3222	0	0	0	5216

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

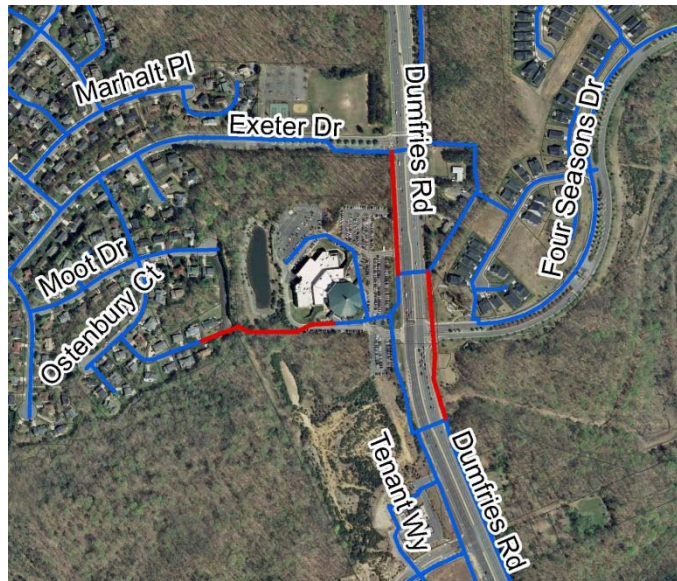
PROJECT INFORMATION

Project Name: Montclair Pressure Zone Improvements – Route 234
CIP Number: WAT-116
JDE Number(s): 24WMOM0203
Location: Near First Mount Zion Baptist Church and Four Seasons Dr. along Rt. 234
Pressure Zone: MO – Montclair
Sewershed: DE – Deweys Branch
Magisterial District: PO – Potomac
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 760 feet of 8-inch and 1,450 feet of 12-inch water main along the Dumfries Road corridor to reinforce the distribution system in the area of Mount Zion Church and Fortuna Shopping Center.
Project Benefit: Increase transmission capacity to provide better service to existing customers as well as redundancy along the Dumfries Road corridor. This will benefit the Mount Zion Church, the shopping center and Brittany Subdivision, and eliminate dead-end mains for improved circulation and water quality.
Source Derivation: Engineering and Planning Division and Operations & Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
397	785	404	0	0	0	0	1586

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

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Montclair Pressure Zone Improvements – Pattie Elementary School & Lakecrest
CIP Number: WAT-117
JDE Number(s): Not Assigned
Location: Pattie ES & Lakecrest Loop Closures
Pressure Zone: MO – Montclair
Sewershed: PC – Powell’s Creek
Magisterial District: PO – Potomac
Criteria: 1, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 1,750 feet of 12-inch and 1,200 feet of 8-inch water main to close several loops in the area of John F. Pattie Elementary School and the adjacent Lakecrest development.
Project Benefit: This project will improve transmission capacity to the Forest Park Tank and service reliability to the existing elementary school and the Lakecrest area. Additionally, this project will eliminate several dead-end mains for improved water quality and distribution system reinforcement.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	119	706	0	825

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: Nottoway Tank to Marumsco Creek Transmission Main
CIP Number: WAT-118
JDE Number(s): Not Assigned
Location: Nottoway Tank to Marumsco Creek at I-95
Pressure Zone: LR – Lake Ridge
Sewershed: BM – Belmont
Magisterial District: WB – Woodbridge
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

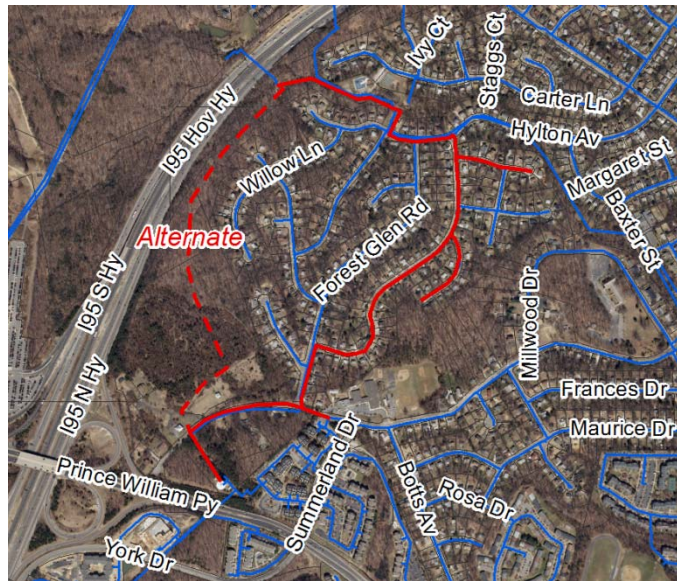
PROJECT DESCRIPTION

Project Description: Construction of approximately 6,700 feet of 16-inch water main through an existing development from the existing 16-inch main at the Nottoway Tank to the existing 18-inch dry main crossing I-95. An alternate route would traverse a proposed development north of the Nottoway Tank to the same final destination. This project also includes the replacement of approximately 1,300 feet of 6-inch main.

Project Benefit: This project will increase transmission capacity and fire flow to Marumsco Village and surrounding areas in the Lake Ridge Pressure Zone. This project is part of a major transmission main upgrade to connect across I-95 to Telegraph Road (WAT-113) which will strengthen delivery from the Cow Branch Booster Pumping Station to the Old Bridge Road Corridor of the Lake Ridge Pressure Zone.

Source Derivation: WRA East End Water System Technical Memorandum, 2001

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	200	209	2849	0	3258

Proposed Funding Sources	
Exp. Fund (02) – Availability Funds	20%
Commit. Funds (03) – Availability Funds	-
Repl. Fund (04) – User Rates	65%
Other Contrib. – Development Contributions	15%
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Montclair Pressure Zone – Additional Feed to T-25 & F-19
CIP Number: WAT-119
JDE Number(s): Not Assigned
Location: Dumfries Rd. and Spriggs Lane Fire Rd.
Pressure Zone: MO – Montclair
Sewershed: PC – Powell’s Creek
Magisterial District: PO – Potomac
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 260 feet of 16-inch water main from Olivia Way to the existing 16-inch water main along Dumfries Road at the old Montclair South Tank site.
Project Benefit: This project provides an additional feed to the Forest Park Tank and Booster Pumping Station, and improves reliability in the Montclair and Oak Ridge Pressure Zones.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	35	137	0	172

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: Cardinal Drive Transmission Main
CIP Number: WAT-120
JDE Number(s): Not Assigned
Location: Cardinal Dr.
Pressure Zone: MO – Montclair
Sewershed: PC – Powell’s Creek
Magisterial District: PO – Potomac
Criteria: 1, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 2,800 feet of 16-inch water main along Cardinal Drive from the Montclair North (Cardinal Drive) Tank to the existing 16-inch main at Cardinal Drive and Greenmount Drive. This project will also construct approximately 175 feet of 8-inch main in Dyers Road and 120 feet of 6-inch main in Auburn Hills Drive to close gaps in the distribution system.

Project Benefit: This project will complete a major transmission main to the Montclair North Tank to increase transmission system capacity, improve service and reliability, and enhance water quality within the pressure zone.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	201	894	0	0	1095

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: Galveston Court Loop Closure
CIP Number: WAT-121
JDE Number(s): Not Assigned
Location: Galveston Ct. to Prince William Pkwy.
Pressure Zone: HO – Hoadly
Sewershed: WA – Airport
Magisterial District: CO – Coles and OC – Occoquan
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 1,200 feet of 16-inch water main to close a loop from the Harris Teeter Shopping Complex to the future proposed 12-inch water main along Prince William Parkway.
Project Benefit: This project will improve reliability and service to the shopping center with the loop closure and enhance water quality.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	165	583	0	748

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

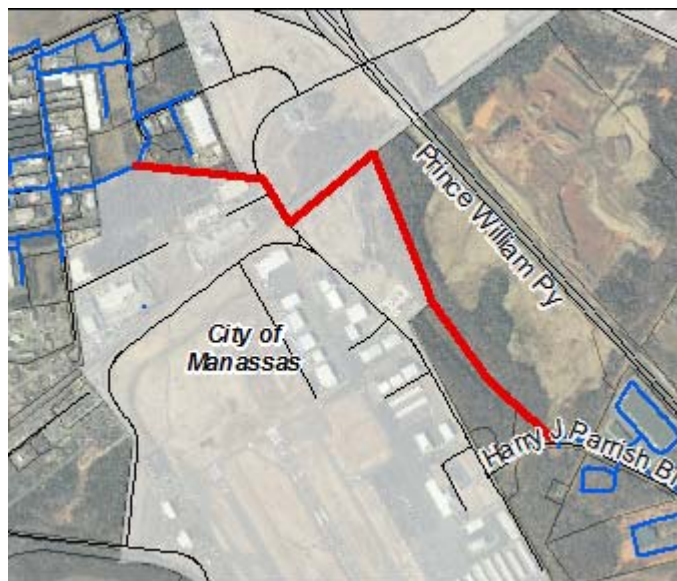
PROJECT INFORMATION

Project Name: Gainesville to Manassas South Connector
CIP Number: WAT-122
JDE Number(s): Not Assigned
Location: Rt. 28 Corridor to Godwin Dr.
Pressure Zone: MS – Manassas South and GW – Gainesville
Sewershed: GD – Godwin Drive Lift Station
Magisterial District: BR – Brentsville and CO – Coles
Criteria: 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division & CH2M

PROJECT DESCRIPTION

Project Description: Construction of approximately 6,500 feet of 16-inch water main to interconnect the Manassas South and Gainesville Pressure 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 will reduce the dependency of the City of Manassas during emergencies and provide a secondary route for the transmission of water from Fairfax Water to all areas around Manassas served by the PWCSA.
Source Derivation: Engineering and Planning Division , WRA Water Supply and Distribution System Optimization Study, 2002

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
153	387	0	539	2988	0	0	4067

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: Piney Branch Transmission Main
CIP Number: WAT-123
JDE Number(s): Not Assigned
Location: Devlin Rd. to Gainesville Tank
Pressure Zone: GW – Gainesville
Sewershed: BR – Broad Run
Magisterial District: BR – Brentsville
Criteria: 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 10,800 feet of 30-inch transmission main along the University Drive Corridor from Devlin Road across the former Vulcan Properties to the existing 24-inch main at the Gainesville Tank.

Project Benefit: This project will increase the pumped discharge from the Stonewall Jackson Booster Pumping Station westward. This project will strengthen the supply of water throughout the Gainesville Pressure Zone and improve the transfer capacity to the Haymarket Pressure Zone. It is anticipated that the construction of this project will be coordinated with development.

Source Derivation: GFI Western Zone Water Transmission Main Study, 1992

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
200	250	0	700	4735	930	0	6815

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	40%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	40%
Other Contrib. – Development Contributions	20%
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Poplar Lane Water Main
CIP Number: WAT-125
JDE Number(s): Not Assigned
Location: Poplar Ln., Riverview Ln. and Devils Reach Rd.
Pressure Zone: WL – Woodbridge
Sewershed: OP – Occoquan Plant
Magisterial District: OC – Occoquan
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

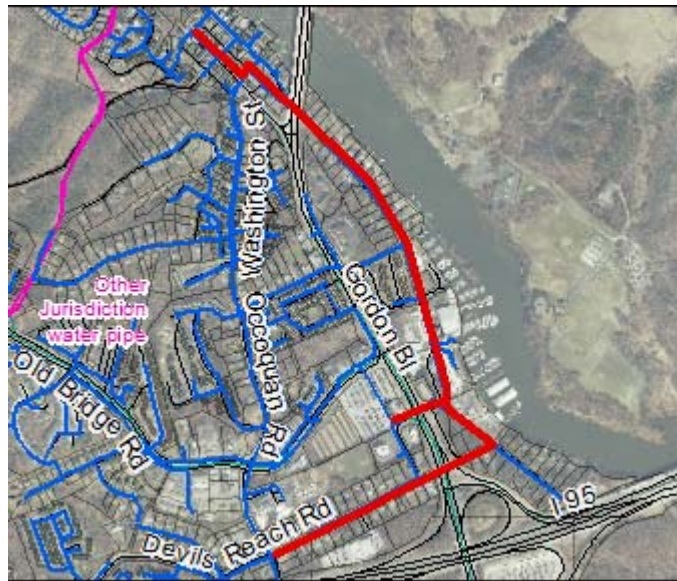
PROJECT DESCRIPTION

Project Description: Construction of a parallel water main along Poplar Lane to supplement the existing 16-inch main along Occoquan Road in case of a water main break on Washington Street near Center Lane. This project will construct approximately 7,500 feet of 16-inch and 500 feet of 8-inch waterlines along Poplar Lane, Riverview Lane and Devils Reach Road.

Project Benefit: This project will improve fire flow, reliability, and service to customers in the area by supplementing the existing 16-inch main along Occoquan Road and providing an alternate flow path in case of a water main break on Washington Street near Center Lane.

Source Derivation: Engineering and Planning, and Operations and Maintenance Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	0	456	3540	3996

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: Hoadly BPS – Additional Supply Main
CIP Number: WAT-126
JDE Number(s): Not Assigned
Location: Old Bridge Rd. and Smoketown Rd.
Pressure Zone: LR – Lake Ridge and HO – Hoadly
Sewershed: WA – Airport and HO – Hooes Run
Magisterial District: OC – Occoquan
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 1,500 feet of 16-inch water main from Smoketown Road to Springwoods Drive at the Hoadly Booster Pumping Station.
Project Benefit: Provides redundancy for the existing 30 year old, 16-inch main along Old Bridge Road and Springwoods Drive which supplies the Hoadly Booster Pumping Station. This main will improve reliability in the Lake Ridge and Hoadly Pressure Zones.
Source Derivation: CH2M Critical Loops Technical Memo

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	0	110	697	807

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: Cow Branch Discharge Main – River Rock Way
CIP Number: WAT-127
JDE Number(s): Not Assigned
Location: River Rock Way
Pressure Zone: MO – Montclair
Sewershed: NE – Neabsco
Magisterial District: WB – Woodbridge
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 1,450 feet of 24-inch water main along River Rock Way from the existing 24-inch stub-out in Opitz Boulevard to the existing 18-inch main in the shopping center to close a major loop in the Montclair Pressure Zone.

Project Benefit: The project will provide additional transmission capacity to the Montclair Pressure Zone, improve system hydraulics, and increase reliability.

Source Derivation: WRA East End Water System Technical Memorandum, 2001

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	151	706	0	0	0	857

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: Route 1 Water Main Reinforcement, North
CIP Number: WAT- 129
JDE Number(s): 22WWLM8101, 24WWWLM8101
Location: Rt. 1, from Featherstone Rd. to Annapolis Way
Pressure Zone: WL – Woodbridge
Sewershed: BM – Belmont
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

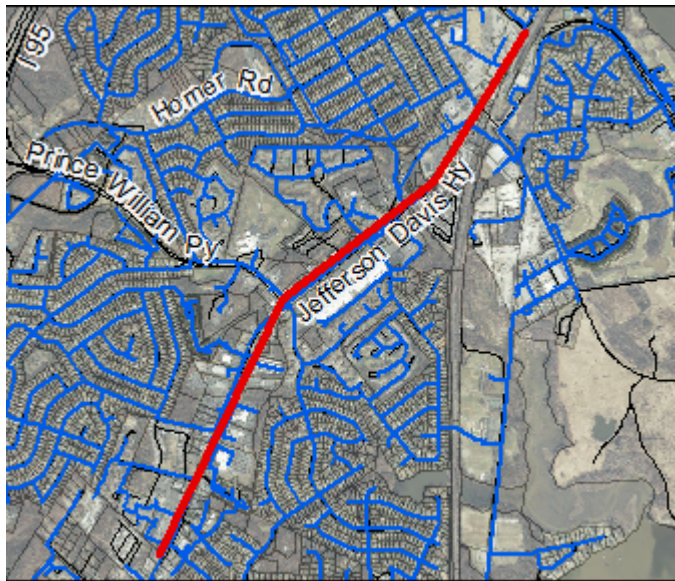
PROJECT DESCRIPTION

Project Description: Construction of approximately 15,000 feet of 16-inch, 12-inch and 8-inch water main along the Route 1 corridor from Featherstone Road north to Annapolis Way. This phase is from Mary’s Way to Annapolis Way with the remainder to be constructed in a future phase. The project will connect to the 16-inch main constructed in CIP Project WAT-130. This project will be constructed in conjunction with VDOT Route 1 improvements.

Project Benefit: Reinforce the Woodbridge Pressure Zone with a new, stronger transmission main backbone, which is currently served by an old 10-inch cast iron main. The project will improve service and fire flows and provides capacity consistent with the County Comprehensive Plan goals for Route 1 Redevelopment.

Source Derivation: WRA East End Water System Technical Memorandum, 2001; Managed By Engineering and Planning - LD

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
3167	1882	1882	0	0	0	0	6931

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	25%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	25%
Other Contrib. – Development Contributions	50%
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Possum Point Road Water Main Rehabilitation – Phase 1
CIP Number: WAT-137
JDE Number(s): 24WDTM8501E 1
Location: Summer Duck Dr. to Town Limits
Pressure Zone: DT – Dumfries
Sewershed: DM – Dumfries Lift Station
Magisterial District: PO – Potomac
Criteria: 1, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of approximately 4,950 feet of existing 12-inch water main with 12-inch DIP along Possum Point Road from Summer Duck Drive to the Town of Dumfries limits.
Project Benefit: Replacement of the existing water main that has corroded over time due to acidic soils will improve reliability of the system.
Source Derivation: Engineering and Planning Division , Managed By Engineering and Planning

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
87	2361	518	750	0	0	0	3716

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

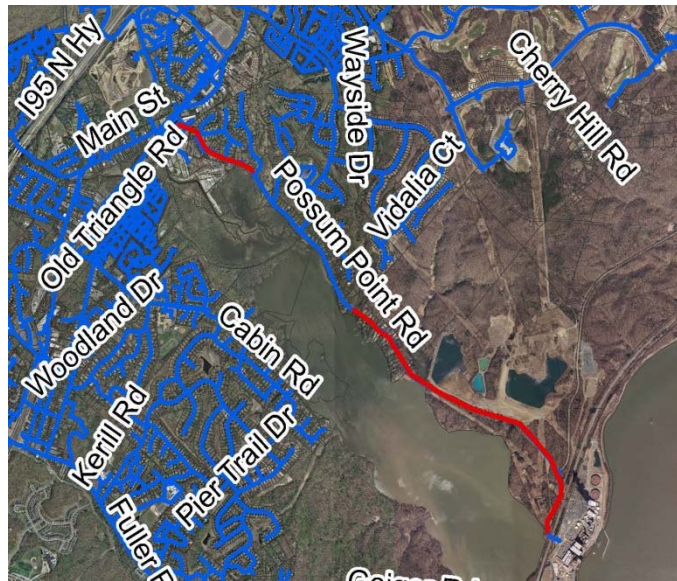
PROJECT INFORMATION

Project Name: Possum Point Road Water Main Replacement – Phase 2
CIP Number: WAT-138
JDE Number(s): Not Assigned
Location: Howard St. to Summer Duck Dr., Town of Dumfries limit to Possum Point Rd. terminus
Pressure Zone: DT – Dumfries
Sewershed: DM – Dumfries Lift Station
Magisterial District: PO – Potomac
Criteria: 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of approximately 11,800 feet of existing 12-inch water main with 12-inch DIP 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 will improve reliability of the system.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	510	2170	2000	0	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: Sudley Road 14-inch Replacement, Loop Closure Realignment
CIP Number: WAT-143
JDE Number(s): Not Assigned
Location: Balls Ford Rd. to Sudley Manor Dr.
Pressure Zone: GM – Greater Manassas
Sewershed: BU – Bull Run, FB – Flat Branch
Magisterial District: GN – Gainesville, BR – Brentsville, CO - Coles
Criteria: 1, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 15,390 feet of 12-inch water main to close several loops between existing 10-inch and 12-inch water mains on both sides of Sudley Road from Balls Ford Road to Williamson Boulevard and Sudley Manor Drive. Project includes several interconnections with existing mains in the vicinity.

Project Benefit: This project will improve transmission, distribution, fire flows, and service to a densely developed corridor of the County. This project will also enable the abandonment of the 40+ year old cast iron main in the median and turn lanes in Sudley Road.

Source Derivation: Operations & Maintenance Division, Engineering and Planning Division, WRA Preliminary Engineering Report 2012.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	453	429	3000	2851	6733

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: "G" Street Replacement and Upgrade
CIP Number: WAT-147
JDE Number(s): 24WWLM3001
Location: Occoquan Rd. to Baxter St.
Pressure Zone: WL – Woodbridge
Sewershed: BM – Belmont Lift Station
Magisterial District: WB – Woodbridge
Criteria: 1, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 2,800 feet of 12-inch water main along “G” Street from Baxter Street to Occoquan Road to replace the existing 6-inch cast iron main. The main will connect the 16-inch transmission main along Baxter Street to the new 16-inch water main in Occoquan Road.

Project Benefit: This project will upgrade a major water line loop in the northern end of the Woodbridge Pressure Zone. This project will improve the water supply and fire flows in the northern commercial section of the pressure zone and improve system reliability and flexibility.

Source Derivation: Engineering and Planning Division; Managed By Engineering and Planning

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
112	0	0	0	505	1009	0	1626

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: Green Valley – Garfield Transmission Main – Phase 2

CIP Number: WAT-149

JDE Number(s): Not Assigned

Location: Green Valley to Dale Blvd.

Pressure Zone: WL – Woodbridge

Sewershed: NE – Neabsco Creek Lift Station

Magisterial District: WB – Woodbridge

Criteria: 5

Project Estimate: Order of Magnitude

Estimate By: Engineering and Planning Division

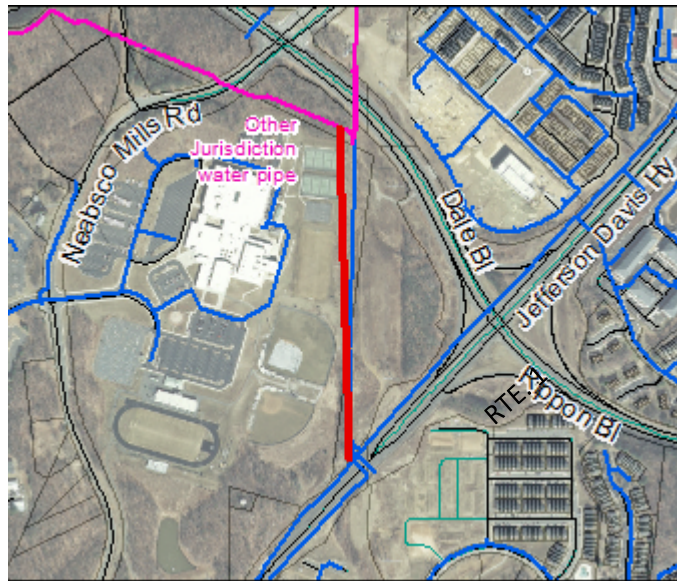
PROJECT DESCRIPTION

Project Description: Construction of approximately 1,700 feet of 36-inch main to replace the existing 24-inch RCP from the existing 36-inch Fairfax Water supply main to the Service Authority’s existing 36-inch main in Route 1.

Project Benefit: This project will increase the transmission capacity and reliability within the Woodbridge Low Pressure Zone to accommodate growing demands in the area east of I-95 and south of the Garfield Booster Pumping Station, as well as other anticipated growth north of Green Valley.

Source Derivation: WRA East End Water System Technical Memorandum, 2001

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	143	1088	0	0	0	1231

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: Cow Branch to Nottoway Transmission Main

CIP Number: WAT-150

JDE Number(s): Not Assigned

Location: North of Cow Branch BPS to York Dr. (Nottoway Tank)

Pressure Zone: LR – Lake Ridge

Sewershed: BM – Belmont and NE – Neabsco

Magisterial District: WB – Woodbridge

Criteria: 1, 5

Project Estimate: Order of Magnitude

Estimate By: Engineering and Planning Division

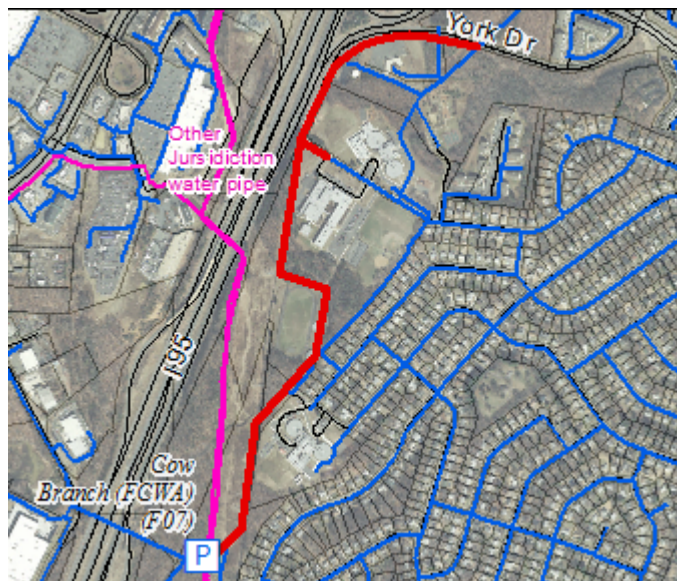
PROJECT DESCRIPTION

Project Description: Construction of approximately 3,700 feet of 16-inch, 220 feet of 12-inch, and 75 feet of 6-inch water main from the existing 16-inch main north of Cow Branch Booster Pumping Station northward to the existing 16-inch water main crossing in York Drive near Prince William County Parkway and the Nottoway Tank.

Project Benefit: Reinforces the transmission capacity to existing customers in the Lake Ridge Pressure Zone from the Cow Branch Booster Pumping Station and improves fire flows in the Lake Ridge Pressure Zone.

Source Derivation: WRA East End Water System Technical Memorandum, 2001

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	159	986	0	0	0	1145

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

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Antioch Road Water Main Loop Closure
CIP Number: WAT-151
JDE Number(s): 22WHMM8001, 24WHMM8001
Location: Rt. 55 to Dominion Valley Tank along Antioch Rd.
Pressure Zone: HM – Haymarket
Sewershed: LB – Little Bull Run and NB – North Branch
Magisterial District: GN – Gainesville, BR – Brentsville
Criteria: 1, 2, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 11,500 feet of 18-inch water main along Antioch Road from the Dominion Valley Tank to the existing 18-inch main in John Marshall Highway south of I-66. This project includes an extension to Heathcote Boulevard and a segment along Route 15.
Project Benefit: This project will close an important loop in the Haymarket Pressure Zone to improve reliability, transmission capacity, and hydraulic efficiency of the water distribution system.
Source Derivation: Engineering and Planning Division; Managed By RK&K

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
4390	0	0	0	0	24	1421	5835

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

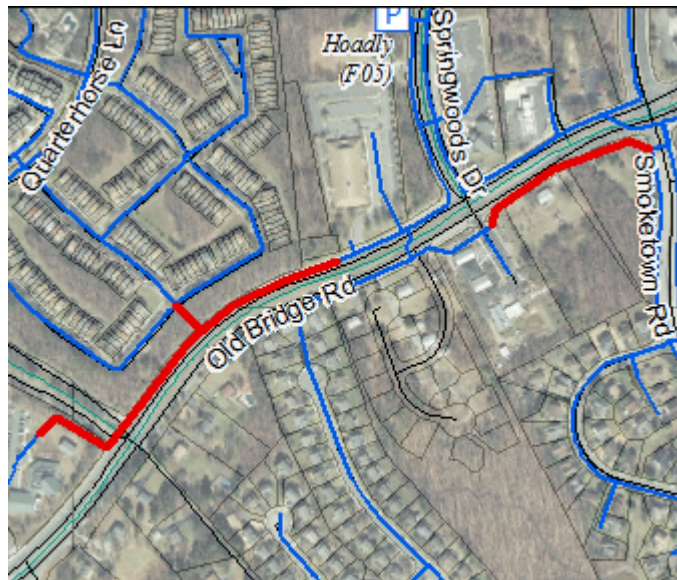
PROJECT INFORMATION

Project Name: Old Bridge Road Loop Closures
CIP Number: WAT-152
JDE Number(s): Not Assigned
Location: Old Bridge Rd.
Pressure Zone: HO – Hoadly
Sewershed: HR – Hooes Run Lift Station
Magisterial District: OC - Occoquan
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 2,150 feet of 12-inch water main for two loop closures along Old Bridge Road.
Project Benefit: Improves system reliability and fire flow capability in the Hoadly Pressure Zone.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	112	681	0	0	793

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

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Airport Tank Area System Improvements
CIP Number: WAT-153
JDE Number(s): Not Assigned
Location: Airport Tank Area
Pressure Zone: LR – Lake Ridge
Sewershed: WA – Airport
Magisterial District: OC – Occoquan
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

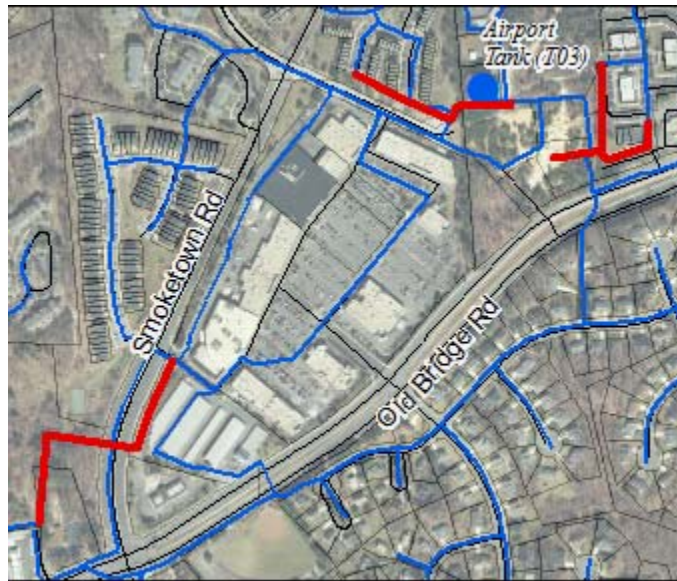
PROJECT DESCRIPTION

Project Description: Construction of approximately 2,600 feet of 8-inch and 12-inch water mains in order to accommodate an expansion of the Hoadly Pressure Zone into the Lake Ridge Pressure Zone near the Airport Tank.

Project Benefit: The proposed pressure zone boundary shift near the Airport Tank will relieve low pressure issues to customers on high ground in the area. The shift will also improve system operations, fire flows, and storage volumes in the Lake Ridge tanks by transferring demand to the Hoadly Pressure Zone.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	145	922	0	0	0	1067

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: Smoketown Road Loop Closures
CIP Number: WAT-154
JDE Number(s): Not Assigned
Location: Near Christ Chapel on Smoketown Rd.
Pressure Zone: LR – Lake Ridge
Sewershed: NE – Neabsco
Magisterial District: OC – Occoquan
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 1,100 feet of 12-inch and 8-inch water main to close several loops along Smoketown Read, both north and south of Christ Chapel.
Project Benefit: Improves system reliability and fire flow capability in the Lake Ridge Pressure Zone near the Potomac Mills Tank.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	61	294	0	0	355

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: Caton Hill Road Loop Closure
CIP Number: WAT-156
JDE Number(s): Not Assigned
Location: Caton Hill Rd. at Strayer University
Pressure Zone: LR – Lake Ridge
Sewershed: NE – Neabsco
Magisterial District: OC – Occoquan
Criteria: 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 400 feet of 16-inch water main to close a gap along Caton Hill Road between the DMV office and Strayer University.
Project Benefit: This loop closure will improve system reliability and increase hydraulic capacity in the area.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	24	167	0	191

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

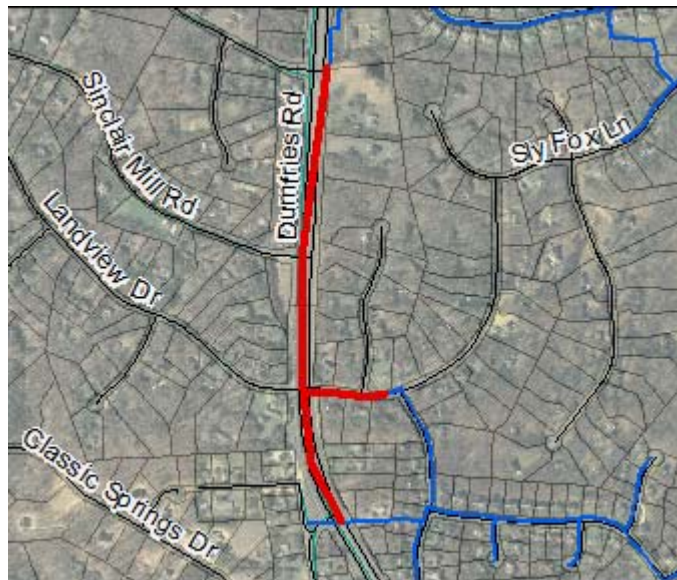
PROJECT INFORMATION

Project Name: Dumfries Road – Vistabrooke Loop Closure
CIP Number: WAT-157
JDE Number(s): Not Assigned
Location: Dumfries Rd. to Vistabrooke Development
Pressure Zone: OR – Oak Ridge
Sewershed: PU – Purcell Branch
Magisterial District: CO – Coles
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 3,000 feet of 12-inch and 500 feet of 8-inch water main for a loop closure along Dumfries Road to the Vistabrooke Development.
Project Benefit: Improves reliability and hydraulic capacity within the Oak Ridge Pressure Zone.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	143	993	0	0	1136

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	10%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	90%
Other Contrib. – Development Contribution	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

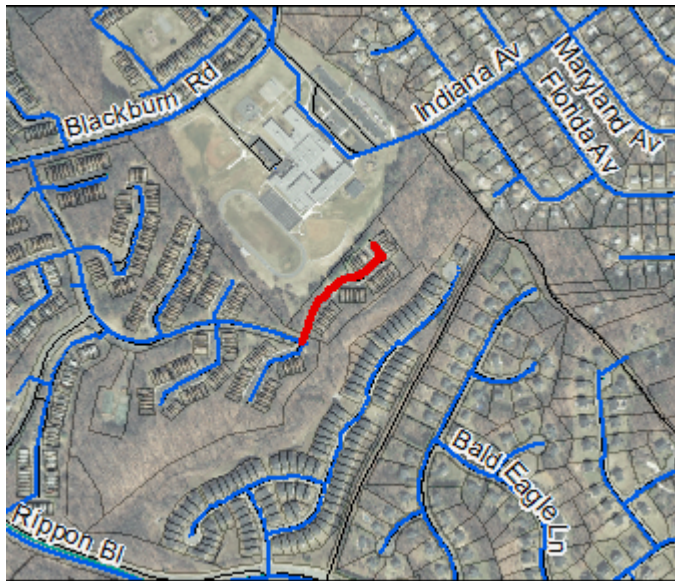
PROJECT INFORMATION

Project Name: Flintlock Terrace Water Main Replacement
CIP Number: WAT-159
JDE Number(s): Not Assigned
Location: Flintlock Tr.
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek Lift Station
Magisterial District: WB – Woodbridge
Criteria: 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 750 feet of 8- inch water main along Flintlock Terrace to replace aging 4-inch and 8-inch mains.
Project Benefit: This project will increase system reliability and improve fire protection in an older portion of the distribution system. This project will also reduce maintenance expenses that resulted from water main breaks and replacement of old service lines.
Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	44	333	0	377

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: Old Stage Road Water Main Replacement
CIP Number: WAT-161
JDE Number(s): Not Assigned
Location: Old Stage Rd. Line Extension
Pressure Zone: DT – Dumfries
Sewershed: DE – Deweys Branch Lift Station
Magisterial District: PO – Potomac
Criteria: 1, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 475 feet of 12-inch water main along Old Stage Road to replace a segment of existing 6-inch main.
Project Benefit: The larger diameter main will improve fire flows and service to existing customers.
Source Derivation: Engineering and Planning, Operations and Maintenance Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	241	0	0	0	0	241

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: Galt Court Water Main Replacement
CIP Number: WAT-162
JDE Number(s): 24WDTM4201
Location: Georgetown Village Sect. 4
Pressure Zone: DT – Dumfries
Sewershed: PC – Powell’s Creek
Magisterial District: WB – Woodbridge
Criteria: 1, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of approximately 850 feet of existing 4-inch cast iron pipe with new 4-inch, 6-inch, and 8-inch DIP water mains in Galt Court in the Georgetown Village development.

Project Benefit: This project will remedy the reliability issues in the Galt Court area as well as increase fire protection to Georgetown Village. There have been several water breaks over the past years.

Source Derivation: Engineering and Planning, and Operations and Maintenance Divisions; Managed By Engineering and Planning

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
274	319	0	0	0	0	0	593

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: Wharf Lane Distribution System Improvements
CIP Number: WAT-163
JDE Number(s): Not Assigned
Location: Kilmer Ln. to Wharf Ln. and Wharf Ln. to Fort Monroe Ct.
Pressure Zone: DT – Dumfries
Sewershed: MR – Melrose Lift Station and DM-Dumfries
Magisterial District: PO – Potomac
Criteria: 1, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 500 feet of 8-inch water main between Kilmer Lane and Wharf Lane, and 500 feet of 8-inch water main between Wharf Lane and Fort Monroe Court.
Project Benefit: This project will increase system reliability and improve fire protection in older areas of the distribution system by completing water line loops and creating a stronger network grid.
Source Derivation: Engineering and Operations and Maintenance Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	38	285	0	0	0	323

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: Curtis Drive Water Main Extension
CIP Number: WAT-164
JDE Number(s): 24WDTM0501
Location: Curtis Dr. to Main St. Dumfries
Pressure Zone: DT – Dumfries
Sewershed: DM – Dumfries Lift Station
Magisterial District: PO – Potomac
Criteria: 1, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

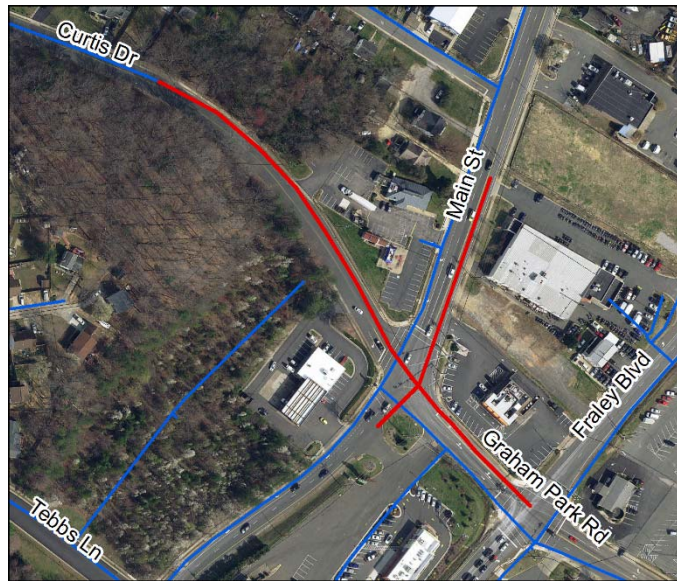
PROJECT DESCRIPTION

Project Description: Construction of approximately 687 feet of 12-inch water main along Graham Park and Fraley Boulevard, and 447 feet of 8-inch and 189 feet of 6-inch water main along Curtis Drive to complete a water line loop closure in the area of the Town of Dumfries.

Project Benefit: This project will provide an additional supply source and increase system reliability and fire protection in an older area of the distribution system.

Source Derivation: Engineering and Operations and Maintenance Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
23	280	300	0	0	0	0	603

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: Bayvue Apartments Water System Replacement
CIP Number: WAT-166
JDE Number(s): Not Assigned
Location: Bayside Ave.
Pressure Zone: WL – Woodbridge
Sewershed: BM – Belmont
Magisterial District: WB – Woodbridge
Criteria: 1, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of existing cast iron water service lines to the 31 buildings of Bayvue Apartments, which are near the intersection of Route 1 and Prince William Parkway. The new service lines will be either PVC or copper. Additionally, this project allows for the study of this area to identify if further work is necessary on the adjacent water mains.

Project Benefit: Increased system reliability and improved fire protection in older portions of the distribution system. There were 11 water main and service line breaks in the last 3 years in this area. Nearby soils test data indicate that the soils are moderately to highly corrosive.

Source Derivation: Engineering and Planning Division, Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	86	754	0	0	0	840

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

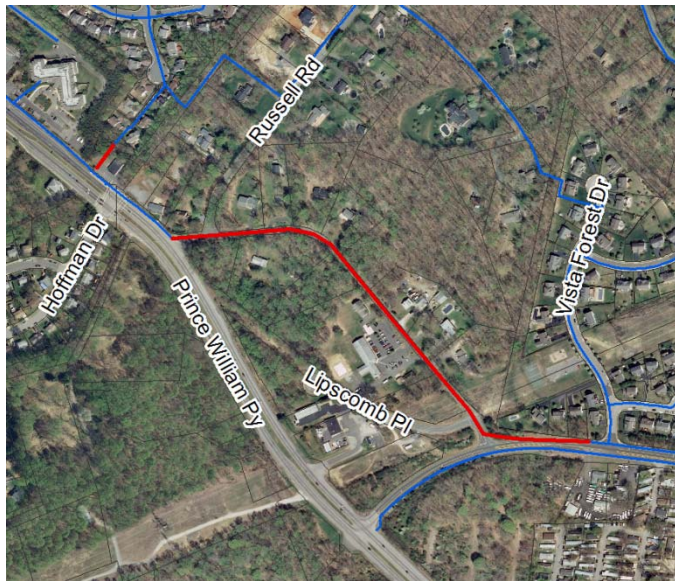
PROJECT INFORMATION

Project Name: Pennington Lane Water Main Extension
CIP Number: WAT-167
JDE Number(s): Not Assigned
Location: Fallenleaf Ct. to Prince William Pkwy. along Pennington Ln.
Pressure Zone: HO – Hoadly
Sewershed: HR – Hooes Run
Magisterial District: OC – Occoquan
Criteria: 1, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 2,180 feet of 12-inch water main along Pennington Lane and approximately 160 feet of 8-inch from Fallenleaf Court to Prince William Parkway to complete several loop closures in the pressure zone.
Project Benefit: The loop closures will improve water circulation and water quality. This project will also improve fire flow and system reliability, and provide access to water service for existing property owners.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	140	865	0	0	0	1005

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: Davis Ford Road Water Main Loop Closure
CIP Number: WAT-170
JDE Number(s): Not Assigned
Location: Davis Ford Rd. from Asdee Ln. to Prince William Pkwy.
Pressure Zone: HO – Hoadley
Sewershed: WA – Airport Lift Station
Magisterial District: OC – Occoquan
Criteria: 1, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 1,540 feet of 16-inch water main along Davis Ford Road to provide a loop closure between Asdee Lane and the Fire and Rescue Station.
Project Benefit: This project will improve hydraulic capacity, fire flows and system reliability in the western region of the Hoadly Pressure Zone.
Source Derivation: Engineering and Planning Division, Operation & Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	48	366	0	0	414

Proposed Funding Sources	
Exp. Fund (02) – Availability Fees	10%
Commit. Fund (03) – Availability Fees	-
Repl. Fund (04) – User Rates	10%
Other Contrib. – Development Contributions	80%
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Rose Hill Circle Water Main Replacement
CIP Number: WAT-172
JDE Number(s): 24WDTM2001
Location: Town of Dumfries
Pressure Zone: DT – Dumfries
Sewershed: DM – Dumfries
Magisterial District: PO – Potomac
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of approximately 665 feet of aged and corroded 4-inch cast iron water main in Rose Hill Circle with new 6-inch DIP. The existing main is heavily tuberculated with external corrosion, and has experienced numerous breaks. This project also includes replacement of the existing sewer main (CIP Project SEW-142).

Project Benefit: This project will improve fire flows, system reliability, and service to existing customers. Combining both water and sewer replacements will save on pavement restoration costs and minimize neighborhood disruptions.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
170	74	0	0	0	0	0	244

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: Bethel Road Water Main
CIP Number: WAT-173
JDE Number(s): Not Assigned
Location: Token Valley Rd. to Van Doren Rd. via Bethel Rd.
Pressure Zone: OR – Oak Ridge
Sewershed: PC – Powell’s Creek
Magisterial District: CO – Coles
Criteria: 1, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 1,100 feet of 12-inch water main along Token Valley Road to close a gap in the distribution system.
Project Benefit: This project will complete a major loop in the Oak Ridge Pressure Zone to increase fire flows, stabilize system pressures, and enhance water quality.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	462	0	0	0	0	0	462

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

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Frances Drive Water Main Replacement
CIP Number: WAT-174
JDE Number(s): Not Assigned
Location: Frances Dr.
Pressure Zone: WL – Woodbridge
Sewershed: BM – Belmont
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 1,440 feet of 6-inch water main to replace an existing 6-inch cast iron main along Frances Drive that has experienced numerous breaks and service disruptions.

Project Benefit: This project will improve fire flows, system reliability, and service to existing customers.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	75	539	0	0	0	614

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: Carter Lane Water Main Replacement
CIP Number: WAT-175
JDE Number(s): Not Assigned
Location: Carter Ln.
Pressure Zone: WL – Woodbridge
Sewershed: BM – Belmont
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 4,100 feet of 6-inch and 8-inch water main along Carter Lane to replace existing 6-inch and 8-inch cast iron mains that have experienced numerous breaks.
Project Benefit: This project will improve fire flows, system reliability, and service to existing customers.
Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	150	800	666	0	1616

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: Lynn Street Water Main Replacement
CIP Number: WAT-176
JDE Number(s): Not Assigned
Location: Lynn St.
Pressure Zone: WL – Woodbridge
Sewershed: BM – Belmont
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of approximately 3,500 feet of 4-inch and 6-inch water mains with 6-inch DIP. This project also includes the replacement of service lines, setters, crocks, valves, and hydrants. The work will take place along Lynn Street in the Long View Apartments Community.

Project Benefit: Increase system reliability and improve fire protection within this older section of Woodbridge. Additionally, this project will reduce maintenance expenses that resulted from water main breaks and replacement of old service lines.

Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	300	500	549	0	0	1349

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

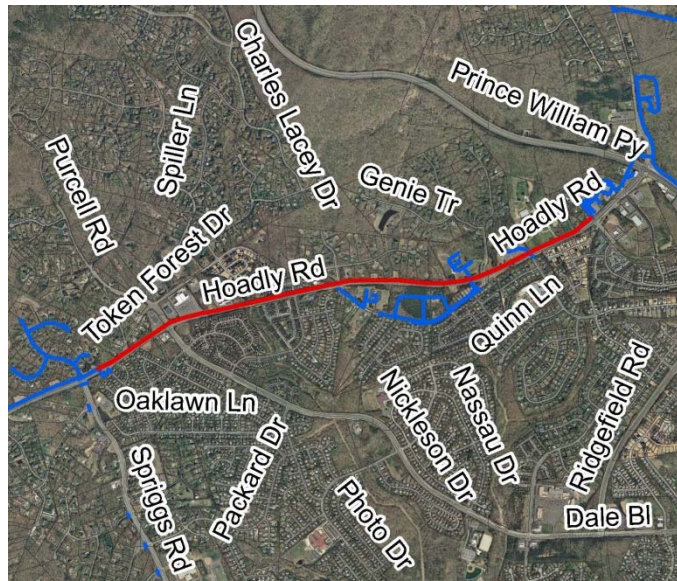
PROJECT INFORMATION

Project Name: Hoadly Road Interconnection
CIP Number: WAT-179
JDE Number(s): Not Assigned
Location: Hoadly Rd.
Pressure Zone: HO – Hoadly and OR – Oak Ridge
Sewershed: PU – Purcell Branch and WA – Airport
Magisterial District: CO – Coles
Criteria: 1, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 11,900 feet of 12-inch and 16-inch water main along Hoadly Road to interconnect the Hoadly and Oak Ridge Pressure Zones
Project Benefit: This project will greatly increase reliability in the eastern water system as each pressure zone will be able to provide a back-up source of supply to the other zone during alternative operations, emergencies, and maintenance activities. This project will also enable the SA to provide service to approximately 55 existing customers currently served by VA-American Water.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	695	2000	1645	0	4340

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

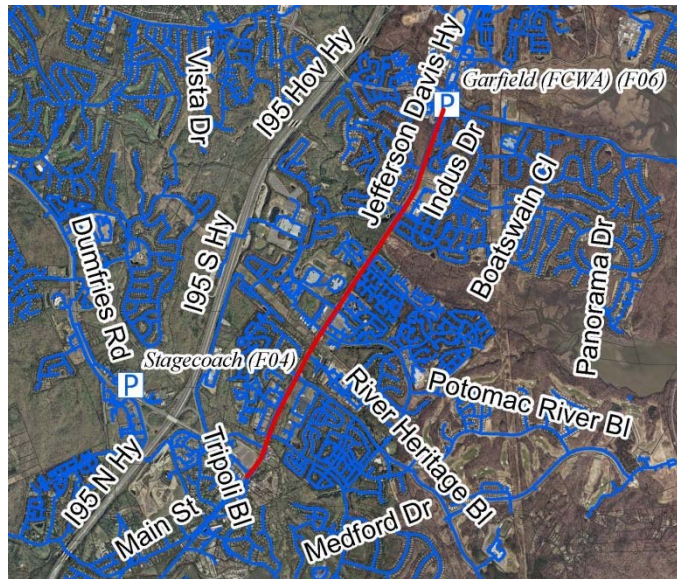
PROJECT INFORMATION

Project Name: Route 1 Transmission Main – Garfield BPS to Route 234
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
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: 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 will 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 will 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 Tech. Memo 2001

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
580	500	0	2500	2500	4283	0	10363

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

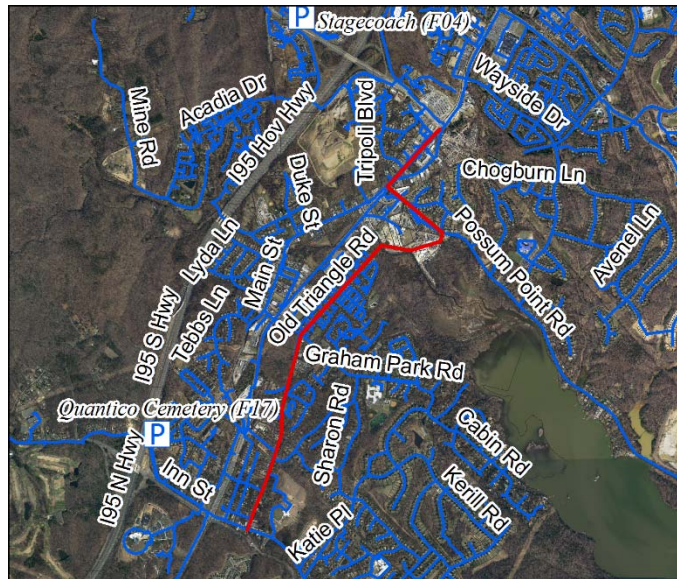
PROJECT INFORMATION

Project Name: Route 1 Transmission Main – Route 234 to Fuller Heights Road
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
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: 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 will increase transmission capacity, reliability, and redundancy within the Dumfries Pressure Zone south of Route 234 and enable several existing older cast iron mains that have experienced numerous breaks to be removed from service.
Source Derivation: Engineering and Planning Division, WRA East End Water System Tech. Memo 2001

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
493	500	0	2500	2500	5400	0	11393

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

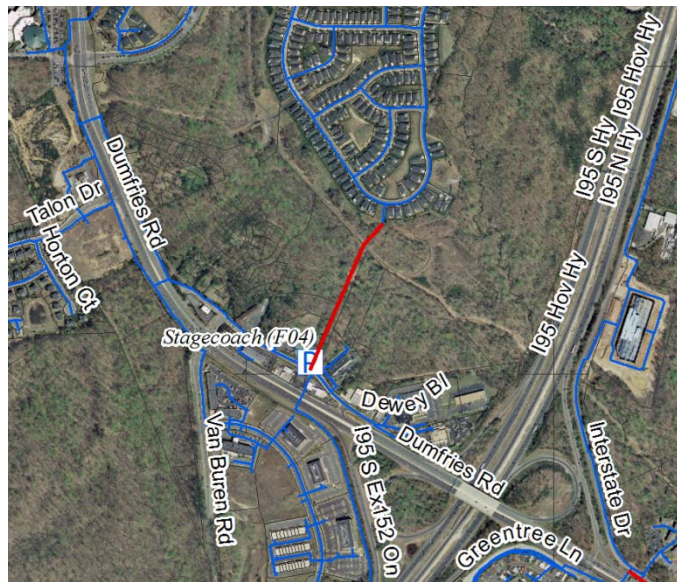
PROJECT INFORMATION

Project Name: Montclair BPS Discharge Transmission Main
CIP Number: WAT-183
JDE Number(s): Not Assigned
Location: Montclair BPS to Old Stage Rd.
Pressure Zone: MO – Montclair
Sewershed: DE – Deweys Branch
Magisterial District: PO – Potomac
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 1,400 feet of 16-inch water main through privately owned commercial property from the proposed Montclair Booster Pumping Station to Old Stage Road.
Project Benefit: This project will increase transmission capacity, reliability, and redundancy within the Montclair Pressure Zone along the Route 234 corridor and enable a larger transfer of water into the Oak Ridge Pressure Zone.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
500	200	702	0	0	0	0	1402

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: Colchester Road Water Main Replacement
CIP Number: WAT-184
JDE Number(s): Not Assigned
Location: Colchester Rd.
Pressure Zone: WL – Woodbridge
Sewershed: BM – Belmont
Magisterial District: WB – Woodbridge
Criteria: 1, 3, 4
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

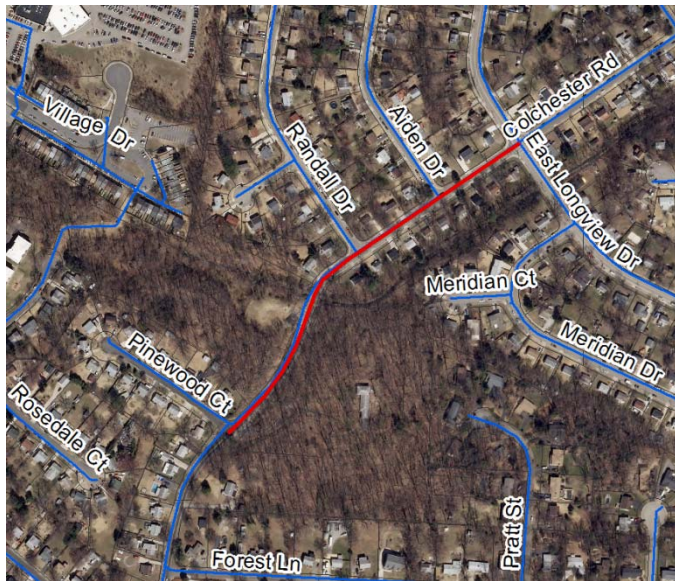
PROJECT DESCRIPTION

Project Description: Replacement of approximately 1,400 feet of 6-inch cast iron pipe with 8-inch cast iron pipe along Colchester Road from Pine Court to East Longview Drive, along with 6 water main valves and 18 3/4-inch water service lines to include meter crocks and covers.

Project Benefit: Improves system reliability, service to customers, fire flow capability, and reduces maintenance costs. There are numerous water main breaks and valves are not working properly.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	76	650	0	726

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

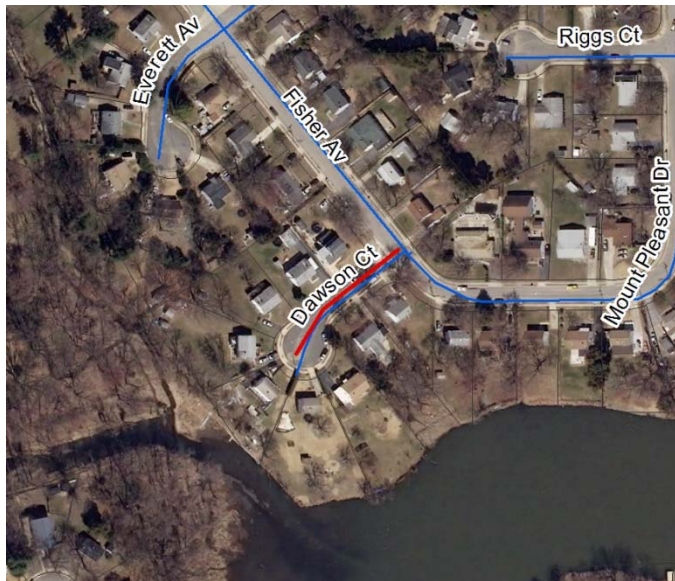
PROJECT INFORMATION

Project Name: Dawson Court Water Main Replacement
CIP Number: WAT-185
JDE Number(s): Not Assigned
Location: Dawson Ct.
Pressure Zone: WL – Woodbridge
Sewershed: BM – Belmont
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of approximately 270 feet of existing 4-inch cast iron water main along Dawson Court.
Project Benefit: Replacement of the existing water main that has developed tuberculation will improve water quality and increase the reliability of the system.
Source Derivation: Engineering and Planning, Operations and Maintenance Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	22	148	0	0	170

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

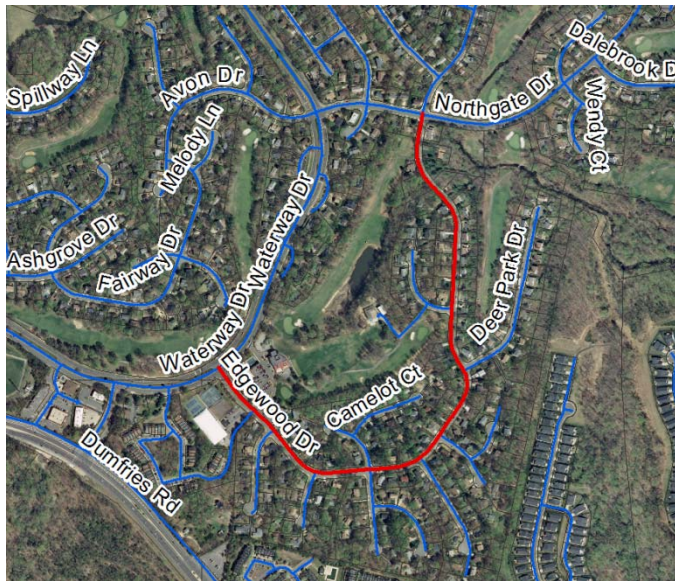
PROJECT INFORMATION

Project Name: Edgewood Drive Water Main Replacement
CIP Number: WAT-187
JDE Number(s): Not Assigned
Location: Edgewood Dr.
Pressure Zone: MO – Montclair
Sewershed: PC – Powell’s Creek
Magisterial District: PO – Potomac
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of approximately 4,300 feet of 8-inch cast iron and DIP along Edgewood Drive from its intersection with Northgate Drive to Waterway Drive.
Project Benefit: This project will increase system reliability and improve fire protection within this older section of Montclair. It will reduce maintenance expenses that have resulted from recurrent water main breaks and replacement of old service lines.
Source Derivation: Engineering and Planning, Operations and Maintenance Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	185	1515	0	1700

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

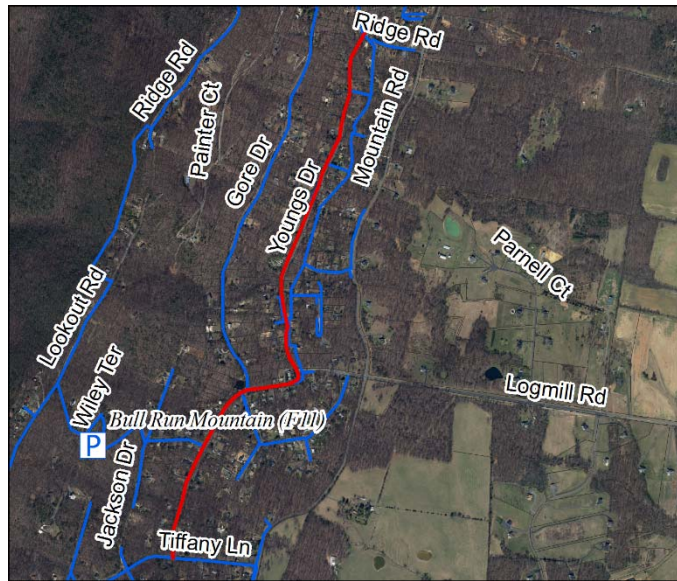
PROJECT INFORMATION

Project Name: Youngs Drive Water Main Replacement
CIP Number: WAT-188
JDE Number(s): Not Assigned
Location: Youngs Dr. – Bull Run Mountain
Pressure Zone: BWL – Bull Run Lower
Sewershed: N/A
Magisterial District: GN – Gainesville
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of approximately 8,300 feet of 4-inch cast iron pipe with 4-inch DIP along Youngs Drive from Ridge Road to Tiffany Lane.
Project Benefit: This project will reduce maintenance costs and service disruptions that have resulted from recurrent water main breaks. It will also increase operational efficiency and reliability of the well systems in the area.
Source Derivation: Engineering and Planning, Operations and Maintenance Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	300	800	1670	0	2770

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: Godwin Drive Water Main Extension
CIP Number: WAT-193
JDE Number(s): 24WGMM0104
Location: Godwin Dr. and Hastings Dr.
Pressure Zone: MS – Manassas Southside
Sewershed: GD – Godwin Drive
Magisterial District: CO – Coles
Criteria: 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

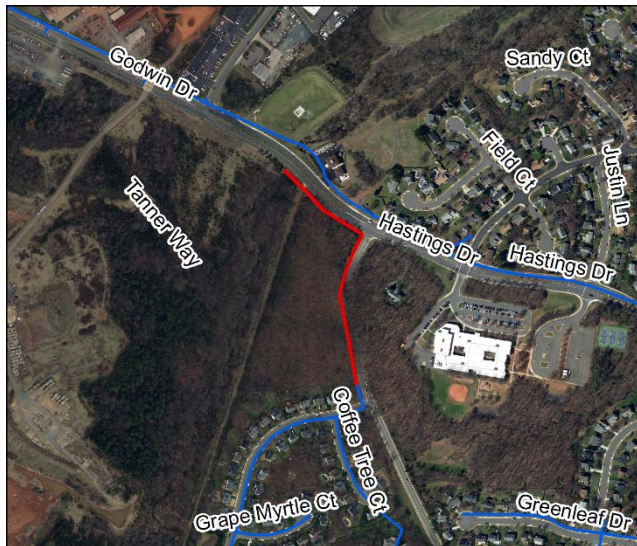
PROJECT DESCRIPTION

Project Description: Construction of approximately 1,442 feet of 16-inch water main along Godwin Drive, northward from the existing water main located north of Winged Elm Circle, and then westward along Godwin Drive and terminating with a stub-out to connect with a future 16-inch water main proposed by others (terminus west of Winters Branch). This project includes an easement acquisition from 10020 Godwin Drive.

Project Benefit: The goal of this project is to maintain a reliable and operational system, and to account for emergency rehabilitation and/or replacements within a reasonable time frame. The project will improve fire flow, reliability, and service to customers.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
77	460	0	0	0	0	0	537

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

Prince William County



Sewage Pumping Station Projects

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Generator Replacement Program
CIP Number: SPS-100
JDE Number(s): Not Assigned
Location: L10 (Melrose), L04 (Occoquan Creek), and L15 (Airport) SPS
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Upgrade or replace aging diesel generators, transfer switches, and appurtenances at L10 (Melrose), L04 (Occoquan Creek), and L15 (Airport) sewage pumping stations.
Project Benefit: Improve and maintain a reliable and operational system by replacing aging generators at Service Authority owned and operated facilities. Eliminate the difficulty in obtaining replacement parts for old and outdated generators.
Source Derivation: Operations and Maintenance Division, Managed By Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	200	200	200	0	0	0	600

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: Install New Air Release Valves on Force Mains
CIP Number: SPS-104
JDE Number(s): 24SCWM0401
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering Division

PROJECT DESCRIPTION

Project Description: Installation of new air release valves on existing sewage force mains 8-inches in diameter and larger at various locations throughout the County.
Project Benefit: To maintain efficient pump station operations by preventing the formation of air pockets and subsequent loss of capacity in force mains and sewage pumping stations throughout the County. Trapped air pockets in force mains could cause corrosive conditions in the pipe if not released.
Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
1385	200	200	190	0	0	0	1975

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

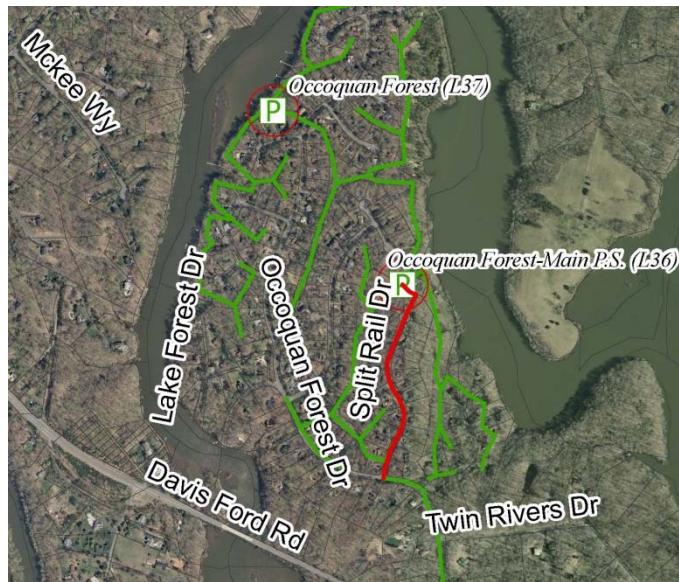
PROJECT INFORMATION

Project Name: Replace Occoquan Forest Sewage Pumping Stations, OQL36 and 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
Criteria: 1, 2, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of the existing antiquated sewage pumping stations and cast iron force mains. The Occoquan Forest Sewage Pumping Stations were constructed in the early 1970s. The new pumping stations will be equipped with emergency generators and by-pass connections on the force mains.
Project Benefit: The goal of the project is to replace the antiquated sewage pumping stations to continue to provide sewer service to sewershed in compliance with the County Comprehensive Plan and DEQ Regulations. The project will reduce maintenance expenses, provide new emergency backup power supplies, and improve safety conditions at the sewage pumping stations.
Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
928	1850	2379	0	0	0	0	5157

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: Replace Old Nokesville Sewage Pumping Station, L20
CIP Number: SPS-108
JDE Number(s): 24SNKL7701
Location: 12829 Fitzwater Dr., Nokesville
Pressure Zone: None
Sewershed: NK - Nokesville
Magisterial District: BR - Brentsville
Criteria: 1, 2, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of the existing antiquated sewage pumping station and force main. The new pumping station will be equipped with an emergency generator, bypass pumping facilities on the force main, and new flow monitoring equipment.

Project Benefit: The goal of this project is to replace the antiquated sewage pumping station in order to provide reliable service to the sewershed in compliance with the County Comprehensive Plan and DEQ Regulations. The Old Nokesville sewage pumping station was constructed around 1965 and has a capacity of 160 gallons per minute. Little, if any, capacity will be added to the new station since the Nokesville area is within the Rural Area. The project will reduce maintenance expenses, improve reliability, provide emergency backup power supply, and improve safety conditions at the sewage pumping station.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
189	618	1391	0	0	0	0	2198

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: Featherstone Lift Station Flood Protection Assessment, L16
CIP Number: SPS-109
JDE Number(s): 24SFSL1601
Location: 15023 Farm Creek Rd., Woodbridge
Pressure Zone: WL – Woodbridge
Sewershed: FS – Featherstone
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

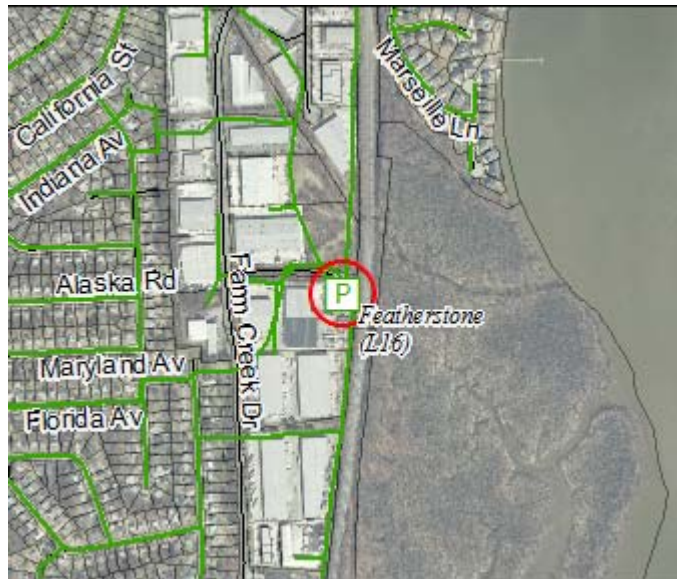
PROJECT DESCRIPTION

Project Description: Preparation of a preliminary engineering report (PER) in order to assess the necessary improvements required to protect the station from flooding due to backwater from the Potomac River as well as from the drainage ways in close proximity to the facility. Cost includes the design and construction of the recommended flood protection modifications.

Project Benefit: The SA must meet all Clean Water Act (CWA) requirements for all permitted facilities. The PER will determine how the station can be protected and then the improvements will be implemented.

Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
225	75	0	1130	0	0	0	1430

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

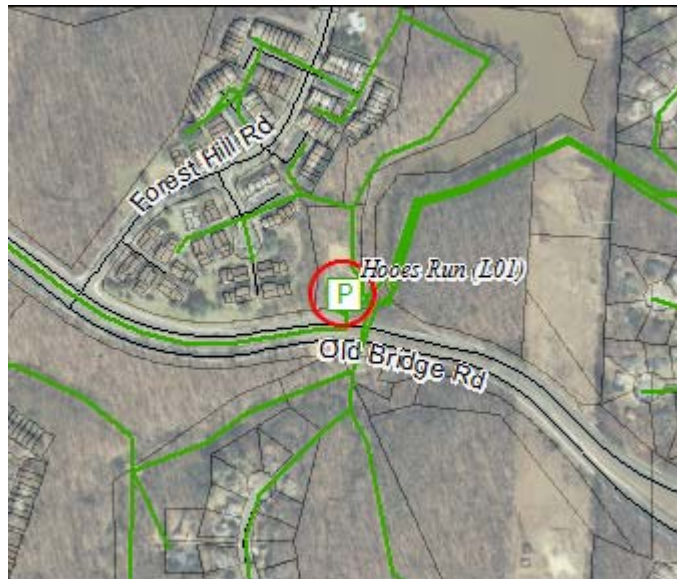
PROJECT INFORMATION

Project Name: Hooes Run Sewage Pumping Station (L01) Architectural and Energy Improvements
CIP Number: SPS-110
JDE Number(s): Not Assigned
Location: 2502 Old Bridge Rd., Woodbridge
Pressure Zone: LR – Lake Ridge
Sewershed: HR – Hooes Run
Magisterial District: OC – Occoquan
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Evaluation and rehabilitation of the Hooes Run Sewage Pumping Station necessary to bring this pumping station to the architectural and aesthetic standard expected of all SA facilities. This project also includes the design and construction of a new back-up generator, HVAC improvements, and ancillary equipment.
Project Benefit: Improve the architectural quality of the Hooes Run SPS and exterior functionality of the aged pumping station. This project will also improve the station’s operation, reliability, and efficiency.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	100	572	1444	0	0	2116

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: Replace Holiday Inn Sewage Pumping Station, L29
CIP Number: SPS-111
JDE Number(s): 24SHBL7802
Location: 10550 Vandor Ln., Manassas
Pressure Zone: GW – Gainesville
Sewershed: HB – Holkums Branch
Magisterial District: GN – Gainesville
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

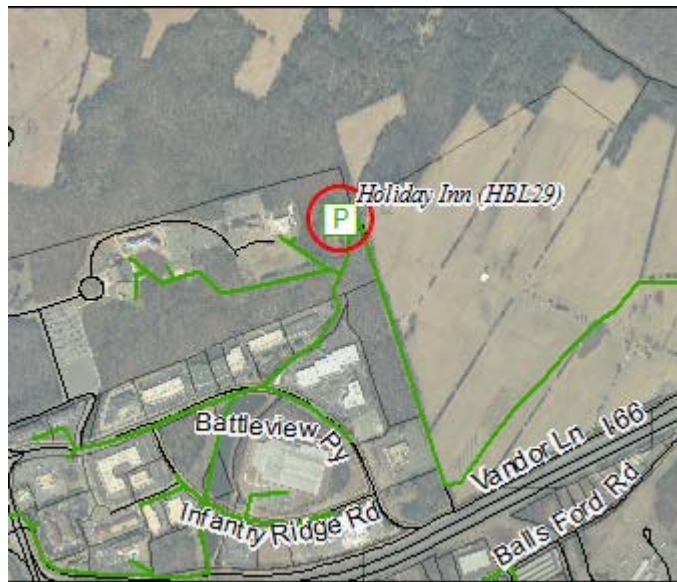
PROJECT DESCRIPTION

Project Description: This project is the replacement of the existing antiquated Holiday Inn Sewage Pumping Station. The new pumping station will be equipped with new pumps and channel grinder, a new emergency generator, new controls and instrumentation in a new Control Building, motors, new flow monitoring equipment, a by-pass connection on the force main, and SCADA.

Project Benefit: The replacement of this antiquated station will reduce maintenance costs, provide an emergency power supply and improve safety conditions to continue providing sewer service to the sewershed in compliance with the County Comprehensive Plan.

Source Derivation: Operations and Maintenance Division; Managed By RKK

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
2177	554	0	0	0	0	0	2731

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: Replace Graham Park Sewage Pumping Station, L13 and Force Main Replacement
CIP Number: SPS-112
JDE Number(s): 24SMRL7601
Location: 3196 Shoreview Rd., Dumfries
Pressure Zone: DT – Dumfries
Sewershed: MR – Melrose
Magisterial District: PO – Potomac
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

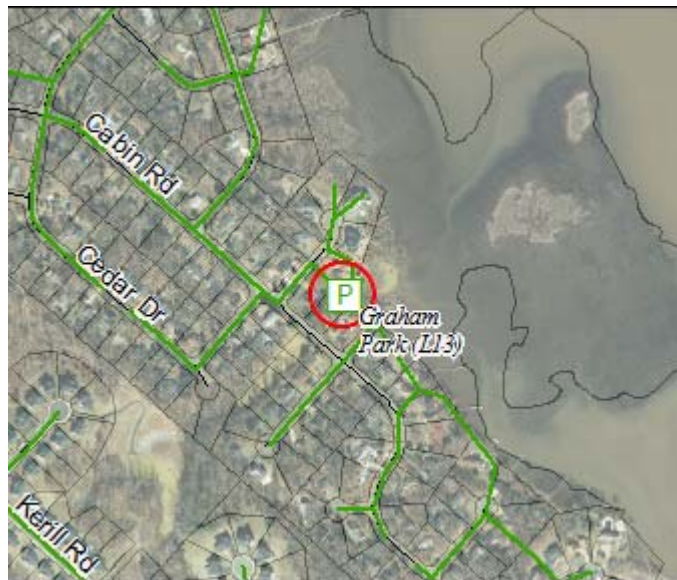
PROJECT DESCRIPTION

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

Project Benefit: Improve service to existing customers in the Melrose sewer shed in compliance with the County Comprehensive Plan. This project will 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 RKK

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
650	1000	1651	0	0	0	0	3301

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

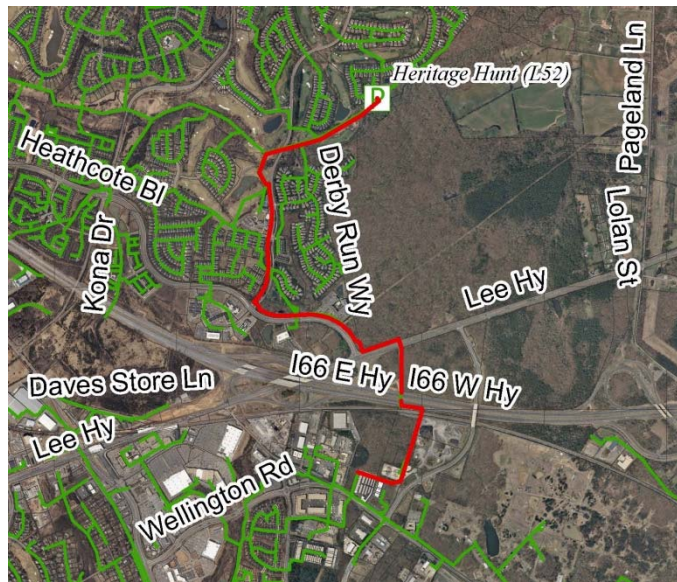
PROJECT INFORMATION

Project Name: Heritage Hunt Sewage Pumping Station, L52, Force Main
CIP Number: SPS-113
JDE Number(s): 22SLBM9001, 24SLBM9001
Location: Heritage Hunt SPS Force Main
Pressure Zone: HM – Haymarket
Sewershed: LB – Little Bull Run
Magisterial District: GN – Gainesville
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 5,950 feet of 24-inch force main from the Heritage Hunt Sewage Pumping 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: Increase discharge capacity of the Heritage Hunt Sewage Pumping Station to meet current and future development needs, and reduce repair and maintenance costs attributed to the operation of the interim station.
Source Derivation: Engineering and Planning Division; PHR&A: Study of Alternative Routings of Wastewater from the Immediate Area of Haymarket, 1994; Managed By RKK

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
1444	752	1000	6184	0	0	0	9380

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

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Replace Heritage Hunt Sewage Pumping Station, L52
CIP Number: SPS-114
JDE Number(s): 22SLBL5202, 24SLBL5202
Location: 6588 Alderwood Way, Gainesville
Pressure Zone: HM – Haymarket
Sewershed: LB – Little Bull Run
Magisterial District: GN – Gainesville
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

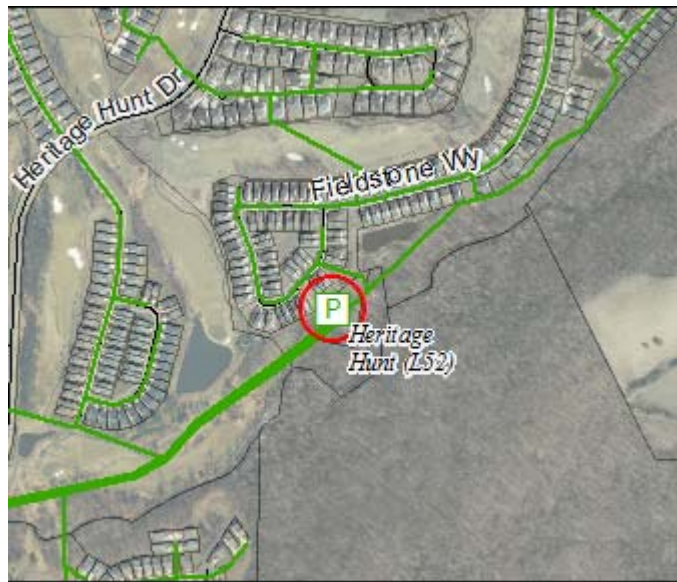
PROJECT DESCRIPTION

Project Description: Replacement of the existing Heritage Hunt sewage pumping station to increase pumping capacity from 5.0 MGD to approximately 8.0 MGD. The project will include the installation of a manual screen, dual channel grinders, dry-pit submersible pumps and associated piping and valves, BIOXIDE odor control system, sump pumps, new flowmeters in a new vault, and a monorail crane system.

Project Benefit: Continue to provide public sewer service to residential and commercial developments occurring in the Little Bull Run and Catharpin Creek Sewersheds in conformance with the PWC Comprehensive Plan. This replacement project is required as the ultimate development of the service area will exceed the capacity of the existing station.

Source Derivation: Engineering and Planning Division; PHR&A: Study of Alternative Routings of Wastewater from the Immediate Area of Haymarket, 1994; Managed By RKK

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
1459	250	1000	6076	7747	0	0	16532

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

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

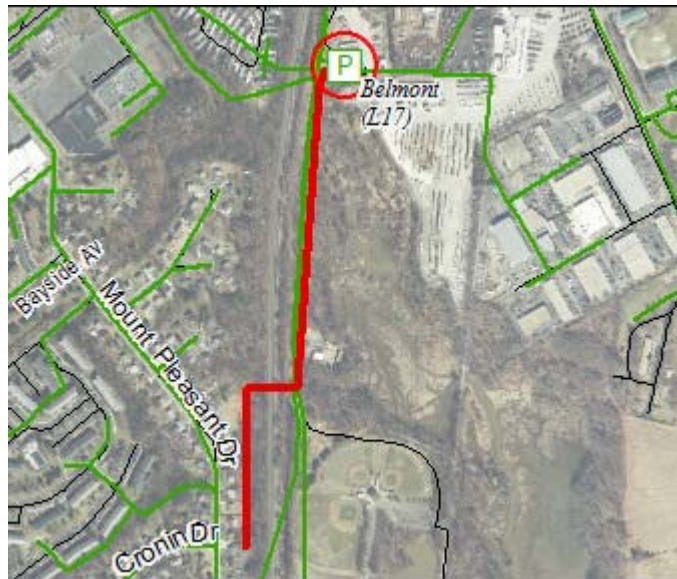
PROJECT INFORMATION

Project Name: Upgrade Belmont Sewage Pumping Station, L17 and Force Main Extension
CIP Number: SPS-115
JDE Number(s): Not Assigned
Location: 13760 Dabney Rd., Woodbridge
Pressure Zone: WL – Woodbridge
Sewershed: BM – Belmont
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Evaluation and rehabilitation of the existing Belmont Sewage Pumping Station to increase pumping capacity from 4.3 MGD to approximately 6 MGD, and the construction of approximately 2,900 feet of 24-inch force main.
Project Benefit: This project will relieve capacity 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. In addition, the project will provide adequate pumping capacity to serve future development within the sewershed in conformance with the County Comprehensive Plan.
Source Derivation: Greeley & Hansen Belmont Sewage Pumping Station/Colchester Interceptor Evaluation: 1998

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	150	440	4616	0	0	0	5206

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 Replacement

CIP Number: SPS-116

JDE Number(s): Not Assigned

Location: Hornbaker SPS, Devil’s Reach Rd. and Health Dr., Woodbridge

Pressure Zone: WL – Woodbridge

Sewershed: OC – Occoquan Creek

Magisterial District: OC – Occoquan

Criteria: 1, 2, 5

Project Estimate: Order of Magnitude

Estimate By: Engineering and Planning Division

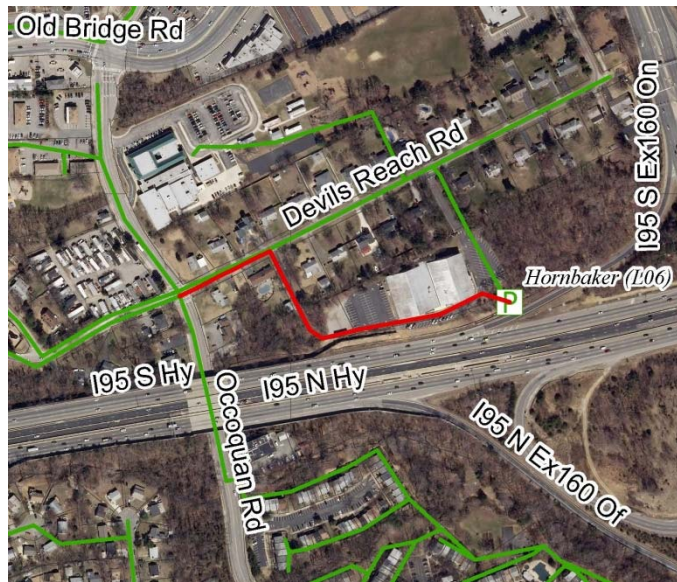
PROJECT DESCRIPTION

Project Description: Replacement and/or 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. The preliminary engineering report (PER) will identify five additional alternatives to see if any additional deficiencies exist, and include a comparison of the five alternatives with the three alternatives previously evaluated.

Project Benefit: This project will improve service and reliability to existing customers, reduce maintenance costs, and the new force main will enhance operations and improve reliability of the pumping station. The SA must meet all Clean Water Act (CWA) requirements for all permitted facilities.

Source Derivation: Engineering and Planning Division and Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
160	0	440	3928	0	0	0	4528

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

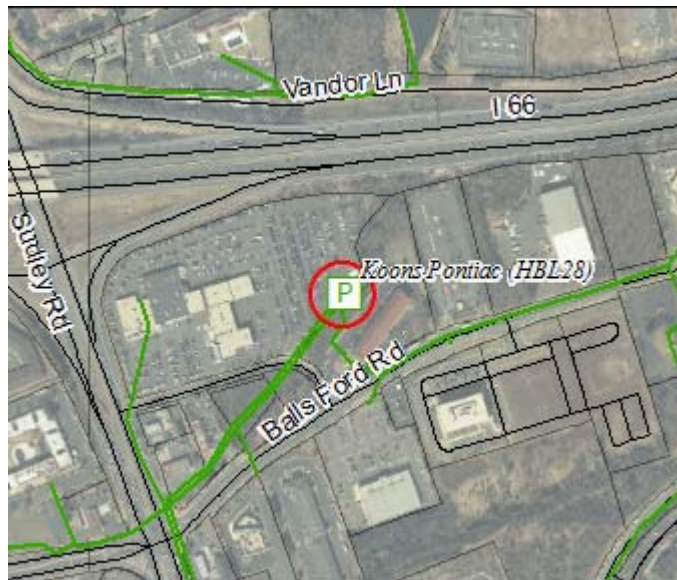
PROJECT INFORMATION

Project Name: Replace Koon's Sewage Pumping Station, L28
CIP Number: SPS-118
JDE Number(s): Not Assigned
Location: 10640 Automotive Dr., Manassas
Pressure Zone: GW – Gainesville
Sewershed: HB – Holkums Branch
Magisterial District: GN – Gainesville
Criteria: 1, 2, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement and upgrade of the existing antiquated Koon's Sewage Pumping Station. The preliminary engineering report (PER) will further define the scope of the project.
Project Benefit: This project will improve service and reliability to existing customers and reduce maintenance costs.
Source Derivation: Engineering and Planning Division, Managed By Engineering and Planning

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	150	300	1109	0	0	0	1559

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: Replace Airport Sewage Pumping Station Pumps, L15
CIP Number: SPS-119
JDE Number(s): 24SWAL1501
Location: 12331 Cotton Mill Dr., Woodbridge
Pressure Zone: LR – Lake Ridge
Sewershed: WA – Airport
Magisterial District: OC – Occoquan
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

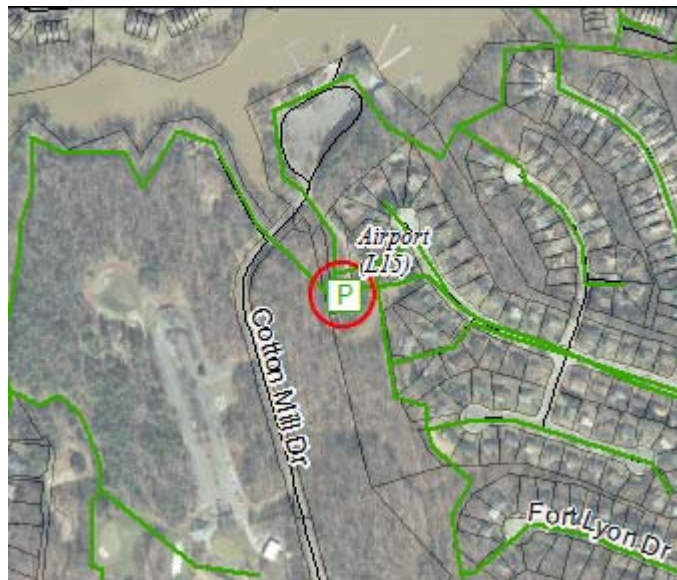
PROJECT DESCRIPTION

Project Description: Replacement of the existing antiquated pumping station. This project will replace the existing dry pit centrifugal pumps with dry pit mounted submersible pumps, replace the motor control center and automatic transfer switch, replace the emergency generator and fuel tank, install a new isolation valve and a flow meter on the discharge force main, and minor structural improvements.

Project Benefit: This project will reduce maintenance costs, improve service and reliability to the existing customers, and update the station with current technology and equipment.

Source Derivation: Operations and Maintenance Division; Managed By RK&K

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
389	1615	832	0	0	0	0	2836

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

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Replace Pumps at Oak Ridge Sewage Pumping Station, L49
CIP Number: SPS-120
JDE Number(s): Not Assigned
Location: 12811 Dusty Willow Rd, Manassas
Pressure Zone: OR – Oak Ridge
Sewershed: PU – Purcell Branch
Magisterial District: CO – Coles
Criteria: 1, 2, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

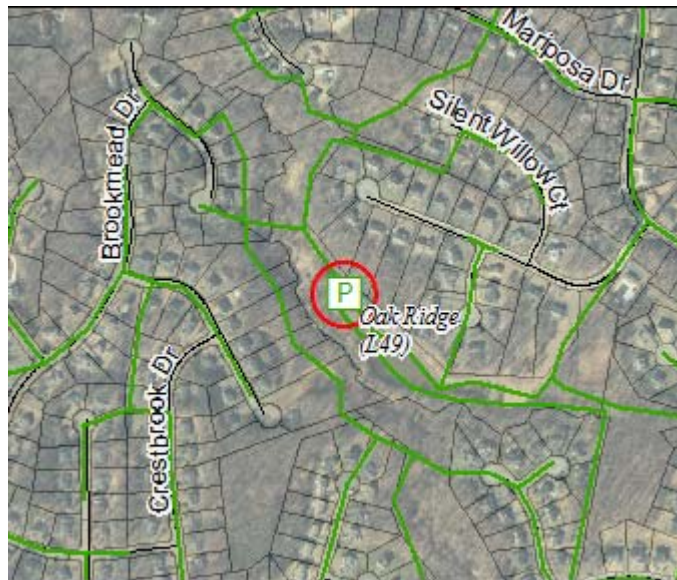
PROJECT DESCRIPTION

Project Description: Replacement of the existing vacuum-lift sewage pumps with submersible or suction lift sewage pumps and new controls and motors. The project allows for the replacement of the emergency generator if the generator proves inadequate for new pumps, installation of a bypass pumping connection on the force main, new SCADA, and any needed architectural improvements.

Project Benefit: The aging vacuum primed sewage pumps are proven unreliable. The new pumping station will increase reliability and reduce the excessive maintenance with newer technology pumps that are more reliable and have a longer service life.

Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	178	722	0	0	0	900

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: Replace Pumps at Dawson's Landing Sewage Pumping Station, L51
CIP Number: SPS-121
JDE Number(s): Not Assigned
Location: 1599 Whistling Swan Way, Woodbridge
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WL – Woodbridge
Criteria: 1, 2, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

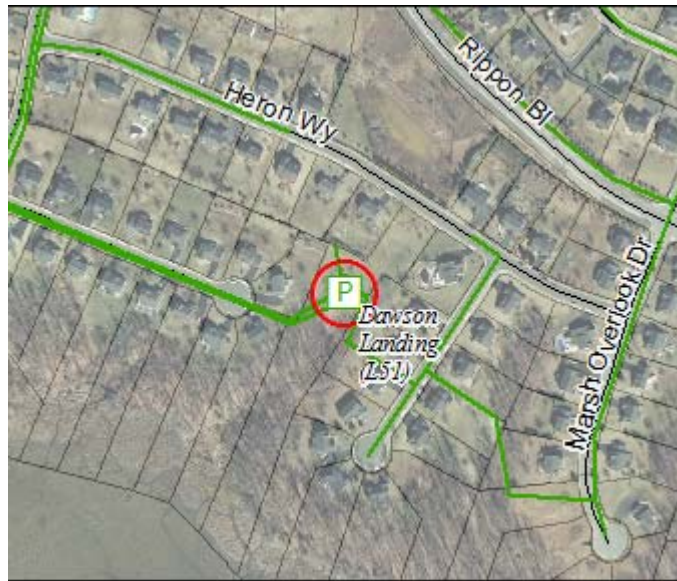
PROJECT DESCRIPTION

Project Description: Replacement of the existing vacuum-lift sewage pumps with submersible or suction lift sewage pumps with new controls and motors. It provides bypass pumping facilities on the force main and includes any needed architectural improvements. Additionally, the project will replace the emergency generator if the current generator proves inadequate for new pumps and a new SCADA system.

Project Benefit: The vacuum primed sewage pumps are proven unreliable. The new pumping station will increase reliability and reduce the excessive maintenance with newer technology pumps that are more reliable and have a longer service life.

Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	178	722	0	0	0	900

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: Replace Spinnaker Court Sewage Pumping Station, L02
CIP Number: SPS-123
JDE Number(s): Not Assigned
Location: 2280 Spinnaker Ct., Woodbridge
Pressure Zone: LR – Lake Ridge
Sewershed: HR – Hoes Run
Magisterial District: OC – Occoquan
Criteria: 1, 2, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement or upgrade of equipment and the facility, to include security measures as necessary to continue the sewage pumping station’s ability to provide reliable service to the sewershed. In addition, the project will install a by-pass connection on the force main and install a new SCADA system. The preliminary engineering report (PER) will further define the scope of the project.

Project Benefit: Bring an antiqued sewage pumping station, which was built in 1970, to new standards to reduce costs of maintenance. The new station will have the same capacity since there is no new development potential. The project will improve pumping station operation, reliability, and security.

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

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	150	300	1202	0	0	0	1652

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 Rehabilitation, L04**
CIP Number: SPS-125
JDE Number(s): Not Assigned
Location: 13221 Marina Way, Woodbridge
Pressure Zone: WL – Woodbridge
Sewershed: OC – Occoquan Creek
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: An evaluation to determine the extent of architectural improvements necessary to bring this pumping station to the aesthetic standards expected of all SA facilities. Additionally, this project will include flood protection of the station and new metering equipment. Based on the results of the study, the scope and budget amount of this project will be adjusted.

Project Benefit: Provide flood protection of the sewage pumping station against the flow tides from the Occoquan Creek. The project will also bring the pumping station to current standards and reduce maintenance costs.

Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	75	194	0	0	0	0	269

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: Piney Branch Sewage Pumping Station Demolition and Gravity Sewer Extension
CIP Number: SPS-126
JDE Number(s): Not Assigned
Location: Piney Branch SPS (L26)
Pressure Zone: GW – Gainesville
Sewershed: PB – Piney Branch, BR – Broad Run
Magisterial District: BR – Brentsville
Criteria: 1, 2, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

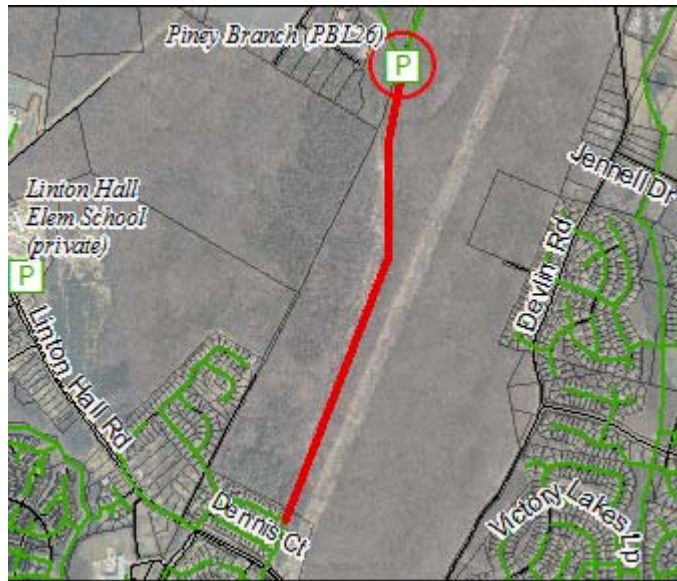
PROJECT DESCRIPTION

Project Description: Demolition of an existing 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 into the Broad Run sewershed. This project will be constructed in conjunction with proposed future development through the MPAU process.

Project Benefit: Eliminate an antiqued sewage pumping station and provide a higher capacity gravity main in order to provide reliable service to the combined sewersheds in compliance with the Prince William County Comprehensive Plan and DEQ regulations.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	2652	0	0	0	2652

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%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Dumfries Lift Station Flood Protection, L18
CIP Number: SPS-127
JDE Number(s): Not Assigned
Location: 3458 Canal Rd., Dumfries
Pressure Zone: DT – Dumfries
Sewershed: DM – Dumfries Lift Station
Magisterial District: PO – Potomac
Criteria: 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Design and construction of flood protection modifications.
Project Benefit: Reduce seepage of floodwaters through walls and entrances and protect instrumentation inside the sewage pumping station.
Source Derivation: Vulnerability Assessment 2015, Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	75	153	0	0	0	0	228

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

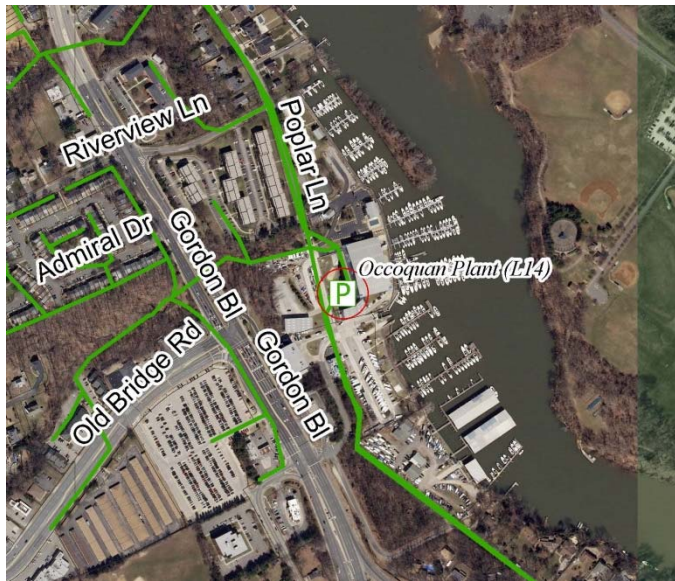
PROJECT INFORMATION

Project Name: Occoquan Plant Lift Station Flood Protection, L14
CIP Number: SPS-129
JDE Number(s): Not Assigned
Location: 12715 Sea Ray Ln., Woodbridge
Pressure Zone: WL – Woodbridge
Sewershed: OS – Occoquan Lift Station
Magisterial District: OC – Occoquan
Criteria: 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Design and construction of the recommended flood protection modifications based on the preliminary engineering report (PER).
Project Benefit: Reduce seepage of floodwaters through walls and entrances and protect instrumentation inside the sewage pump station.
Source Derivation: Vulnerability Assessment 2015, Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	75	151	0	0	0	0	226

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

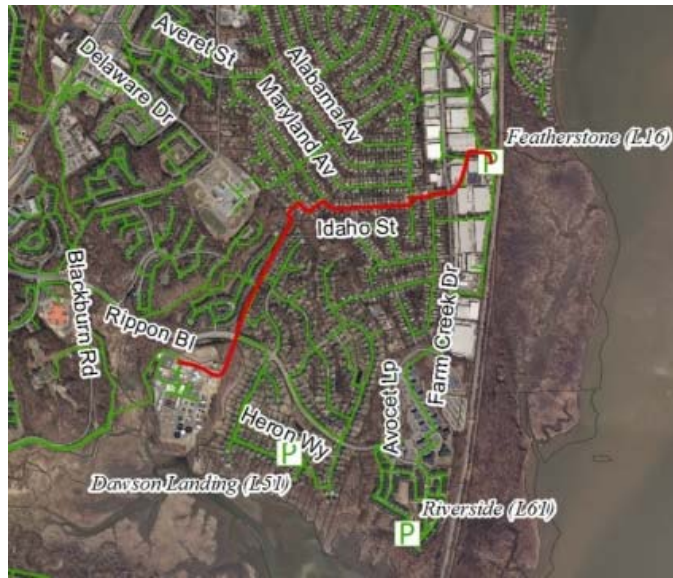
PROJECT INFORMATION

Project Name: Featherstone Sewage Pumping Station, L16, Force Main Assessment
CIP Number: SPS-133
JDE Number(s): 24SFSE0201
Location: Featherstone area towards H.L. Mooney AWRP
Pressure Zone: WL – Woodbridge
Sewershed: FS – Featherstone
Magisterial District: WB – Woodbridge
Criteria: 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Conduct a capacity analysis, a soil testing, and a pipe assessment on the existing 30-inch Featherstone force main that cannot be taken out of service. The project will assess the existing condition of the force main and it will also identify any necessary corrective measures.
Project Benefit: The results from the capacity analysis, soil testing, and the condition assessment will help the SA to strategically rehabilitate or redesign the 30-inch force main and determine the useful life of this major, critical pipeline in the Eastern Sanitary Sewer System.
Source Derivation: Engineering and Planning, Operations and Maintenance Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
7	200	0	894	0	0	0	1101

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
Prince William County



Sewage Collection Projects

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: County-Wide Emergency Capital Work
CIP Number: SEW-100
JDE Number(s): Multiple
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Emergency rehabilitation and replacement of sewer mains and manholes throughout the County that could arise during the fiscal year.
Project Benefit: Maintain a reliable and operational system, and respond to emergency rehabilitation and/or replacements within a reasonable time frame.
Source Derivation: Engineering and Planning, Operations and Maintenance Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	500	500	500	500	500	500	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%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

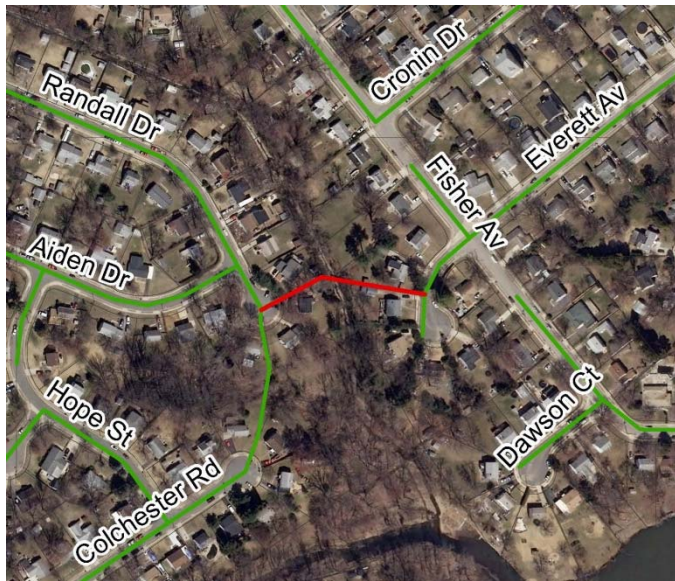
PROJECT INFORMATION

Project Name: Redirect Colchester Road Sewer – Randall Drive to Everett Avenue
CIP Number: SEW-105
JDE Number(s): Not Assigned
Location: Cul-de-sac in Randall Dr. to cul-de-sac in Everett Ave.
Pressure Zone: WL – Woodbridge
Sewershed: FS – Featherstone
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Construction of approximately 388 feet of 16-inch sanitary sewer and manholes to replace the existing 15-inch sanitary sewer located between Randall Drive and Everett Avenue. The existing sanitary sewer is failing and needs replacement to satisfy existing flow conditions.
Project Benefit: Improved hydraulic conditions of an old and failing sanitary sewer asset.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	86	577	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: Dumfries Force Main Replacement
CIP Number: SEW-106
JDE Number(s): 24SDMM4502
Location: Dumfries
Pressure Zone: DT – Dumfries
Sewershed: DM – Dumfries
Magisterial District: PO – Potomac
Criteria: 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

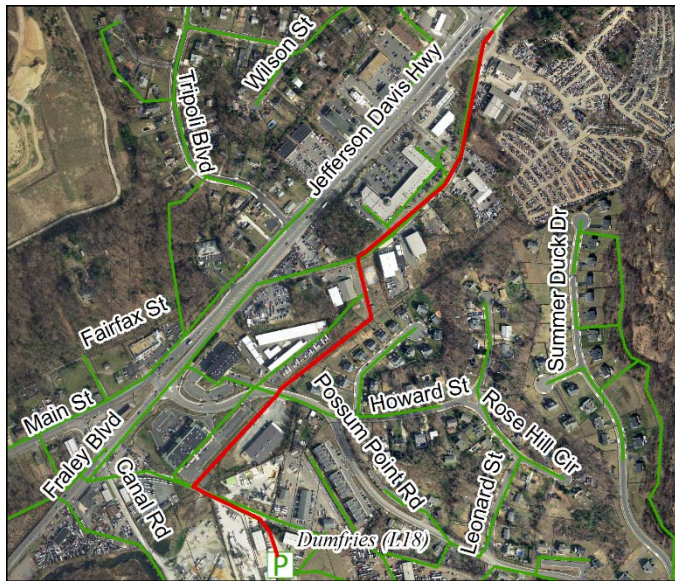
PROJECT DESCRIPTION

Project Description: Replacement and relocation of approximately 4,200 feet of existing 16-inch force main and replacement of approximately 700 feet of existing 3-inch force main with new 6-inch DIP.

Project Benefit: The Dumfries Sewershed is one of the largest and oldest sheds in Eastern Prince William County. The flows from the Purcell Branch Sewershed flow to the H.L. Mooney AWRF. The replacement of the force main will increase the sewer capacity and reduce inflow and infiltration.

Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
794	1500	1044	0	0	0	0	3338

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: Cow Branch Trunk Sewer Replacement
CIP Number: SEW-107
JDE Number(s): Not Assigned
Location: I-95 to Neabsco Sewage Pumping Station
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

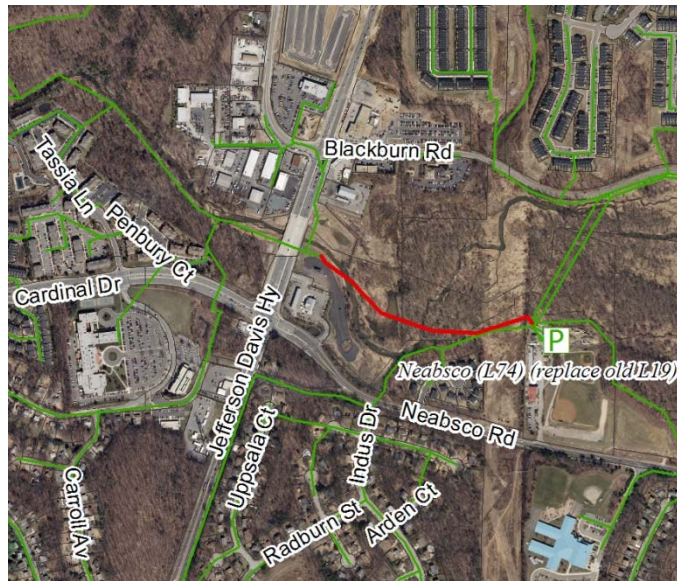
PROJECT DESCRIPTION

Project Description: Replacement and upgrade of approximately 1,700 feet of 21-inch Cow Branch Trunk Sewer from Route 1 to Neabsco Sewage Pumping Station with a 24-inch sanitary sewer.

Project Benefit: The Neabsco Sewershed was built in the mid 1960’s and is one of the oldest trunk sewers in Eastern Prince William County. The goal of the project is to improve sewer capacity and prevent inflow and infiltration on a 1968 VC pipe in the Cow Branch Drainage Basin. Additionally, the project will reduce system inflow and infiltration and, therefore, reduce flows to the H.L. Mooney AWRP.

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

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	260	150	1000	402	0	0	1812

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

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Little Creek Sewershed Manhole Rehabilitation
CIP Number: SEW-115
JDE Number(s): Not Assigned
Location: Little Creek Sewershed
Pressure Zone: DT – Dumfries
Sewershed: LC – Little Creek
Magisterial District: PO – Potomac
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

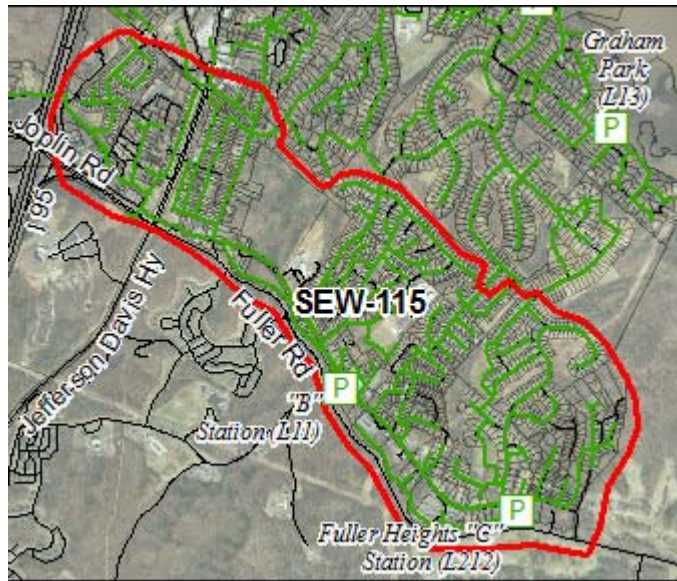
PROJECT DESCRIPTION

Project Description: Rehabilitation of a large number of manholes within the Little Creek sewershed. The rehabilitation is based on recommendations from the Little Creek SSES Study conducted by Baker Engineering.

Project Benefit: The Little Creek Sewershed is a mid-sized sewershed and is one of the oldest trunk sewer systems in Eastern Prince William County. The project will reduce inflow and infiltration and reduce flows to the sewage pumping stations and the H.L. Mooney AWWF. It will also extend the life of the assets.

Source Derivation: Baker Engineering; Operations and Maintenance Division; Managed By Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
302	301	0	0	0	0	0	603

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: Flat Branch Sewershed Rehabilitation / CIPP Lining – Rixlew Lane
CIP Number: SEW-118
JDE Number(s): Not Assigned
Location: Rixlew Ln. from Ashton Ave. to Sudley Rd.
Pressure Zone: GM – Greater Manassas
Sewershed: FB – Flat Branch
Magisterial District: BR – Brentsville
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 3,256 feet of 12-inch and 15-inch sanitary sewer. The bulk of the work will take place within the easement off Rixlew Lane between Ashton Avenue and Sudley Road.

Project Benefit: The Flat Branch Sewershed is one of the oldest sewersheds in Western Prince William County and also one of the closest sewersheds to UOSA. The lining of the sewer mains in question is necessary. It will reduce maintenance requirements, and inflow and infiltration. The lining will also extend the life of the assets.

Source Derivation: Operations and Maintenance Division; Managed By Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	229	0	0	0	0	0	229

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: Hooes Run Sewer Rehabilitation / CIPP Lining – Colby Drive
CIP Number: SEW-123
JDE Number(s): Not Assigned
Location: Colby Dr. and Spinnaker Ct.
Pressure Zone: LK – Lake Ridge
Sewershed: HR – Hooes Run
Magisterial District: OC – Ocoquan
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 7,898 feet of 8-inch sanitary sewer. The bulk of the work will take place on Colby Drive and Spinnaker Court to Spinnaker Pumping Station in the Alake Ridge Subdivision.
Project Benefit: The Hooes Run Sewershed is one of the largest sewersheds in Eastern Prince William County. The flows from Hooes Run shed are tributary to the H.L. Mooney AWRF. The lining of the sewer mains in question is necessary. It will reduce maintenance requirements, and inflow and infiltration. The lining will also extend the life of the assets.
Source Derivation: Operations and Maintenance Division; Managed By Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	371	0	0	0	0	0	371

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: Dewey's Creek Sewer Rehabilitation / L18 Outfall – Route 1
CIP Number: SEW-126
JDE Number(s): Not Assigned
Location: Dewey's Creek SPS & Rt. 1
Pressure Zone: DT – Dumfries
Sewershed: DE – Dewey's Branch
Magisterial District: PO – Potomac
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehabilitation of a number of manholes within the easement off Jefferson Davis Highway. The work will begin near the intersection of Route 234 and Jefferson Davis Highway and continue to Wayside Drive.
Project Benefit: Dewey's Creek Sewershed is a mid-sized sewershed in Eastern Prince William County. Dewey's Branch sewershed is tributary to the H.L. Mooney AWRF. The project will reduce inflow and infiltration and reduce flows to the H.L. Mooney AWRF. It will also extend the life of the assets.
Source Derivation: Operations and Maintenance Division; Managed By Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	145	0	0	145

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

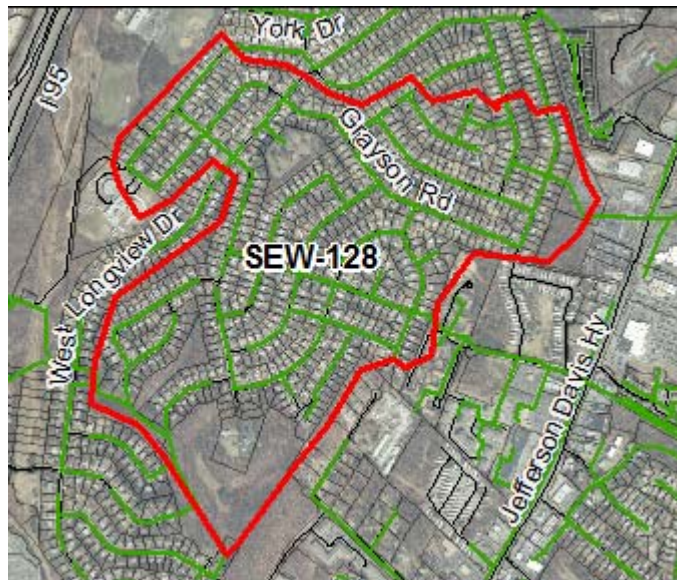
PROJECT INFORMATION

Project Name: Belmont Sewer Rehabilitation / CIPP Lining – Section 2B
CIP Number: SEW-128
JDE Number(s): 24SBMM4101
Location: Marumsco Hills Section 2B
Pressure Zone: LR – Lake Ridge
Sewershed: BM – Belmont
Magisterial District: WB – Woodbridge
Criteria: 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 30,887 feet of 8-inch sanitary sewer. The bulk of the work will take place between Culpeper Drive and Caroline Street off West Longview Drive.
Project Benefit: Reduce maintenance requirements due to root intrusion. It will also reduce inflow and infiltration. The lining of these sewer sections will extend the life of these assets.
Source Derivation: Operations and Maintenance Division; Managed By Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
1045	385	0	0	0	0	0	1430

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: Belmont Sewer Rehabilitation / CIPP Lining – Section 2A

CIP Number: SEW-129

JDE Number(s): Not Assigned

Location: Marumscos Hills Section 2A

Pressure Zone: LR – Lake Ridge

Sewershed: BM – Belmont

Magisterial District: WB – Woodbridge

Criteria: 1, 2, 3, 5

Project Estimate: Order of Magnitude

Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 11,974 feet of 8-inch sanitary sewer. The bulk of the work will take place between Richmond Avenue and Warren Drive off West Longview Drive.

Project Benefit: The Belmont Sewershed is a mid-sized sewershed in Eastern Prince William County. The flows from the sewershed are tributary to the H.L. Mooney AWWRF. The lining of the sewer mains in question will reduce maintenance requirements due to root intrusion, and it will reduce inflow and infiltration. The lining will also extend the life of the assets.

Source Derivation: Operations and Maintenance Division; Managed By Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	599	0	0	0	0	0	599

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: Belmont Sewer Rehabilitation / CIPP Lining – Section 1
CIP Number: SEW-130
JDE Number(s): Not Assigned
Location: Marumscos Hills Section 1
Pressure Zone: LR – Lake Ridge and WL – Woodbridge
Sewershed: BM – Belmont
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 8,909 feet of 8-inch sanitary sewer. The bulk of the work will take place on Maurice Drive, Frances Drive, and Botts Avenue.
Project Benefit: The Belmont Sewershed is a mid-sized sewershed in Eastern Prince William County. The flows from the sewershed are tributary to the H.L. Mooney AWRP. The lining of the sewer mains in question will reduce maintenance requirements due to root intrusion, and it will reduce inflow and infiltration. The lining will also extend the life of the assets.
Source Derivation: Operations and Maintenance Division; Managed By Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	426	0	0	0	0	0	426

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: Rose Hill Circle Sewer Main Replacement
CIP Number: SEW-142
JDE Number(s): 24SDMM5001
Location: Rose Hill Cir., Dumfries
Pressure Zone: DT – Dumfries
Sewershed: DM – Dumfries
Magisterial District: PO – Potomac
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Replacement of approximately 725 feet of existing 6-inch concrete sanitary sewer with 8-inch PVC sanitary sewer. The project also includes replacing 4 manholes, approximately 15 private sewer laterals, and installing clean-outs where necessary. This project will be constructed with CIP Project WAT-172.

Project Benefit: This project will improve service, reduce inflow and infiltration, and minimize maintenance costs. Combining both water and sewer main replacement work will save pavement restoration costs and minimize neighborhood disruptions during construction.

Source Derivation: Operations and Maintenance, Engineering and Planning Divisions

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
170	74	0	0	0	0	0	244

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: Lakeridge Sewer Rehabilitation / CIPP Lining – Deepford Drive to Woodfern Court
CIP Number: SEW-144
JDE Number(s): Not Assigned
Location: Lakeridge, off Antietam Rd.
Pressure Zone: LR – Lake Ridge
Sewershed: HR – Hooes Run
Magisterial District: OQ – Occoquan
Criteria: 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 19,900 feet of 8-inch sanitary sewer. The bulk of the work will take place on the sanitary sewer system between Deepford Drive and Woodfern Court and the related easements in the Lakeridge Subdivision.
Project Benefit: Hooes Run Sewershed is one of the largest sewersheds in Eastern Prince William County. The flows from Hooes Run sewershed are tributary to the H.L. Mooney AWRP. The lining of the sewer mains in question is necessary. It will reduce maintenance requirements and inflow and infiltration. The lining will also extend the life of the assets.
Source Derivation: Operations and Maintenance Division; Managed By Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	1357	0	0	0	0	1357

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

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Woodbridge Sewer Rehabilitation / CIPP Lining – Horner Road
CIP Number: SEW-145
JDE Number(s): Not Assigned
Location: Woodbridge, G St. to Brice St.
Pressure Zone: WL – Woodbridge
Sewershed: BM – Belmont Lift Station
Magisterial District: WB – Woodbridge
Criteria: 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 15,945 feet of 8-inch and 10-inch sanitary sewer. The work will take place in the Marumscosco area surrounding Horner Road.
Project Benefit: The Belmont Sewershed is a mid-sized sewershed in Eastern Prince William County. The flows from the sewershed are tributary to the H.L. Mooney AWRP. The lining of the sanitary sewer in question will reduce maintenance requirements, inflow and infiltration, and will also extend the life of the assets.
Source Derivation: Operations and Maintenance Division; Managed By Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	999	0	0	0	0	999

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

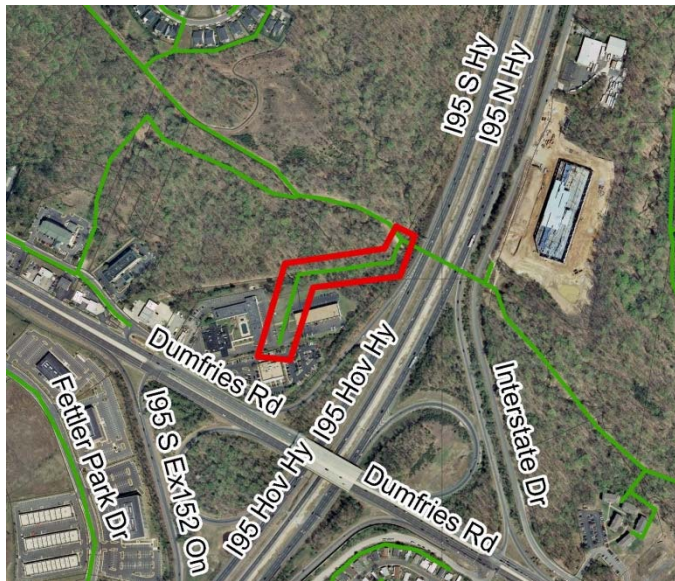
PROJECT INFORMATION

Project Name: Dumfries Sewer Rehabilitation / Manholes – Old Stage Road
CIP Number: SEW-147
JDE Number(s): Not Assigned
Location: Easement off Old Stage Rd.
Pressure Zone: DT – Dumfries
Sewershed: DE – Dewey’s Branch Lift Station
Magisterial District: PO – Potomac
Criteria: 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehabilitation of 14 manholes in the vicinity of the Quality Inn on Old Stage Road.
Project Benefit: Dewey’s Creek Sewershed is a mid-sized sewershed in Eastern Prince William County. Dewey’s Branch sewershed is tributary to the H.L. Mooney AWRF. The project will reduce inflow and infiltration, and reduce flows to the H.L. Mooney AWRF. It will also extend the life of the assets.
Source Derivation: Operations and Maintenance Division; Managed By Operations and Maintenance Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	100	0	0	0	0	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 Name: Lake Ridge Sewer Rehabilitation / CIPP Lining – Old Bridge Road
CIP Number: SEW-149
JDE Number(s): Not Assigned
Location: Old Bridge Rd. near Occoquan Rd.
Pressure Zone: WL – Woodbridge
Sewershed: OS – Occoquan Plant
Magisterial District: OC – Occoquan
Criteria: 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 4,103 feet of 8-inch sanitary sewer. The work will take place along Old Bridge Road from the intersection with Directors Loop to the intersection with Occoquan Road, and along Cara Drive.
Project Benefit: Occoquan Plant Sewershed is one of the mid-sized sewersheds in Eastern Prince William County. The flows from the sewershed are tributary to the H.L. Mooney AWRP. The lining of the sewer mains in question is necessary to reduce maintenance requirements, and reduce inflow and infiltration. The lining will also extend the life of the assets.
Source Derivation: Operations and Maintenance Division; Managed By Operations and Maintenance Division.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	274	0	0	0	274

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: East End Sewer Equalization Study
CIP Number: SEW-152
JDE Number(s): Not Assigned
Location: East End Sanitary Sewer System
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division, Baker

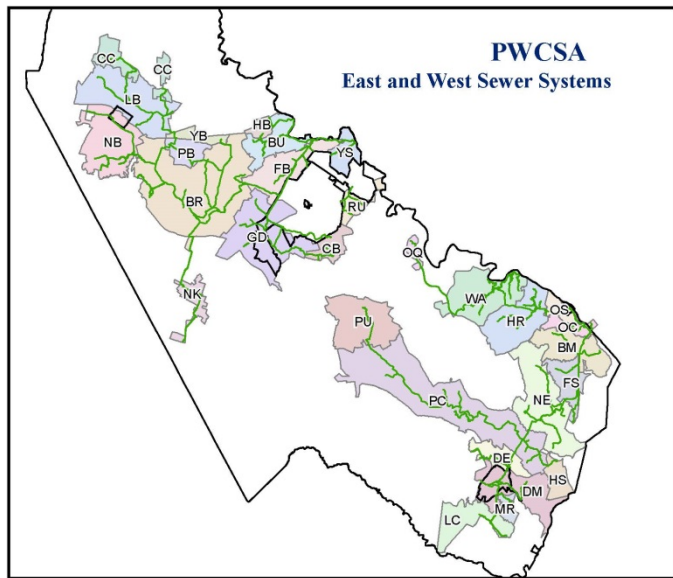
PROJECT DESCRIPTION

Project Description: Perform a sanitary sewer equalization analysis for 12 SA lift stations on the East End with a capacity equal or greater than 1 MGD and at the H.L. Mooney AWRF. The scope of work includes the identification of potential locations and sizing of equalization basins, identification of necessary components, and developing cost estimates.

Project Benefit: Equalize and reduce sanitary sewer loads to the H. L. Mooney AWRF to prevent possible sanitary sewer overflows and improve plant operations.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
290	25	0	0	0	0	0	315

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: Dumfries Sewer Shed Rehabilitation / Woodland Drive and Sharon Road

CIP Number: SEW-153

JDE Number(s): Not Assigned

Location: Woodland Dr. and Sharon Rd. off Graham Park Rd.

Pressure Zone: DT – Dumfries

Sewershed: DM – Dumfries

Magisterial District: PO – Potomac

Criteria: 1, 2, 3, 5

Project Estimate: Order of Magnitude

Estimate By: Engineering and Planning Division, Baker

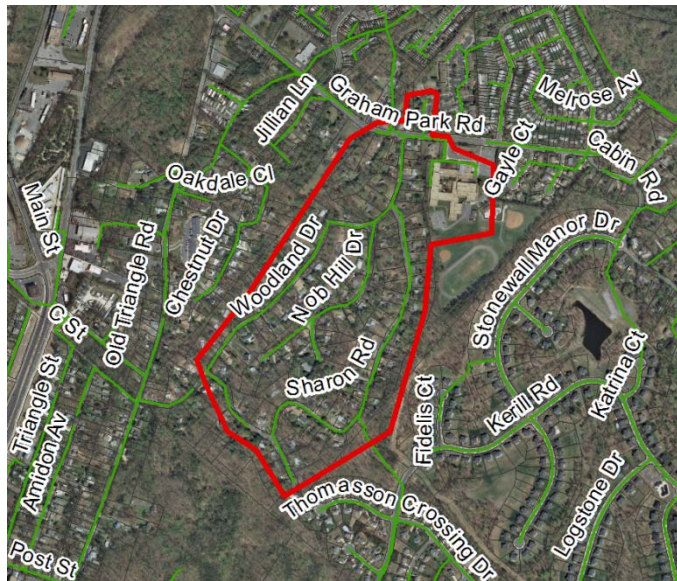
PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 10,840 feet of 8-inch sanitary sewer. The work will take place on Woodland Drive, Sharon Road, Cato Court, and Nob Hill Drive.

Project Benefit: The Potomac Sewershed is one of the oldest sewersheds in Eastern Prince William County. The lining of the sewer mains will reduce maintenance requirements and inflow and infiltration. CIPP lining will also extend the life of the assets.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	542	0	0	0	542

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

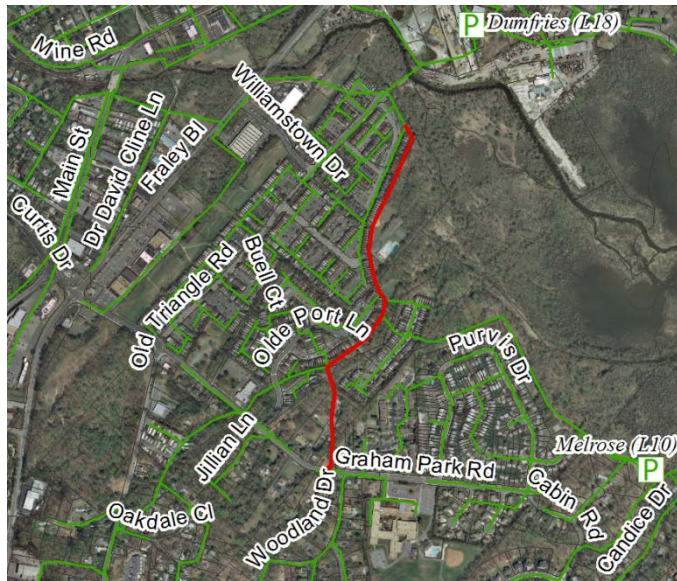
PROJECT INFORMATION

Project Name: Dumfries Sewer Shed Rehabilitation / Williamstown Easement
CIP Number: SEW-154
JDE Number(s): Not Assigned
Location: Easement off Graham Park Rd. and Milroy Dr.
Pressure Zone: DT – Dumfries
Sewershed: DM – Dumfries
Magisterial District: PO – Potomac
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division, Baker

PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 3,300 feet of 18-inch sanitary sewer. The work will take place within the easement starting off Graham Park Road and end within the easement off Milroy Drive.
Project Benefit: The Dumfries Sewershed is one of the oldest sewersheds in Eastern Prince William County. The lining of the sewer mains will reduce maintenance requirements and inflow and infiltration. CIPP lining will also extend the life of the assets.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	328	0	0	0	0	0	328

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

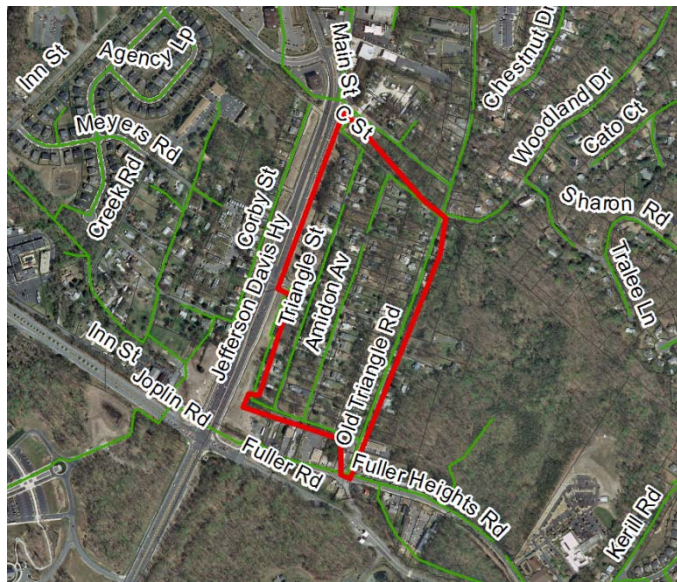
PROJECT INFORMATION

Project Name: Little Creek Sewershed Rehabilitation / Old Triangle Road
CIP Number: SEW-155
JDE Number(s): Not Assigned
Location: Triangle – Triangle St. to Old Triangle Rd.
Pressure Zone: DT – Dumfries
Sewershed: LC –Little Creek
Magisterial District: PO – Potomac
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division, Baker

PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 7,595 feet of 8-inch sanitary sewer. The work will take place in the area of Triangle Street, Amidon Avenue, Old Triangle Road, and connecting side streets.
Project Benefit: The Little Creek Sewershed is one of the oldest sewersheds in Eastern Prince William County. The lining of the sewer mains will reduce maintenance requirements and inflow and infiltration. CIPP lining will also extend the life of the assets.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	394	0	0	0	0	394

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

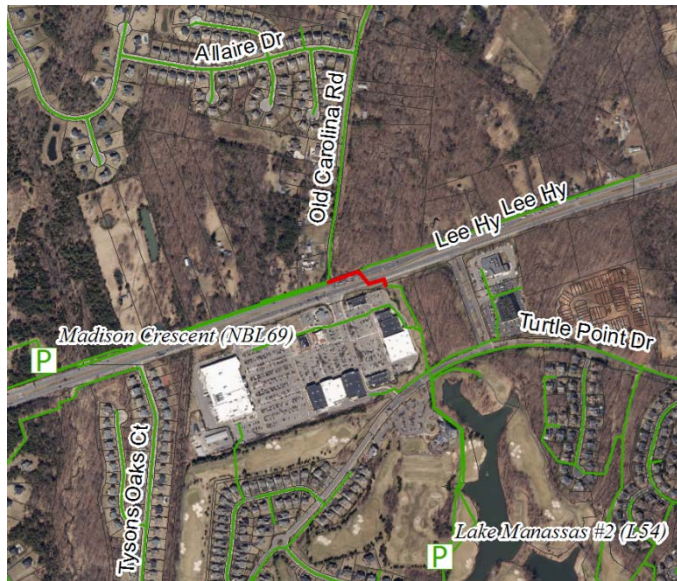
PROJECT INFORMATION

Project Name: Replacement of Old Carolina Road and Route 29 Crossing
CIP Number: SEW-156
JDE Number(s): Not Assigned
Location: East of the intersection of Lee Hwy. (Rt.29) and Old Carolina Rd.
Pressure Zone: HM – Haymarket
Sewershed: NB –North Branch
Magisterial District: BR – Brentsville
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division, Baker

PROJECT DESCRIPTION

Project Description: Replacement and upgrade of approximately 550 feet of existing 8-inch sanitary sewer with 12-inch sanitary sewer in the vicinity of the Shops at Stonewall Shopping Center. This project will be constructed in conjunction with future development through the MPA process.
Project Benefit: This project will increase capacity to accommodate future anticipated growth in the area.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	577	0	0	0	0	0	577

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

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Sudley Road Sewer Main Replacement and Upgrade
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
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division, Baker

PROJECT DESCRIPTION

Project Description: Installation of approximately 2,250 feet of 15-inch and 21-inch sanitary sewer main and 11 manholes south of Williamson Boulevard. This includes a trenchless crossing of Williamson Boulevard.
Project Benefit: This project will increase capacity along this corridor to accommodate future anticipated growth.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
179	250	2978	799	0	0	0	4206

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: Rippon Landing / CIPP Lining
CIP Number: SEW-158
JDE Number(s): Not Assigned
Location: Woodbridge, between Blackburn Rd. and Rippon Blvd.
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

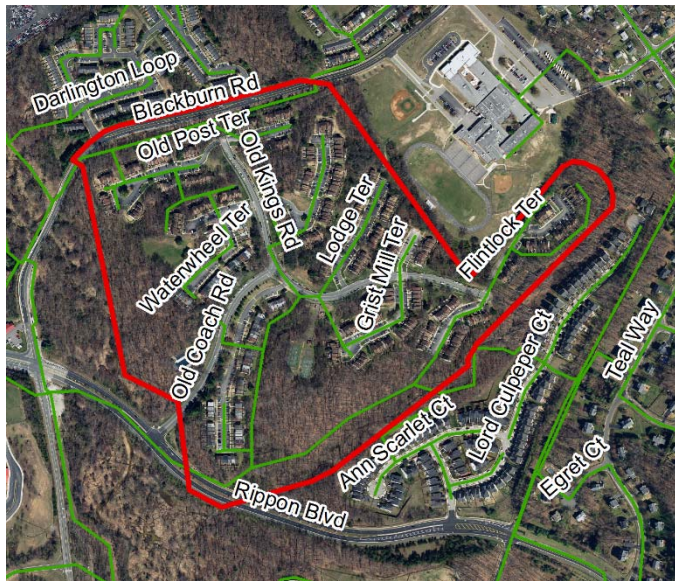
PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 13,197 feet of 8, 10, and 12-inch sanitary sewer. The bulk of the work will take place off Old Kings Road and Old Coach Road.

Project Benefit: The flows from Neabsco Creek sewershed are tributary to the H.L. Mooney AWRF. Lining of the sanitary sewer mains is necessary. It will reduce maintenance requirements and inflow and infiltration. The lining will also extend the life of the assets.

Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	782	0	0	782

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

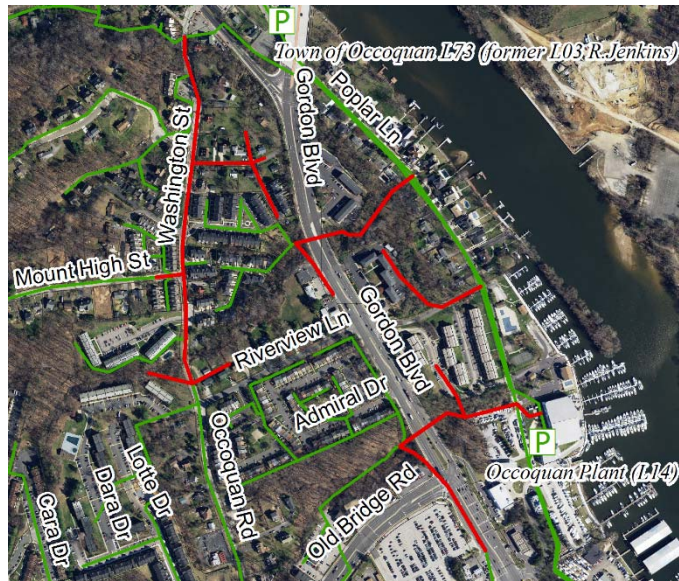
PROJECT INFORMATION

Project Name: Town of Occoquan / CIPP Lining
CIP Number: SEW-160
JDE Number(s): Not Assigned
Location: Occoquan Rd. and Gordon Blvd.
Pressure Zone: WL – Woodbridge
Sewershed: OS – Occoquan Plant
Magisterial District: OC – Occoquan
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 6,963 feet of 8-inch sanitary sewer. The bulk of the work will take place on Occoquan Road and Gordon Boulevard.
Project Benefit: The flows from Occoquan Plant sewershed are tributary to the H.L. Mooney AWRP. Lining of the sanitary sewer mains is necessary. It will reduce maintenance requirements and inflow and infiltration. The lining will also extend the life of the assets.
Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	377	0	0	377

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: Lake Ridge / CIPP Lining – Oakwood Drive
CIP Number: SEW-161
JDE Number(s): Not Assigned
Location: Lake Ridge, Oakwood Dr.
Pressure Zone: LR – Lake Ridge
Sewershed: HR – Hooes Run
Magisterial District: OC – Occoquan
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 10,736 feet of 8-inch sanitary sewer. The bulk of the work will take place in the area of Oakwood Drive on the south side of Old Bridge Road.
Project Benefit: The flows from Hooes Run sewershed are tributary to the H.L. Mooney AWRF. Lining of the sanitary sewer mains is necessary. It will reduce maintenance requirements and inflow and infiltration. The lining will also extend the life of the assets.
Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	591	0	0	591

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

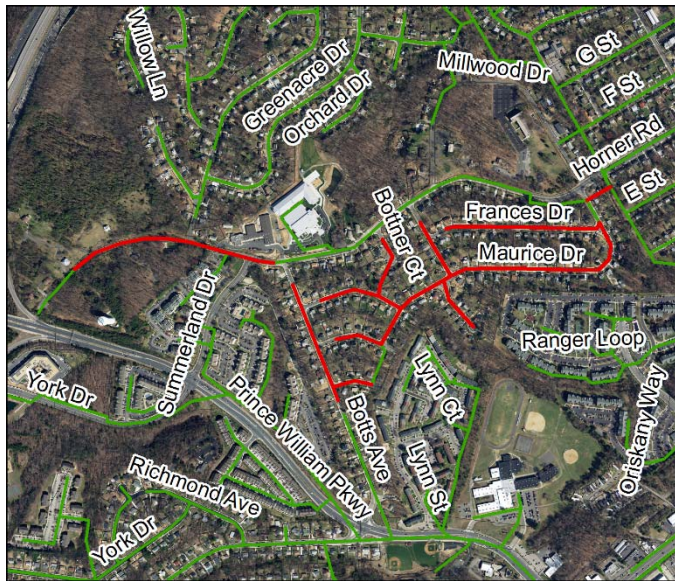
PROJECT INFORMATION

Project Name: Marumsco Hills / CIPP Lining – Maurice Drive
CIP Number: SEW-162
JDE Number(s): Not Assigned
Location: Woodbridge, in the Maurice Dr. area
Pressure Zone: LR – Lake Ridge and WL – Woodbridge
Sewershed: BM – Belmont
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehabilitation of approximately 9,903 feet of 8-inch sanitary sewer. The bulk of the work will take place in the area of Maurice Drive and Botts Avenue.
Project Benefit: The flows from Belmont sewershed are tributary to the H.L. Mooney AWRP. Lining of the sanitary sewer mains is necessary. It will reduce maintenance requirements and inflow and infiltration. The lining will also extend the life of the assets.
Source Derivation: Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	437	0	0	437

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
Prince William County



Water Reclamation Facility Projects

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Capital Emergency Projects
CIP Number: WRF-100
JDE Number(s): Multiple
Location: H.L. Mooney AWRF
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB - Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: CH2M

PROJECT DESCRIPTION

Project Description: This project serves as an emergency fund to cover unforeseen emergency maintenance and repairs to the capital facilities at the plant.
Project Benefit: Allows for the repair or replacement of critical infrastructure in a timely manner to ensure the continued safe and efficient operations of the plant.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	513	513	513	513	513	0	2565

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: Land Improvements
CIP Number: WRF-101
JDE Number(s): 24SMPN0001
Location: H.L. Mooney AWRF
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: CH2M

PROJECT DESCRIPTION

Project Description: This project entails land improvements including curb and gutter improvements, improvements to the Water Tower Access Road and Outfall Access Road, and construction of a secondary entrance from Rippon Boulevard. This also includes stormwater management improvements including berming, regrading, and new structures.

Project Benefit: The land improvements will increase site safety and security, protect offsite exposure to industrial activity, and enhance public perception.

Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
522	0	0	1421	0	0	5586	7529

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: Denitrification Filters
CIP Number: WRF-105
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRP
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB - Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: CH2M

PROJECT DESCRIPTION

Project Description: Improvements to the denitrification filters including upgrade of instrumentation and equipment as necessary to meet design nitrogen removal requirements, construction of covers over the denitrification filter channels, demolition of old final filters, and backwash improvements.
Project Benefit: Permit compliance, asset management, and operational resiliency.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	142	1255	135	0	1532

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: Corrosion Control
CIP Number: WRF-110
JDE Number(s): 24SMPC0201
Location: H.L. Mooney AWRP
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB - Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: CH2M

PROJECT DESCRIPTION

Project Description: Performing corrosion control measures, industrial coatings and concrete surface repairs, as well as engineering inspection services for plant equipment and facilities such as tanks, pumps, blowers, mixers, clarifier and thickener mechanisms, exterior building and lighting fixtures.
Project Benefit: This project allows for improved corrosion control measures throughout the plant and extends asset life.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
556	150	150	150	150	183	0	1339

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: Incineration Backup
CIP Number: WRF-113
JDE Number(s): 24SMPS0014
Location: H.L. Mooney AWRP
Pressure Zone: WL - Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB - Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: CH2M

PROJECT DESCRIPTION

Project Description: Study, design, and construction of facilities to provide immediate backup to the existing fluidized bed incinerator for emergency, short-term, and long-term planned shutdowns. Individual projects are to include a study of disposal options and solids processing and handling improvements.

Project Benefit: This project is required to provide operational flexibility of solids disposal alternatives and ensure viable back-up options to the fluidized bed incinerator, in addition to hauling to the landfill.

Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
533	250	500	1250	1250	315	1100	5198

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

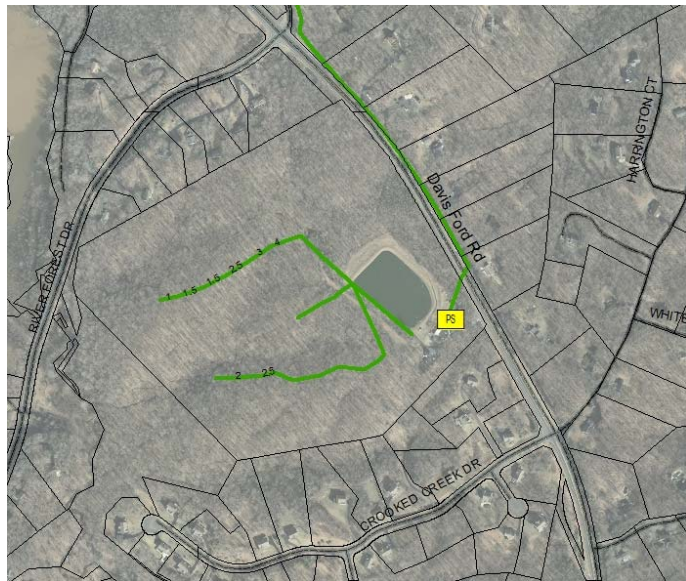
PROJECT INFORMATION

Project Name: Occoquan Forest WWTP Closure & Site Restoration
CIP Number: WRF-114
JDE Number(s): 24SOQU0101
Location: Occoquan Forest WWTP
Pressure Zone: OQ – Occoquan Forest
Sewershed: OQ – Occoquan Forest
Magisterial District: OC – Occoquan
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: CH2M

PROJECT DESCRIPTION

Project Description: Design, permitting and demolition for the de-commissioning of the Occoquan Forest Wastewater Treatment Plant (WWTP) and site restoration of the receiving pond. Discharge permit for WWTP is expiring and the plant has been replaced by a pumping station.
Project Benefit: This project is to meet DEQ requirements and land sale.
Source Derivation: Environmental Services & Water Reclamation Division, Managed By Engineering and Planning Division
Special Note: Per Finance Division – This project does not meet the accounting criteria to be capitalized, therefore it will be accounted for as an expense along with the disposal costs of the Occoquan Forest Plant and related assets.

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
303	317	1269	0	0	0	0	1889

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: Control & Process Building. Renovations
CIP Number: WRF-116
JDE Number(s): 24NMPH0007
Location: H.L. Mooney AWRP
Pressure Zone: WL - Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB - Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: CH2M

PROJECT DESCRIPTION

Project Description: Conversion of the existing laboratory into office space and SCADA-Secure room. Additional design and construction for complete roof replacement. Allowance for refurbishment of Old Admin Building for temporary facilities.
Project Benefit: This project will provide for increased office-use space. It will also bring the building up to code and offer enhanced security for the SCADA control room.
Source Derivation: Environmental Services & Water Reclamation Division, Managed By Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
790	4321	473	0	0	0	0	5584

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: Peak Flow Management Facilities
CIP Number: WRF-118
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRF
Pressure Zone: WL - Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB - Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: CH2M

PROJECT DESCRIPTION

Project Description: Design and construction of on-site facilities to manage, store, or process excess peak flows to the H.L. Mooney AWRF. Alternatives to evaluate include an above ground equalization tank and high-rate treatment processes such as ballasted flocculation. This project needs to be considered in conjunction with SEW-152.

Project Benefit: This project adds necessary operational resiliency and ability to process and contain peak flows to the plant and minimize the potential for wastewater spills.

Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	250	250	250	0	0	11343	12093

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: Hydraulic Improvements
CIP Number: WRF-122
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRF
Pressure Zone: WL - Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB - Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: CH2M

PROJECT DESCRIPTION

Project Description: Design and construction of new facilities and/or improvements and upgrades to improve hydraulics and prevent flow restrictions. Specific projects will be determined based on updated dynamic hydraulic model studies under WRF-126. The hydraulic improvements are phased, with first phase for improvements from plant inlet to primary treatment, and second phase from bioreactor basins to outfall.

Project Benefit: This project improves permit compliance, provides alternatives to improve hydraulic capacity to process peak flows to the plant and minimize spills.

Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	150	150	150	202	1245	808	2705

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: Ongoing Renewal and Replacement
CIP Number: WRF-123
JDE Number(s): 24NMPP0501
Location: H.L. Mooney AWRF
Pressure Zone: WL - Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB - Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: CH2M

PROJECT DESCRIPTION

Project Description: On-going major updating, restoration, and replacement projects for management of H.L. Mooney AWRF to maintain and extend useful life of assets and address regular wear and asset aging.
Project Benefit: Permit compliance and plant resilience.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
5	500	1619	2500	2500	2375	0	9499

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: New Solids Treatment
CIP Number: WRF-124
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRF
Pressure Zone: WL - Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB - Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: CH2M

PROJECT DESCRIPTION

Project Description: Planning, design, and construction of new solids treatment facilities supplemental to the existing fluidized bed incinerator (FBI), and commissioned during the life of the existing FBI to provide long-term operational continuity and a full-scale backup to the FBI. Project is to consider a new FBI, new dryer, or other suitable technology. Includes demolition of the multiple hearth incinerator (MHI).

Project Benefit: Provides operational resiliency by additional biosolids processing capacity and potential additional outlets for processed solids and flexibility to meet potential changes in regulations.

Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	250	0	0	0	0	72932	73182

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: Influent Flow Diversion Structure
CIP Number: WRF-125
JDE Number(s): 24SMPP0004
Location: H.L. Mooney AWRF
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 1, 4, 5
Project Estimate: Order of Magnitude
Estimate By: CH2M

PROJECT DESCRIPTION

Project Description: Design and construction of an influent flow diversion structure and pipe to divert influent force main flow directly to an equalization basin for high flow management and to facilitate planned maintenance in the pre-aeration and pretreatment processes.

Project Benefit: Permit compliance and plant resilience.

Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
382	225	0	0	0	0	0	607

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: Dynamic Hydraulic Model and Instrumentation

CIP Number: WRF-126

JDE Number(s): 24SMPP0006

Location: H.L. Mooney AWRF

Pressure Zone: WL - Woodbridge

Sewershed: NE – Neabsco Creek

Magisterial District: WB - Woodbridge

Criteria: 1, 5

Project Estimate: Order of Magnitude

Estimate By: CH2M

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 PER for hydraulic improvements. The hydraulic modeling is phased, first from plant inlet through primary clarifies, and then from bioreactor to the outfall.

Project Benefit: The instrumentation and dynamic simulation model will facilitate the determination of physical plant improvements and/or management of plant processes.

Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
317	200	300	186	0	0	0	1003

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: Switchgear Building Protection
CIP Number: WRF-127
JDE Number(s): 24NMPH0006
Location: H.L. Mooney AWRF
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: Replace existing louvers with hurricane-resistant louvers on the Switchgear building at Mooney. Replace existing windows panels with panels that are resistant to high winds. This project also includes replacing existing gravel landscaping surrounding the building and three adjacent generators with sod and concrete to reduce the risk of flying debris during high wind and/or hurricane events.

Project Benefit: This project helps to protect assets within the Switchgear Building at the H.L. Mooney AWRF from sabotage or high winds due to hurricanes and tornadoes as identified in the Vulnerability Assessment Report.

Source Derivation: Vulnerability Assessment Recommendations, Operations & Maintenance Division;

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
404	425	642	0	0	0	0	1471

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: Refurbish Operations Support Facility
CIP Number: WRF-129
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRP
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 1, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: Modifications and improvements to the Operations Support Facility including improvements to building functional areas such as warehouse, maintenance shop, office space, filing and storage, kitchen and lunchroom, locker and shower areas, and the building exterior, structure, roof, and parking.
Project Benefit: Improved use of available space, including increased security of stored materials.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	0	0	6309	6309

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 Repairs and Modifications
CIP Number: WRF-131
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRP
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 5
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: Repair and refurbishment of existing fluidized bed incinerator (FBI) equipment, including design and installation of new or replacement equipment from the cake pumps to the ash basins. Projects will include a condition assessment, ash basin improvements, and new heat exchanger, ducts, and plenums.
Project Benefit: Operational resilience and regulatory compliance for tracking FBI costs (FBI is considered new after 50% of initial cost is spent).
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	150	500	1500	887	300	0	3337

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 Creek
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: CH2M

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 and instrumentation 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, motors and various blower components and technology.

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

Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
538	500	500	1486	1250	1250	3608	9132

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: Old Admin Building Rehabilitation
CIP Number: WRF-137
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRF
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 5
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: Rehab and repurposing of existing office, administration, and storage space.
Project Benefit: Provides for necessary office space and storage.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	0	0	1518	1518

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 Creek
Magisterial District: WB – Woodbridge
Criteria: 2, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: Project includes improvements to several areas of the plant including: primary clarifier odor control upgrades; primary clarifier collection equipment upgrades; primary clarifier electrical improvements; equalization basin modifications; RAS Building No. 1 - RAS pumps modifications; UV Building - additional UV equipment; yard valves - replacement; methanol storage addition; lime system upgrades; ferric system improvements; secondary clarifier improvements; plant structural protection and refurbishment; polymer system replacement.

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

Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
56	750	1000	1000	1000	1944	75704	81454

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: Electrical Resiliency
CIP Number: WRF-139
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRF
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 5
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: Study to evaluate, design, and construct modifications to the plant electrical system to improve system resiliency. Elements to be evaluated include partial rerouting of generator power feed and plant 4160 Volt power system, new switchgear bus system, and secondary switchgear building. This project will include rerouting of second underground feed from power utility’s transformer to the new switchgear building.

Project Benefit: Improves plant operations resiliency and minimizes potential impacts to the environment.

Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	250	400	500	350	6477	7977

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: Plant Lighting Improvements
CIP Number: WRF-140
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRF
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 2, 4
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: This project will study and design improvements to plant site and external building lighting.
Project Benefit: This project will enhance security and safety and lead to increased resiliency by reducing power load.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	0	0	1000	1000

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: Fuel Facilities Improvements
CIP Number: WRF-141
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRP
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: This project will study and design necessary improvements to fuels stations, underground storage tanks (USTs), above-ground storage tanks (ASTs), and associated spill protection systems.
Project Benefit: The project improves resilience of plant fuel systems, minimizes potential for environmental impacts, and ensures compliance with UST regulations.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	250	500	750	0	0	0	1500

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: Replace / Upgrade Freight Elevators
CIP Number: WRF-142
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRP
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: The project includes design and construction of upgrades or replacement of the existing freight elevators in the Controls and Process Building and the Solids Handling Building.
Project Benefit: This project improves reliability and level of service for the freight elevators which are necessary for plant maintenance and operations, and will reduce elevator maintenance requirements.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	68	611	1500	908	0	0	3087

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: Septage Receiving Facility Upgrades
CIP Number: WRF-143
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRP
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 3
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: The project will study and recommend alternatives for upgrades to the septage receiving station to improve handling of screenings, improve efficiency of accepting septage at the plant, and reduce operations and maintenance for the in-plant pump station.
Project Benefit: Improved level of service for septage handling, more efficient for staff, and reduced potential for adverse environmental impacts.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	0	0	1285	1285

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: Plant Variable Frequency Drives (VFDs) and Associated Electrical Upgrades

CIP Number: WRF-144

JDE Number(s): Not Assigned

Location: H.L. Mooney AWRF

Pressure Zone: WL – Woodbridge

Sewershed: NE – Neabsco Creek

Magisterial District: WB – Woodbridge

Criteria: 2, 4, 5

Project Estimate: Order of Magnitude

Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: The project will upgrade various variable frequency drives (VFDs) at the plant and provide new enclosures for motor control centers (MCCs) where needed.

Project Benefit: The project will improve operations, maintenance and energy efficiency. The new VFDs have advanced features, are easier to maintain, and provide a greater level of diagnostic data to SCADA. The project will also improve operations and maintenance by improving access to MCCs.

Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	150	750	1439	4000	0	0	6339

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: Plant Capacity Increase
CIP Number: WRF-145
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRP
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 5
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: The project will study and design improvements necessary to increase the plant hydraulic capacity in alignment with the Master Plan; for example a possible increase of 24 MGD to 32 MGD for normal flow; and from 52.9 MGD to 80 MGD for peak flow.

Project Benefit: The project will allow the plant to be sized for increased capacity to meet projected flows and to continue to meet its permit obligations.

Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	250	500	750	750	500	14542	17292

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: Upgrade Odor Control Systems
CIP Number: WRF-146
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRP
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 4
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: Study and design of improvements to the existing plant odor control systems and new odor control systems for solids building odors, equalization basin odors, and primary clarifier odors. Study and design to include investigation of existing odor components and selection of appropriate technologies to treat odors.
Project Benefit: Provides enhanced odor control systems that will reduce odor impacts to neighbors.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	150	850	0	0	7194	8194

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: Plantwide Buildings Roof Replacement
CIP Number: WRF-147
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRP
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: Study, design, and construction services for replacement of aging building roofs.
Project Benefit: Maintain necessary facilities for operations and maintenance, reduce roof maintenance requirement, and improve staff safety.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	125	500	1950	1200	1295	1950	7020

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: Upgrades to In-Plant Pump Station Equipment
CIP Number: WRF-148
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRP
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: Study and design of improvements to the aging In-Plant pump station mechanical and electrical equipment.
Project Benefit: This project will reduce maintenance, increase asset reliability, improve operations, and provide a general improved level of service.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	250	750	7194	8194

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: Pretreatment Facilities Upgrades
CIP Number: WRF-149
JDE Number(s): Not Assigned
Location: H.L. Mooney AWRF
Pressure Zone: WL – Woodbridge
Sewershed: NE – Neabsco Creek
Magisterial District: WB – Woodbridge
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: Study and design of upgrades to the pretreatment facilities at the H.L. Mooney AWRF. The project will involve potential upgrades and/or replacement of the screening facilities, grit chambers, pre-aeration system, and force main realignment. This project is related to the Equalization Study, WRF-122 Hydraulic Improvements projects.
Project Benefit: Improved plant performance, spill prevention, safety, and level of service.
Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	0	0	0	0	0	7194	7194

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: Mooney Featherstone Force Main Repair and/or Replacement

CIP Number: WRF-150

JDE Number(s): Not Assigned

Location: H.L. Mooney AWRF

Pressure Zone: WL – Woodbridge

Sewershed: NE – Neabsco Creek

Magisterial District: WB – Woodbridge

Criteria: 1, 2, 3, 4, 5

Project Estimate: Order of Magnitude

Estimate By: Operations & Maintenance Division

PROJECT DESCRIPTION

Project Description: Study and design for repairs and/or replacement of Featherstone force main within the H.L. Mooney AWRF perimeter. To be performed in coordination with Featherstone Rehabilitation Coordination Projects outside H.L. Mooney AWRF.

Project Benefit: Improved asset management and capacity management.

Source Derivation: Environmental Services & Water Reclamation Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	80	500	782	2717	0	0	4079

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%



Service Authority

Prince William County



Miscellaneous Projects

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Water and Sewer Master Plan Utility Adjustments (MPUA)
CIP Number: MISC-100
JDE Number(s): Multiple
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 3, 4, 5
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 construction of water and sewer mains in conjunction with new development and VDOT / County road projects. This project also covers the cost for the SA to increase pipe sizes in accordance with the Master Plan and other studies to provide additional capacity and improve system operations and efficiencies.

Project Benefit: The goal of this project is to reduce the SA’s cost of increasing transmission capacity in accordance with the County Comprehensive Plan and other studies while the utility infrastructure is being constructed as part of current development and VDOT / County road projects

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
On-going	500	500	500	500	500	0	2500

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: PWCSA Water and Sewer Facilities Security Enhancements
CIP Number: MISC-101
JDE Number(s): 24NCWU0004,74WHOF0001,74NLR0001
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

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

Project Benefit: This project will provide protection against unauthorized entry, vandalism, and/or destruction of facilities. The enhancements will minimize potential threats to the water distribution and sewer collection systems, 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 Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
On-going	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%

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
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: RDA, Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Design and construction of an approximately 19,000 sf maintenance building and expansion to the Wellington Road Operations Center. This project will relocate an existing storm water management pond for better space utilization to include more parking space, additional fuel storage and material storage. Additionally, this project will assess the flow of traffic around the facility.

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

Source Derivation: Engineering and Planning Division, Operations and Maintenance Division, General Conditions Facility Assessment (2009); Managed by Operations and Maintenance Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
69	0	300	2405	2376	0	0	5150

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: PWCSA 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
Criteria: 1, 2, 3, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance

PROJECT DESCRIPTION

Project Description: Renovations to accommodate the expansion of staff at the Spittle Building, and change functions at facilities owned by the SA.
Project Benefit: This project will improve the functionality of SA facilities by providing additional space for 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 Operations and Maintenance

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
948	500	500	500	500	500	0	3448

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: Spittle Complex Improvements
CIP Number: MISC-104
JDE Number(s): Not Assigned
Location: Spittle Complex
Pressure Zone: HO – Hoadly
Sewershed: WA – Airport Lift Station
Magisterial District: OC – Occoquan
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Operations and Maintenance Division

PROJECT DESCRIPTION

Project Description: The proposed new facilities include: new Auxiliary Building, Trailer-Mounted Equipment Storage Building, and relocation of the Fueling Station. In addition, this project also includes the Spittle Complex Site / Civil Plan for upgraded drainage and new parking lot.

Project Benefit: This project will improve the functionality of SA facilities by providing additional space for 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

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
103	55	500	1629	3000	3000	8876	17163

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: Upgrade Spittle Complex Electrical Service
CIP Number: MISC-105
JDE Number(s): 14NSCH0301
Location: Spittle Complex
Pressure Zone: HO – Hoadly
Sewershed: WA – Airport Lift Station
Magisterial District: OC – Occoquan
Criteria: 1, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Upgrade the Spittle Complex electrical service and reconfigure other internal Spittle electrical systems to accommodate future needs.
Project Benefit: This project will provide proper electrical service for the electrical demands generated by expansion of the Spittle Complex. Work also includes the reconfiguration of the Spittle Building IT and Customer Service areas to separate them, provide for individual USP’s, and accommodate future service needs.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
267	0	20	300	1672	0	0	2259

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: Spittle Building HVAC Energy Improvements
CIP Number: MISC-106
JDE Number(s): Not Assigned
Location: Spittle Complex
Pressure Zone: HO – Hoadly
Sewershed: WA – Airport Lift Station
Magisterial District: OC – Occoquan
Criteria: 2, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Upgrades and improvements to the Spittle Administration Building HVAC system. Project includes hydronic pump replacement, chiller pipe interconnections, and the heating / cooling system replacement in the Call Center.
Project Benefit: This project will improve the heating and cooling systems at the Spittle Building to increase energy efficiency and reduce operating costs. A separate HVAC system will be installed for the Call Center.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
220	0	0	100	1182	0	0	1502

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: Spittle Office Building Addition
CIP Number: MISC-112
JDE Number(s): Not Assigned
Location: Spittle Complex
Pressure Zone: HO – Hoadly
Sewershed: WA – Airport Lift Station
Magisterial District: OC – Occoquan
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

PROJECT DESCRIPTION

Project Description: Design and construction of a new wing to the existing Spittle Building to accommodate for the expansion of staff.
Project Benefit: This project will improve the functionality of SA facilities by providing additional space for expansion of staff, reduce energy costs, and ensure a safe and comfortable work environment for SA staff.
Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
659	1500	8215	2715	0	0	0	13089

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%



Service Authority
Prince William County



Information Technology Projects

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: SCADA System - Owner Services
CIP Number: IT-102
JDE Number(s): 14NSCC0001
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: IT Division

PROJECT DESCRIPTION

Project Description: Document review, planning and design-related administrative support, and estimating and negotiating for the planning and design of the SCADA project.
Project Benefit: This project replaces obsolete SCADA equipment with current technology for increased availability to customers, automation of existing manual processes, and increased security and real-time monitoring.
Source Derivation: Information Technology Division, Managed By Information Technology Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
1150	300	700	500	500	0	0	3150

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 – Construction Phase
CIP Number: IT-103
JDE Number(s): 14NSCC0001
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: IT Division

PROJECT DESCRIPTION

Project Description: SCADA system design and engineering services intended to replace the existing Distribution and Collection (D&C) SCADA system currently in place.
Project Benefit: This project replaces the obsolete SCADA system with current technology for increased availability to customers, automation of existing manual processes, and increased security and real-time monitoring.
Source Derivation: Information Technology Division, Managed By Information Technology Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
4158	2000	5000	5000	3781	0	0	19939

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: JD Edwards – Upgrade
CIP Number: IT-105
JDE Number(s): 14NSCG0109
Location: Spittle
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: IT Division

PROJECT DESCRIPTION

Project Description: As part of PWCSA’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 increase productivity and reporting capabilities.
Source Derivation: Information Technology Department, Managed By Information Technology Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
380	600	0	0	0	0	0	980

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: Spittle
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: IT Division

PROJECT DESCRIPTION

Project Description: As part of the PWCSA's Organizational Strategic Plan and IT's Strategic Plan, this project involves upgrades and custom design features to the Cayenta CIS system.
Project Benefit: This project will increase productivity and reporting capabilities.
Source Derivation: Information Technology Department, Managed By Information Technology Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
330	0	0	0	0	500	0	830

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) Upgrade/Replacement
CIP Number: IT-107
JDE Number(s): 14NAAG0112
Location: County Wide
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: IT Division

PROJECT DESCRIPTION

Project Description: As part of PWCSA’s Organizational Strategic Plan and IT’s Strategic Plan, this project involves upgrades or replacement of the current CMMS system. The current version of Hansen is obsolete and lacks the functionality desired by the organization.

Project Benefit: This project provides for increased operational efficiencies and enables the migration of hardware and OS to a Microsoft platform. Benefits include enhanced integrations with SA systems, addition of warehouse/inventory processes, and direct cost of employee time charged to a project.

Source Derivation: Information Technology Department, Managed By Information Technology Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
1860	1917	1650	1380	1093	500	0	8400

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
CIP Number: IT-110
JDE Number(s): Not Assigned
Location: Spittle
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: IT Division

PROJECT DESCRIPTION

Project Description: As part of PWCSA’s Organizational Strategic Plan and IT’s Strategic Plan, this project will develop a SA-wide central document repository and cloud-based Office Productivity Tools.

Project Benefit: This project will offer increased operational efficiencies. Document Management covers a number of areas including: Document version control and cloud-based access and editing to word processing, spreadsheets, presentations, and other document tools; Operations and Maintenance manuals and record drawings; Developer services projects; Capital project design and construction; Integration with CIS, CMMS, and GIS; Legal and accounting workflow; Public relations and web site management for the internet and intranet websites; Document archiving for obsolete drawings, closed projects, and retention policies.

Source Derivation: Information Technology Department, Managed By Information Technology Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	100	370	250	0	0	0	720

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: Business Analytics Dashboard Development
CIP Number: IT-114
JDE Number(s): 14NAAG0140
Location: Spittle
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 2, 5
Project Estimate: Order of Magnitude
Estimate By: EAM Division

PROJECT DESCRIPTION

Project Description: Development of targeted Business Analytics dashboards (reporting platform) for specific business areas. Includes development of data-flow processes, frameworks, and master data management repository.

Project Benefit: The Business Analytics Dashboard shall serve as the user interface for consumption of performance data. The Dashboard shall provide a centrally located, easily accessible interface. Additionally, users will be able to access supporting Data Governance documentation, investigate supporting data sources, and evaluate trends.

Source Derivation: Enterprise Asset Management Division, Managed By Enterprise Asset Management Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	305	316	230	161	0	0	1012

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: Hydraulic Modeling Development
CIP Number: IT-116
JDE Number(s): 14NAAG0270
Location: Spittle
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 2, 5
Project Estimate: Order of Magnitude
Estimate By: EAM Division

PROJECT DESCRIPTION

Project Description: Development of additional hydraulic modeling capabilities and related data as well as development of the frameworks, standards, and processes necessary for model use.

Project Benefit: The hydraulic models offer the SA an ability to simulate collection and distribution system performance, run scenario-based analysis, monitor system performance, and perform general system planning within a computer/virtual environment.

Source Derivation: Enterprise Asset Management Division, Managed By Enterprise Asset Management Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY19	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
2760	274	143	0	0	0	0	3177

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: Spittle
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 4, 5
Project Estimate: Order of Magnitude
Estimate By: EAM 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 preliminary data capture.

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

Source Derivation: Enterprise Asset Management Division, Managed By Enterprise Asset Management Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
586	489	598	370	168	0	0	2211

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: Systems Integration
CIP Number: IT-118
JDE Number(s): 14NAAG0230
Location: Spittle
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 2, 5
Project Estimate: Order of Magnitude
Estimate By: EAM Division

PROJECT DESCRIPTION

Project Description: Development, testing, and deployment of automated, scalable tools to efficiently integrate the SA's business systems. Components will consist of frameworks, standards, processes, and tools to support the deployment.

Project Benefit: Successful implementation of mature analytics that support data-driven decision making hinges on the ability to efficiently access critical data stored in multiple business systems across the enterprise. Systems Integration streamlines data accessibility by providing a scalable, consistent approach to integrating data in disparate business systems that meets the SA's current and future data needs.

Source Derivation: Enterprise Asset Management Division, Managed By Enterprise Asset Management Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
355	615	615	382	382	221	0	2570

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: Spittle
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 2, 5
Project Estimate: Order of Magnitude
Estimate By: EAM 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 SA-wide perspective, understand cross-divisional dependencies and priorities, and develop data-driven asset management plans.
Source Derivation: Enterprise Asset Management Division, Managed By Enterprise Asset Management Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
540	184	200	75	0	0	0	999

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: Integrated Utility Planning and Prioritization
CIP Number: IT-122
JDE Number(s): Not Assigned
Location: Spittle
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 2, 5
Project Estimate: Order of Magnitude
Estimate By: E&P Division

PROJECT DESCRIPTION

Project Description: Development of processes, standards, policies, and tools (including PMIS and CIP investment software) necessary for the identification, prioritization, planning, and project management of SA capital and non-capital projects.
Project Benefit: Improve cross-division planning and execution of work in alignment with SA strategic priorities and resource constraints.
Source Derivation: Enterprise Asset Management and Engineering and Planning Divisions, Managed By Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
468	715	715	100	0	0	0	1998

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: Data Governance
CIP Number: IT-123
JDE Number(s): 14NAAG0220
Location: Spittle
Pressure Zone: Multiple
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 2, 5
Project Estimate: Order of Magnitude
Estimate By: EAM Division

PROJECT DESCRIPTION

Project Description: Data Governance development and deployment in support of Business Analytics; Data Governance documentation provides documentation of data ownership, quality tolerances, methodologies for data analysis, and inputs to other Business Analytics components such as data modeling, Master Data Management, analysis, and reporting.

Project Benefit: Business Analytics provides the foundation for data-driven decision making and Data Governance is a critical foundational component of Business Analytics. Data Governance provides critical documentation related to data ownership, workflows, quality parameters, analysis methodologies, and dependencies across IT systems.

Source Derivation: Enterprise Asset Management Division, Managed By Enterprise Asset Management Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
597	414	426	368	0	0	0	1805

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

Prince William County



Regional Utility Projects

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Purchase Capacity at Fairfax Water Treatment Plants
CIP Number: FW-1
JDE Number(s): N/A
Location: Fairfax Water Corbalis Water Treatment Plant
Service Level: None
Sewershed: None
Magisterial District: Multiple
Criteria: 1, 2, 3, 4, 5
Project Estimate: Budget
Estimate By: Finance Division

PROJECT DESCRIPTION

Project Description: This project allows for the purchase of capacity rights in the expansion of Fairfax Water's Water Treatment Plants. The Service Authority reimburses Fairfax Water for the pro-rata share of 20 MGD based on actual costs incurred over the life of the project. Includes 5 MGD of finished water capacity purchased in FY17.
Project Benefit: The goal of this project is to increase capacity rights to provide water supply for increased demands due to continuing development of PWC.
Source Derivation: General Manager's Office

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
115131	822	167	0	0	0	0	116120

Proposed Funding Sources	
Expansion Fund (02)	32%
Commitment Fund (03)	48%
Replacement Fund (04)	20%
Other Contribution	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: UOSA CIP
CIP Number: UOSA-1
JDE Number(s): N/A
Location: UOSA Occoquan Policy Service Area
Service Level: None
Sewershed: None
Magisterial District: Multiple
Criteria: 1, 2, 3, 4, 5
Project Estimate: Budget
Estimate By: Finance Division

PROJECT DESCRIPTION

Project Description: This project captures the Service Authority’s portion of UOSA’s Capital Improvement Program, which consists of the following projects: Nutrient Cap, Cub Run, Flat Branch Delivery System, Reserve Maintenance, Hydraulic Improvements, Project 54 Improvements, and future plant expansions. Projects are approved by UOSA’s Board of Directors and are financed through the issuance of debt. UOSA bills each jurisdiction quarterly their proportionate share of debt service based on planned spending and reconciles the allocation of debt service annually based on actual spending. Debt service is charged to Purchased Resources in the Service Authority’s Operating Budget.

Project Benefit: The goal of this project is to accommodate the continued increase in contributions from new commercial and residential development in areas tributary to this regional WRF and to treat the flows to a total nitrogen level of 8 mg/L.

Source Derivation: General Manager’s Office

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
96929	9509	10354	9965	9010	6508	23272	165547

Proposed Funding Sources	
Expansion Fund (02)	-
Commitment Fund (03)	9%
Replacement Fund (04)	91%
Other Contribution	-
PROJECT TOTAL	100%

PWCSA CAPITAL IMPROVEMENT PROJECT DATA SHEET

PROJECT INFORMATION

Project Name: Occoquan River Crossing
CIP Number: WAT-192
JDE Number(s): Not Assigned
Location: Eastern PWC, Occoquan River
Pressure Zone: Eastern Water System
Sewershed: Multiple
Magisterial District: Multiple
Criteria: 1, 2, 3, 4, 5
Project Estimate: Order of Magnitude
Estimate By: Engineering and Planning Division

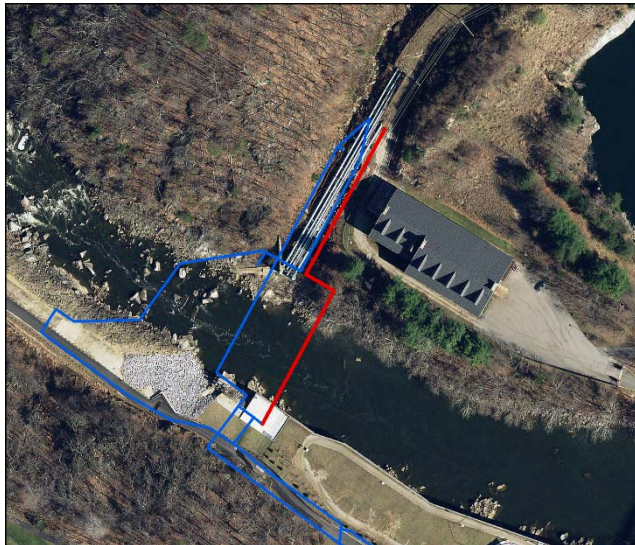
PROJECT DESCRIPTION

Project Description: Design and construction of approximately 700 feet of 42-inch steel water main for an additional subaqueous crossing of the Occoquan River connecting transmission facilities on either side of the river that supply the SA’s Eastern Water System.

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 main will also increase capacity and enhance system reliability and availability for SA customers in the Eastern Water System.

Source Derivation: Engineering and Planning Division

PROJECT PICTURE



PROJECT FUNDING

PRE-FY20	FY20	FY21	FY22	FY23	FY24	POST-FY24	TOTAL
0	150	1162	4248	4248	1062	0	10870

Proposed Funding Sources	
Expansion Fund (02)	30%
Commitment Fund (03)	-
Replacement Fund (04)	70%
Other Contribution	-
PROJECT TOTAL	100%

**CAPITAL IMPROVEMENTS PROGRAM
FISCAL YEARS 2020 - 2024**



Service Authority
Prince William County

SECTION C

FUTURE PROJECTS LIST

FUTURE PROJECTS BEYOND FISCAL YEAR 2024

The following is a list of Potential Projects slated for expenditures beyond fiscal Year 2024.

<i>WATER SUPPLY PROJECTS</i>	
PROJECT NAME	PROJECT LOCATION
N/A	

<i>WATER STORAGE PROJECTS</i>	
PROJECT NAME	PROJECT LOCATION
N/A	

<i>WATER TRANSMISSION PROJECTS</i>	
PROJECT NAME	PROJECT LOCATION
Lakeridge & Hoadly Pressure Zone Evaluation & Replacement	Stallion Court to Mojave Lane
Lakeridge & Hoadly Pressure Zone Evaluation & Replacement	Cambridge Drive to Antietam Road
Lakeridge & Hoadly Pressure Zone Evaluation & Replacement	Omisol Road
Lakeridge & Hoadly Pressure Zone Evaluation & Replacement	Loop Closures Hedges Run to Avery Way
Lakeridge & Hoadly Pressure Zone Evaluation & Replacement	Loop Closure Golf Course to Mt. Burnside Way
Lakeridge & Hoadly Pressure Zone Evaluation & Replacement	Mohican Rd Area Loop Closures
Lakeridge & Hoadly Pressure Zone Evaluation & Replacement	Woodfern Ct and Seminole Rd Loop Closures
Lakeridge & Hoadly Pressure Zone Evaluation & Replacement	Marsala, Madeira, Burgundy Loop Closures
Lakeridge & Hoadly Pressure Zone Evaluation & Replacement	Deep Ford Dr.-Antietam Elem School Loop
Lakeridge & Hoadly Pressure Zone Evaluation & Replacement	Kingswood Ct Loop Closure
Lakeridge & Hoadly Pressure Zone Evaluation & Replacement	Clipper Dr., Skipper Circle, Mayflower Dr. Loop Closures
Lakeridge & Hoadly Pressure Zone Evaluation & Replacement	Monarch, Manchester, Derriford Loop Closure
Oak Ridge Pressure Zone Improvements	Kahns Rd to Fox Mill Development

<i>WATER TRANSMISSION PROJECTS (cont.)</i>	
PROJECT NAME	PROJECT LOCATION
Oak Ridge Pressure Zone Improvements	Foxmill Development, Sec1
Oak Ridge Pressure Zone Improvements	Chaddsford Trail to Harvey Road Loop Closure
Montclair Pressure Zone Improvements	Lakecrest Loop Closures
Dawson Beach Road to Featherstone Road Transmission Main	Dawson Beach to Featherstone via Veterans
Gainesville Pressure Zone Improvements	Jacksonville Ave to Bethlehem Rd
Woodbridge Pressure Zone Improvements	Woodside Dr. to Ironwood St
Woodbridge Pressure Zone Improvements	Farm Creek Rd to Illinois Ct
Woodbridge Pressure Zone Improvements	Farm Creek Rd to Persistence Dr.
Haymarket Pressure Zone Improvements	Jefferson St to Rising Sun Ln
Haymarket Pressure Zone Improvements	Park Valley Church to Long Park Loop
Haymarket Pressure Zone Improvements	Pennshire Dr. to Piedmont Golf Maint. Bldg.
Herbert Drive BPS Transmission Mains	Rollingbrooke & Summit School
Herbert Drive BPS Transmission Mains	Summit School to Old Bridge Rd
Walnut Street Water Main Replacement	Walnut St: Featherstone Rd RR X to Colchester St.
Corby St and Anderson St Water Main Replacement	Corby Street and Anderson St, Triangle, VA
Ashton Ave Water Main	Rixlew Ln to Crestwood Dr. and Schofield Way
Montgomery Avenue Water Main Replacement	Montgomery Ave, Opitz Rd to W. Longview Dr.
Cardinal Drive and Neabsco Rd Mains Boundary Shift	Montclair & Woodbridge Low Pressure Zones

<i>SEWAGE PUMPING STATION PROJECTS</i>	
PROJECT NAME	PROJECT LOCATION
Area 6 Sewage Pumping Station Upgrades, L31	10351 Harry J Parrish Blvd., Manassas

<i>SEWAGE COLLECTION PROJECTS</i>	
PROJECT NAME	PROJECT LOCATION
Cow Branch Trunk Sewer Upgrade & Replacement/Rehabilitation	From I-95 to Caton Hill Road
Powell's Creek Trunk Sewer Upgrade & Replacement	Interceptor Sewer between I-95 and Route 1
Occoquan Plant Sewer Evaluation & Rehabilitation/Replacement	Occoquan Road from Old Bridge to Mill St
Godwin Drive Sewershed Evaluation & Rehabilitation/Replacement	Harry Parrish Blvd
Godwin Drive Sewershed Evaluation & Rehabilitation/Replacement	Wakeman Drive
Dumfries Sewershed Evaluation & Rehabilitation/Replacement	Prince William Estates

<i>WATER RECLAMATION FACILITY PROJECTS</i>	
PROJECT NAME	PROJECT LOCATION
N/A	

<i>MISCELLANEOUS PROJECTS</i>	
PROJECT NAME	PROJECT LOCATION
N/A	

<i>INFORMATION TECHNOLOGY PROJECTS</i>	
PROJECT NAME	PROJECT LOCATION
N/A	

<i>REGIONAL UTILITY PROJECTS</i>	
PROJECT NAME	PROJECT LOCATION
N/A	

**CAPITAL IMPROVEMENTS PROGRAM
FISCAL YEARS 2020 - 2024**

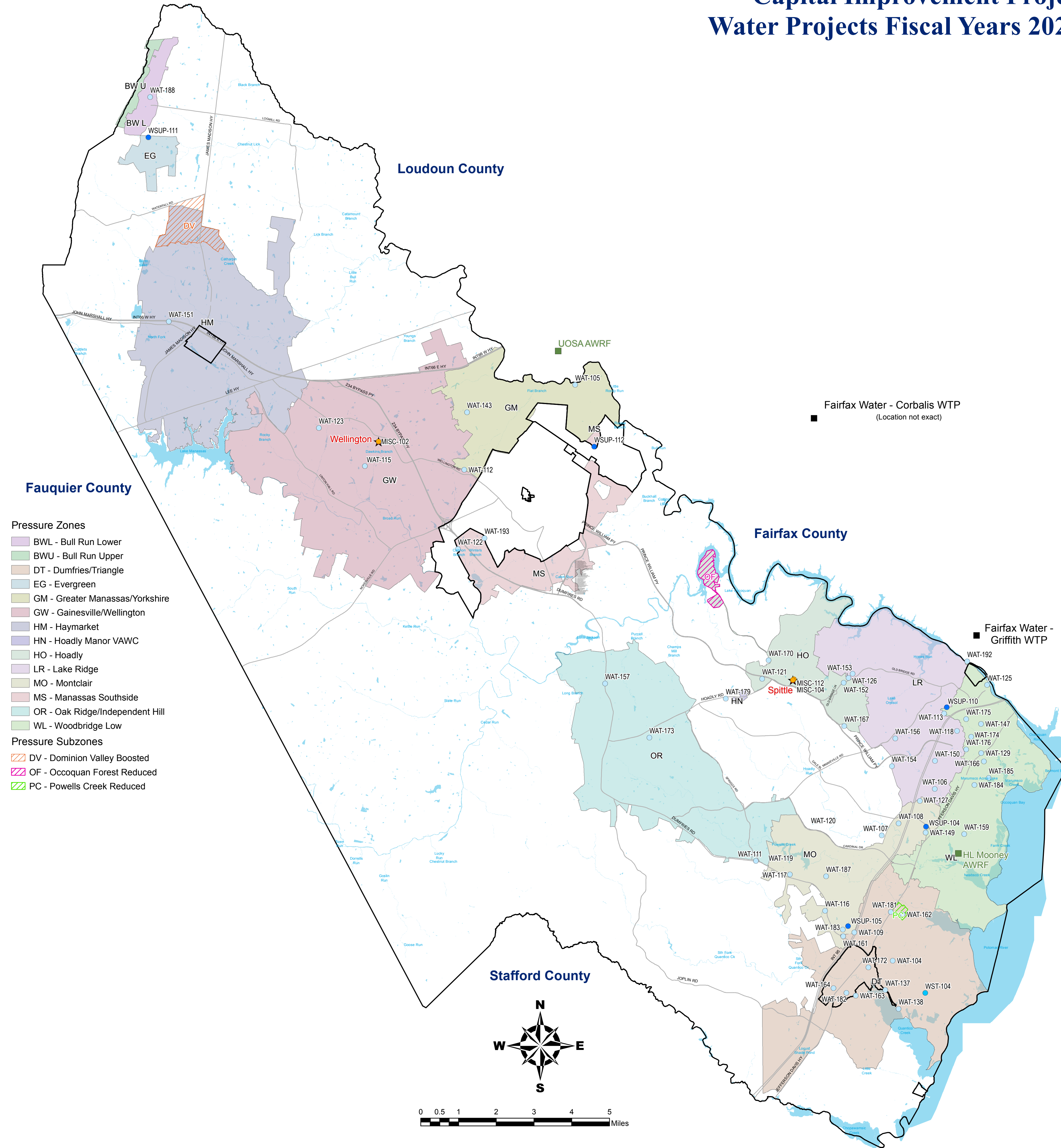


Service Authority
Prince William County

SECTION D

**FACILITIES AND PROJECT
MAPS**

Capital Improvement Projects Water Projects Fiscal Years 2020-2024



Regional Utility Projects (REG)

- FW-1 Fairfax Water Capacity Agreement
- UOSA-1 UOSA CIP
- WAT-192 Occoquan River Crossing

Information Technology Projects (IT)

- IT-102 SCADA System - Owner Services
- IT-103 SCADA System - Construction Phase
- IT-105 JD Edwards Upgrade
- IT-106 Cayenta - CIS
- IT-107 Computerized Maintenance Management System (CMMS) Upgrade/Replacement
- IT-110 Document Management System
- IT-114 Business Analytics Dashboard Development
- IT-116 Hydraulic Model Development
- IT-117 Vertical Asset Data Development
- IT-118 System Integration
- IT-121 Asset Management Analytics
- IT-122 Integrated Utility Planning and Prioritization
- IT-123 Data Governance

Miscellaneous Projects (MISC)

- MISC-100 Water and Sewer Master Plan Utility Adjustments (MPUA)
- MISC-101 PWCSA Water & Sewer Facility Security Enhancements
- MISC-102 Expand Wellington Rd Operations Center
- MISC-103 PWCSA Facilities Renewals and Upgrades
- MISC-104 Spittle Complex Improvements
- MISC-105 Upgrade Spittle Complex Electrical Service
- MISC-106 Spittle Building HVAC Energy Improvements
- MISC-112 Spittle Office Building Addition

Water Supply Projects (WSUP)

- WSUP-103 Water Meter Vault Improvements
- WSUP-104 Dale Blvd 16-inch Water Meter Vault
- WSUP-105 Montclair Water Booster Pumping Station
- WSUP-110 Herbert Drive Water Booster Pumping Station Modifications
- WSUP-111 Bull Run Mountain Well Upgrades
- WSUP-112 Manassas Southside Booster Pumping Station Upgrades
- WSUP-114 Capital Meter Program - Expansion
- WSUP-115 Capital Meter Program - Replacement

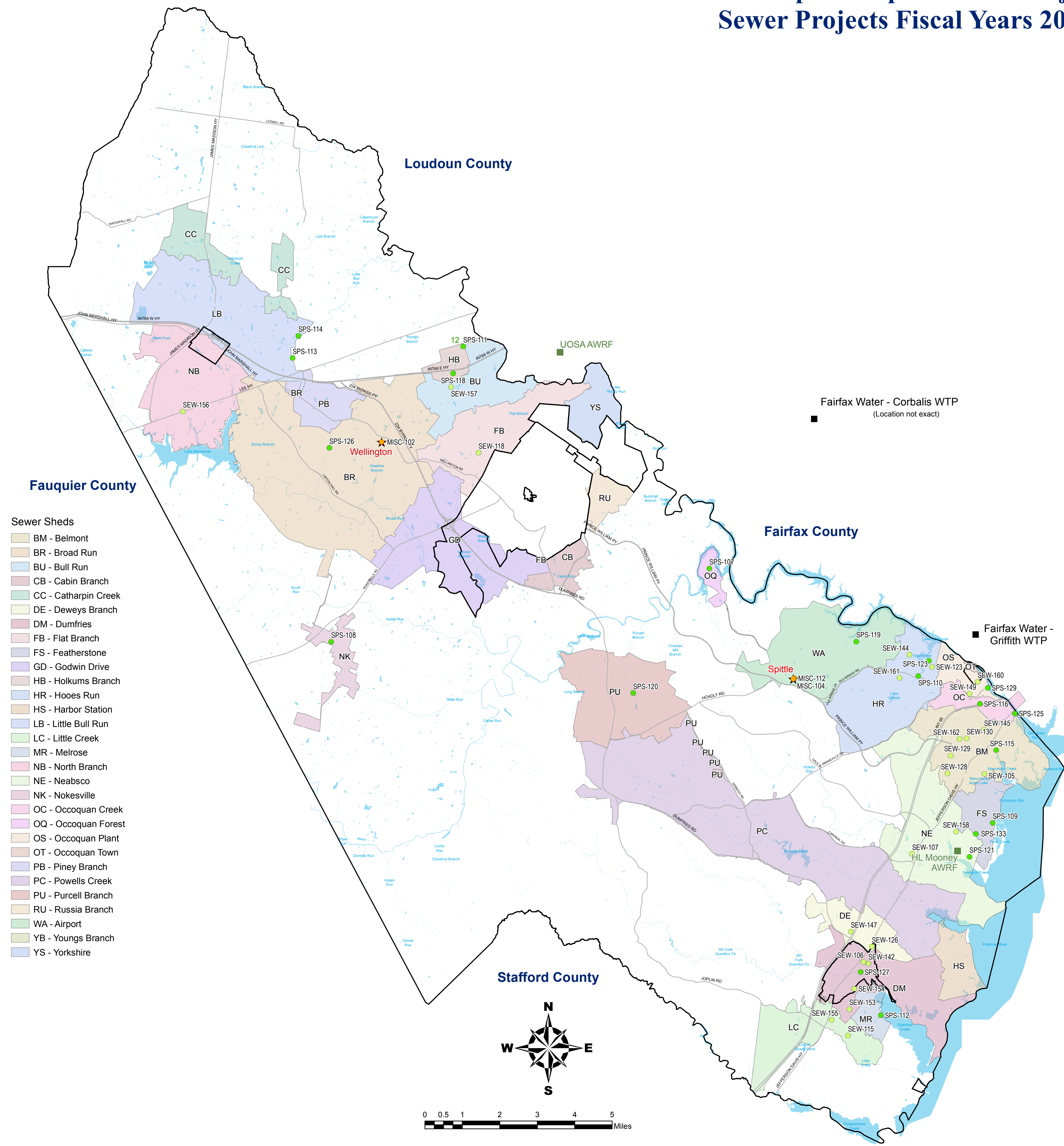
Water Storage Projects (WST)

- WST-104 Potomac Shores Water Storage Tank
- WST-107 Conversion of Storage Tanks to Pumped Storage
- WST-110 Water Storage Tank Maintenance Program

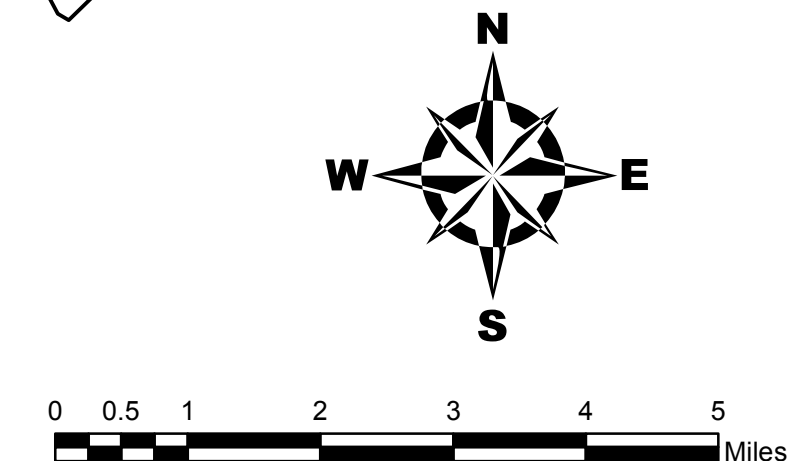
Water Transmission Projects (WAT)

- WAT-100 County Wide - Emergency Capital Work
- WAT-101 County Wide - Water System Assessments
- WAT-104 Potomac Shores Parkway Transmission Main
- WAT-105 Somersworth Drive Loop Closure
- WAT-106 West Long View Drive Water Main Replacement
- WAT-107 Brightwood Transmission Main Replacement
- WAT-108 I-95 Crossing at Dale Boulevard
- WAT-109 Montclair Booster Station Transmission Main
- WAT-111 Oakridge Pressure Zone Supplemental Supply from Forest Park BPS
- WAT-112 Stonewall Jackson BPS - Additional Discharge Main
- WAT-113 Herbert Drive Booster Pump Station Transmission Mains
- WAT-115 Dawkins Branch Transmission Main
- WAT-116 Montclair Pressure Zone Improvements - Route 234
- WAT-117 Montclair Pressure Zone Improvements - Pattie Elem & Lakecrest
- WAT-118 Nottoway Tank to Marumsc Creek Transmission Main (Phase 4 Marumsc Village)
- WAT-119 Montclair Pressure Zone - Additional Feed to T-25 & F-19
- WAT-120 Cardinal Dr Transmission Main
- WAT-121 Galveston Ct Loop Closure
- WAT-122 Gainesville to Manassas South Connector
- WAT-123 Piney Branch Transmission Main
- WAT-125 Poplar Lane Water Main
- WAT-126 Hoadly Pump Station - Additional Supply Main
- WAT-127 Cow Branch Discharge Main - River Rock Way
- WAT-129 Route 1 Water Main Reinforcement, North
- WAT-137 Possum Point Road Water Main Replacement - Phase 1
- WAT-138 Possum Point Road Water Main Replacement - Phase 2
- WAT-143 Sudley Rd 14-inch Replacement, Loop Closures and Realignment
- WAT-147 "G" Street Water Main Replacement and Upgrade
- WAT-149 Green Valley-Garfield Transmission Main - Phase 2
- WAT-150 Cow Branch to Nottoway Transmission Main
- WAT-151 Antioch Road Water Main Loop Closure
- WAT-152 Old Bridge Road Loop Closures
- WAT-153 Airport Tank Area System Improvements
- WAT-154 Smoketown Road Loop Closures
- WAT-156 Caton Hill Road Loop Closures
- WAT-157 Dumfries Road - Vistabrooke Loop Closures
- WAT-159 Flintlock Terrace Water Main Replacement
- WAT-161 Old Stage Road Water Main Replacement
- WAT-162 Galt Court Water Main Replacement
- WAT-163 Wharf Lane Distribution System Improvements
- WAT-164 Curtis Drive Water Main Extension
- WAT-166 Bayvue Apartments Water System Replacement
- WAT-167 Hoadly Pressure Zone Improvements - Pennington Lane
- WAT-170 Davis Ford Road Water Main Loop Closure
- WAT-172 Rose Hill Circle Water Main Replacement
- WAT-173 Bethel Road Water Main
- WAT-174 Frances Drive Water Main Replacement
- WAT-175 Carter Lane Water Main Replacement
- WAT-176 Lynn Street Water Main Replacement
- WAT-179 Hoadly Road Interconnection
- WAT-181 Route 1 Transmission Main - Garfield BPS to Rt 234
- WAT-182 Route 1 Transmission Main - Rt 234 to Fuller Heights Rd
- WAT-183 Montclair BPS Discharge Transmission Main
- WAT-184 Colchester Road Water Main Replacement
- WAT-185 Dawson Court Water Main Replacement
- WAT-187 Edgewood Drive Water Main Replacement
- WAT-188 Youngs Drive Water Main Replacement
- WAT-193 Godwin Drive Water Main Extension

Capital Improvement Projects Sewer Projects Fiscal Years 2020-2024



- Sewer Sheds**
- BM - Belmont
 - BR - Broad Run
 - BU - Bull Run
 - 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)**
- FW-1 Fairfax Water Capacity Agreement
 - UOSA-1 UOSA CIP
 - WAT-192 Occoquan River Crossing
- Information Technology Projects (IT)**
- IT-102 SCADA System - Owner Services
 - IT-103 SCADA System - Construction Phase
 - IT-105 JD Edwards Upgrade
 - IT-106 Cayenta - CIS
 - IT-107 Computerized Maintenance Management System (CMMS) Upgrade/Replacement
 - IT-110 Document Management System
 - IT-114 Business Analytics Dashboard Development
 - IT-116 Hydraulic Model Development
 - IT-117 Vertical Asset Data Development
 - IT-118 System Integration
 - IT-121 Asset Management Analytics
 - IT-122 Integrated Utility Planning and Prioritization
 - IT-123 Data Governance
- Miscellaneous Projects (MISC)**
- MISC-100 Water and Sewer Master Plan Utility Adjustments (MPUA)
 - MISC-101 PWCSA Water & Sewer Facility Security Enhancements
 - MISC-102 Expand Wellington Rd Operations Center
 - MISC-103 PWCSA Facilities Renewals and Upgrades
 - MISC-104 Spittle Complex Improvements
 - MISC-105 Upgrade Spittle Complex Electrical Service
 - MISC-106 Spittle Building HVAC Energy Improvements
 - MISC-112 Spittle Office Building Addition
- Sewage Pumping Station Projects (SPS)**
- SPS-100 Generator Replacement Program
 - SPS-104 Install Air Release Valves on Force Mains
 - SPS-107 Replace Occoquan Forest Sewage Pumping Stations, OQL36 & OQL37
 - SPS-108 Replace Old Nokesville Sewage Pumping Station, L20
 - SPS-109 Featherstone Lift Station Flood Protection Assessment, L16
 - SPS-110 Hooes Run Sewage Pumping Station, L01 - Architectural and Energy Improvements
 - SPS-111 Replace Holiday Inn Sewage Pumping Station, L29
 - SPS-112 Replace Graham Park Sewage Pumping Station, L13
 - SPS-113 Heritage Hunt Sewage Pumping Station, L52 & Force Main
 - SPS-114 Replace Heritage Hunt Sewage Pumping Station, L52
 - SPS-115 Upgrade Belmont Sewage Pumping Station, L17 & Force Main Extension
 - SPS-116 Replace Hornbaker Sewage Pumping Station, L06 & Force Main
 - SPS-118 Replace Koon's Liftstation, L28
 - SPS-119 Replace Airport Sewage Pumping Station Pumps, L15
 - SPS-120 Replace Pumps at Oak Ridge Sewage Pumping Station, L49
 - SPS-121 Replace Pumps at Dawson's Landing Sewage Pumping Station, L51
 - SPS-123 Replace Spinnaker Court Sewage Pumping Station, L02
 - SPS-125 Occoquan Creek Sewage Pumping Station Rehabilitation, L04
 - SPS-126 Piney Branch Sewage Pumping Station Replacement & Gravity Sewer Extension
 - SPS-127 Dumfries Lift Station Flood Protection, L18
 - SPS-129 Occoquan Plant Lift Station Flood Protection Assessment, L14
 - SPS-133 Featherstone Sewage Pumping Station (L16), Force Main Assessment
- Sewage Collection Projects (SEW)**
- SEW-100 County Wide - Emergency Capital Work
 - SEW-105 Redirect Colchester Road Sewer @ Randall Dr to Everett Av
 - SEW-106 Dumfries Force Main Replacement
 - SEW-107 Cow Branch Trunk Sewer Replacement
 - SEW-115 Little Creek Sewershed Manhole Rehabilitation
 - SEW-118 Flat Branch Sewershed Rehabilitation / CIPP Lining - Rixlew Ln
 - SEW-123 Hooes Run Sewer Rehabilitation / CIPP Lining - Colby Drive
 - SEW-126 Dewey's Creek Sewer Rehabilitation / L-18 Outfall Route 1
 - SEW-128 Belmont Sewer Rehabilitation / CIPP Lining - Section 2B
 - SEW-129 Belmont Sewer Rehabilitation / CIPP Lining - Section 2A
 - SEW-130 Belmont Sewer Rehabilitation / CIPP Lining - Section 1
 - SEW-142 Rose Hill Circle Sewer Main Replacement
 - SEW-144 Lake Ridge Sewer Rehabilitation / CIPP Lining - Deepford Dr to Woodfern Ct
 - SEW-145 Woodbridge Sewer Rehabilitation / CIPP Lining - Horner Rd
 - SEW-147 Dumfries Sewer Rehabilitation / 7 Manholes - Old Stage Rd
 - SEW-149 Lake Ridge Sewer Rehabilitation / CIPP Lining - Old Bridge Rd
 - SEW-152 East End Sewer Equalization Study
 - SEW-153 Dumfries Sewershed Rehabilitation / Woodland Dr & Sharon Rd
 - SEW-154 Dumfries Sewershed Rehabilitation / Williamstown Easement
 - SEW-155 Little Creek Sewershed Rehabilitation / Old Triangle Rd.
 - SEW-156 Replacement of Old Carolina and Rte 29 Crossing
 - SEW-157 Sudley Road Sewer Main Replacement & Upgrade
 - SEW-158 Rippon Landing / CIPP Lining Sections S1A, S1B and S5A
 - SEW-160 Town of Occoquan / CIPP Lining
 - SEW-161 Lake Ridge / CIPP Oakwood Drive
 - SEW-162 Marumso Hills / CIPP Lining Maurice Dr
- Water Reclamation Facilities Projects (WRF)**
- WRF-100 Capital Emergency Projects
 - WRF-101 Land Improvements - Replacement
 - WRF-102 Central Storage Facility
 - WRF-108 Chemical Reduction Improvements
 - WRF-110 Corrosion Control
 - WRF-113 Incineration Alternative Backup
 - WRF-114 Occoquan Forest WWTP Closure & Site Restoration
 - WRF-116 Control & Process Building Renovations
 - WRF-117 Mooney Water Tank and Water Tower Road Improvements
 - WRF-118 Equalization Tank
 - WRF-122 Hydraulic Improvements
 - WRF-123 Ongoing Renewal and Replacement
 - WRF-124 Multiple Hearth Upgrade / New Incineration
 - WRF-125 Influent Diversion Structure
 - WRF-126 Dynamic Simulation Modeling and Related Permanent Instrumentation
 - WRF-127 Switchgear Building Protection
 - WRF-128 ID Fan Improvement
 - WRF-129 Refurbish the Operation Support Facility
 - WRF-131 FBI Sand Receiving Modifications
 - WRF-133 FBI Heat Exchanger, Expansion Joint, and Plenums
 - WRF-137 Old Admin Building Rehabilitation
 - WRF-138 Facility Wide Improvement
 - WRF-139 Electrical Resiliency
 - WRF-140 RAS Tube Replacements
 - WRF-141 Fuel Facilities Improvements
 - WRF-142 Replace / Upgrade Freight Elevators
 - WRF-143 Septage Receiving Facility Upgrades
 - WRF-144 Plant Variable Frequency Drives and Associated Electrical Upgrades
 - WRF-145 Plant Capacity Increase
 - WRF-146 Upgrade Odor Control Systems Plant-Wide Buildings Roof Replacement
 - WRF-147 Plant-Wide Buildings Roof Replacement
 - WRF-148 Upgrades to In-plant Pump Station Equipment
 - WRF-149 Pretreatment Facilities Upgrades
 - WRF-150 Mooney Featherstone Force Main Repair / Replacement

