

WATER PROGRAM

The Water Program is administered by the Utilities Department. The program is designed to achieve five primary strategic objectives:

- 1) Replace and/or rehabilitate aging infrastructure;
- 2) Maintain or increase system reliability;
- 3) Improve system efficiency;
- 4) Address system growth; and
- 5) Regulatory compliance.

The Water Program continues to plan and invest in the future of the city by maximizing treatment capacity and ensuring facilities are in place to reliably provide water to current and future city residents. The program is slated to improve and enhance the city's water supply, treatment and distribution systems, and provide for new construction and/or upgrades of the city's infrastructure such as pump stations, tanks, treatment facilities, and transmission and distribution water mains.



PRIOR YEAR ACCOMPLISHMENTS

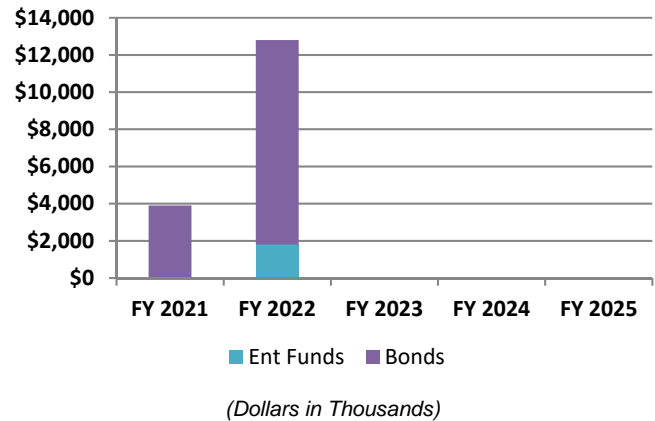
The Water Program continues to invest in ongoing projects to maintain and upgrade the City's reservoir, Water Treatment Facility, and transmission/distribution system. These projects include:

- Upgrades to the existing 24" water transmission main to 36" (W-042). Portions of the transmission main are being replaced along Route 28 and Vint Hill Road along with road improvements being performed with Prince William County.
- Installing 530 feet of 12" water main to meet the requirements of the new fire department.
- In coordination with the Prince William Street road project (T-019), completed installation of water mains and rehabilitation work.

THE FIVE-YEAR PLAN (FY 2021 – FY 2025)

The FY 2021 Five-Year Capital Improvement Program (CIP) includes \$1,800,000 in Enterprise Funds (Water Fund) and \$14,900,000 in Bonds.

In FY 2021 funding consists of a \$3,900,000 in Bonds.



FY 2021 CAPITAL PROJECTS

24" Transmission Main Replacement (W-042)

Additional funding is programmed for the 24" Transmission Main Replacement. This project is estimated to be completed in FY 2025.



Dean Storage Tank (W-071)

Complete construction of new water storage tank behind the existing facility on Dean Drive to comply with regulations for minimum system-wide storage as well as to meet peak seasonal water demands.

FY 2021 MAINTENANCE CAPITAL PROJECTS

Main Replacement/Looping (W-050)

Replace undersized and aging/failing water mains and loop existing dead-ends on Fort Drive from Portner Avenue to Jackson Avenue and Hill Place.

Water Plant Improvements (W-070)

Replace and refurbish critical components of the Water Treatment Plant related to both age and increased capacity requirements.

NEW CAPITAL PROJECTS

There are no new projects proposed for the Water Program.

SUMMARY OF WATER CAPITAL PROJECTS

(\$ in Thousands)

Cost Estimates:	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future	Total Project	5-Year CIP
Planning	2,175	-	-	-	-	-	200	2,375	-
Land	-	-	-	-	-	-	-	-	-
Construction	29,485	3,900	-	12,800	-	-	900	47,085	16,700
Total Cost	31,660	3,900	-	12,800	-	-	1,100	49,460	16,700
Funding Sources:									
General Fund	-	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-	-
Water Fund	11,910	-	-	1,800	-	-	1,100	14,810	1,800
Electric Fund	-	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-	-
Bonds	19,750	3,900	-	11,000	-	-	-	34,650	14,900
State	-	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-	-
Total Funding	31,660	3,900	-	12,800	-	-	1,100	49,460	16,700
Operating Impacts:									
Revenue	-	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-	-
Program (Costs) Saving	-	-	-	-	-	-	-	-	-
Debt Service	-	-	(312)	(312)	(1,192)	(1,192)	(20,832)	(23,840)	(3,008)
Net Revenue	-	-	(312)	(312)	(1,192)	(1,192)	(20,832)	(23,840)	(3,008)

WATER CAPITAL PROJECT LISTING

(\$ in Thousands)

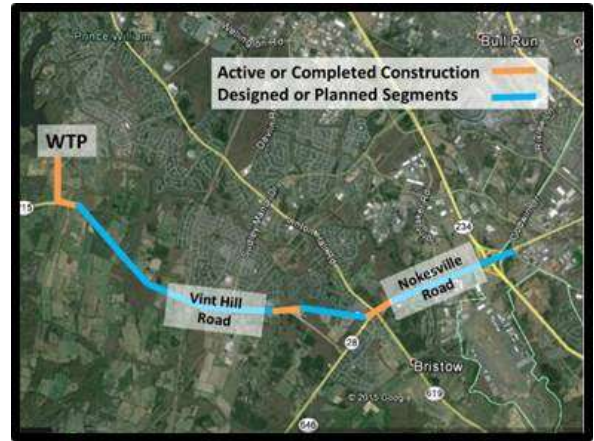
Project Name	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future	Total Project	5-Year CIP
24" Transmission Main R	16,260	3,900	-	12,800	-	-	-	32,960	16,700
Finished Water Capacity	3,000	-	-	-	-	-	-	3,000	-
Clear-Well Addition and	2,400	-	-	-	-	-	-	2,400	-
Nokesville Road Water	-	-	-	-	-	-	1,100	1,100	-
Dean Storage Tank	10,000	-	-	-	-	-	-	10,000	-
Total	31,660	3,900	-	12,800	-	-	1,100	49,460	16,700

W-042 24" Transmission Main Replacement

Year Introduced: 2007
Change: Decreased Estimate
Associated Proj: T-042
Program Area: Water
Managing Dept: Utilities
Manager: T. Dawood
Plan Conformance:

Comprehensive Plan 7.7

Est. Start: 7/1/2012
Est. Complete: 6/30/2025



Description:

Replace the existing 45-year old water transmission main with a 36" water transmission main in order to increase reliability and water transmission capacity from the Water Treatment Plant to the City. The main is approaching the ends of its useful life and experiences unacceptable hydraulic conditions during peak demand periods. Two phases have already been completed, one phase is in construction and half completed, three more phases are in design, and the last is being planned out. The project will be coordinated with both City roadway improvements and Prince William County roadway improvements.

Cost Estimate: (\$ in 1,000s)	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future	Total Project
Planning	1,225	-	-	-	-	-	-	1,225
Land	-	-	-	-	-	-	-	-
Construction	15,035	3,900	-	12,800	-	-	-	31,735
Total Cost	16,260	3,900	-	12,800	-	-	-	32,960

Funding Sources: (\$ in 1,000s)

General Fund	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-
Water Fund	8,760	-	-	1,800	-	-	-	10,560
Electric Fund	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-
Bonds	7,500	3,900	-	11,000	-	-	-	22,400
State	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-
Total Funding	16,260	3,900	-	12,800	-	-	-	32,960

Operating Impacts: (\$ in 1,000s)

Revenue	-	-	-	-	-	-	-	-
Staffing (Costs) Savings	-	-	-	-	-	-	-	-
Facility (Costs) Savings	-	-	-	-	-	-	-	-
Program (Costs) Savings	-	-	-	-	-	-	-	-
Debt Service	-	-	(312)	(312)	(1,192)	(1,192)	(20,832)	(23,840)
Net Revenue	-	-	(312)	(312)	(1,192)	(1,192)	(20,832)	(23,840)

WATER MAINTENANCE CAPITAL PROJECT LISTING

(\$ in Thousands)

The City identifies Capital Projects as projects with a cost greater than \$100,000 **and** a useful life of 10+ years. The City recognizes that there are additional projects/needs that are capital in nature but do not meet the requirement set forth for a capital project. These additional projects/needs are considered Maintenance Capital Projects, a list of which is provided below for the Water Program.

Project Name	Prior Years	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Future	Total Project	5-Year CIP
Main Replacement / Loo	2,734	495	515	400	400	400	-	4,944	2,210
Water Plant Improvemen	787	200	200	200	200	200	-	1,787	1,000
Total Cost	3,521	695	715	600	600	600	-	6,731	3,210

Funding Sources

General Fund	-	-	-	-	-	-	-	-	-
Sewer Fund	-	-	-	-	-	-	-	-	-
Water Fund	3,521	695	715	600	600	600	-	6,731	3,210
Electric Fund	-	-	-	-	-	-	-	-	-
Stormwater Fund	-	-	-	-	-	-	-	-	-
Airport Fund	-	-	-	-	-	-	-	-	-
School Fund	-	-	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-	-
State	-	-	-	-	-	-	-	-	-
Federal	-	-	-	-	-	-	-	-	-
NVTA	-	-	-	-	-	-	-	-	-
Other Sources	-	-	-	-	-	-	-	-	-
Total Funding	3,521	695	715	600	600	600	-	6,731	3,210