

SUMMARY OF WATER PROJECTS

DOLLARS IN THOUSANDS

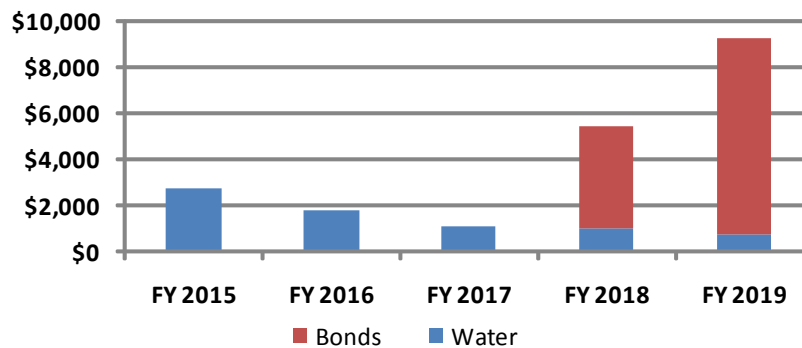
| Project Estimates: | Prior Years | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | Future | Total Project | 5-Year CIP |
|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
| Planning | 1,140 | 150 | - | 200 | - | - | 95 | 1,585 | 350 |
| Land | - | - | - | - | - | - | - | - | - |
| Construction | 8,631 | 2,550 | 1,800 | 900 | 5,460 | 9,240 | 17,555 | 46,136 | 19,950 |
| Total | 9,771 | 2,700 | 1,800 | 1,100 | 5,460 | 9,240 | 17,650 | 47,721 | 20,300 |

Funding Sources:

| | | | | | | | | | |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
| General Fund | - | - | - | - | - | - | - | - | - |
| Enterprise Funds | 9,771 | 2,700 | 1,800 | 1,100 | 960 | 740 | 2,950 | 20,021 | 7,300 |
| School Fund | - | - | - | - | - | - | - | - | - |
| Bonds | - | - | - | - | 4,500 | 8,500 | 14,700 | 27,700 | 13,000 |
| Other Local Government | - | - | - | - | - | - | - | - | - |
| State | - | - | - | - | - | - | - | - | - |
| Federal | - | - | - | - | - | - | - | - | - |
| Gas Taxes | - | - | - | - | - | - | - | - | - |
| Proffers | - | - | - | - | - | - | - | - | - |
| Storm Water Mgmt Fees | - | - | - | - | - | - | - | - | - |
| NVTA | - | - | - | - | - | - | - | - | - |
| Other | - | - | - | - | - | - | - | - | - |
| Total | 9,771 | 2,700 | 1,800 | 1,100 | 5,460 | 9,240 | 17,650 | 47,721 | 20,300 |

Operating Impacts:

| | | | | | | | | | |
|--------------------|----------|----------|----------|----------|----------|--------------|-----------------|-----------------|--------------|
| Personnel | - | - | - | - | - | - | - | - | - |
| Revenue Offset | - | - | - | - | - | - | - | - | - |
| Facility Costs | - | - | - | - | - | - | - | - | - |
| Program Costs | - | - | - | - | - | - | - | - | - |
| Debt Service | - | - | - | - | - | (337) | (41,213) | (41,550) | (337) |
| Net Revenue | - | - | - | - | - | (337) | (41,213) | (41,550) | (337) |



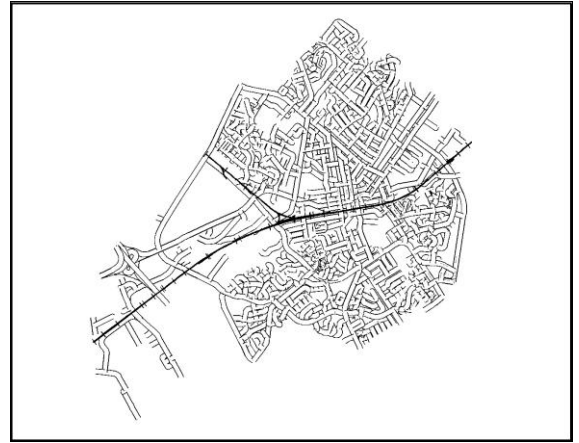
WATER PROJECTS

DOLLARS IN THOUSANDS

| Project Name | Prior Years | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | Future | Total Project | 5-Year CIP |
|--------------------------------|--------------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------------|-------------------|
| Water System Storage | - | - | - | - | - | - | 2,050 | 2,050 | - |
| 24" Transmission Main Replac | 4,510 | 1,800 | 1,100 | 500 | - | 8,500 | 12,500 | 28,910 | 11,900 |
| P.W. Tank to Quarry Tank Tra | - | - | - | - | - | - | 200 | 200 | - |
| Meter Upgrades | 2,212 | 350 | 150 | - | - | - | - | 2,712 | 500 |
| Raw Water Pump Replaceme | 160 | - | - | - | 170 | - | - | 330 | 170 |
| Finished Water Capacity Incre | 350 | 150 | - | - | 2,500 | - | - | 3,000 | 2,650 |
| Liberia Avenue (Centreville Ro | - | - | - | - | - | 300 | - | 300 | 300 |
| Main Replacement / Looping | 1,074 | 400 | 550 | 400 | 440 | 440 | 2,100 | 5,404 | 2,230 |
| Recycle Decant to the Water T | 360 | - | - | - | - | - | - | 360 | - |
| Filter Controller Replacement | 35 | - | - | - | - | - | - | 35 | - |
| Flocculation Paddles and Bear | 300 | - | - | - | - | - | - | 300 | - |
| Fire House Tank Demolition | 30 | - | - | - | - | - | - | 30 | - |
| Grant Avenue (Prince William | - | - | - | - | - | - | 300 | 300 | - |
| Prince William Street Oversizi | 620 | - | - | - | - | - | - | 620 | - |
| Existing Clear-Well Roof | 120 | - | - | - | 200 | - | - | 320 | 200 |
| Second Clear-Well at Water T | - | - | - | 200 | 2,000 | - | - | 2,200 | 2,200 |
| Nokesville Road Upgrade | - | - | - | - | - | - | 500 | 500 | - |
| West Street Water Line | - | - | - | - | 150 | - | - | 150 | 150 |
| Total | 9,771 | 2,700 | 1,800 | 1,100 | 5,460 | 9,240 | 17,650 | 47,721 | 20,300 |

W-042 24" Transmission Main Replacement

Year Introduced: 2007
Change: Increased Estimate
Associated Proj: N/A
Program Area: Water
Managing Dept: Utilities
Manager: T. Dawood
Plan Conformance:
 Comprehensive Plan 7.7



Description:

Replace 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.

PROJECT-TO-DATE

Account # CP3683

| | | |
|----------------------|-----------|-----------|
| Budget: | \$ | 4,510,370 |
| Expenditures: | \$ | 1,997,961 |
| Balance: | \$ | 2,512,409 |

| Project Estimate: (\$ in thousands) | Prior Years | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | Future | Total Project |
|-------------------------------------|--------------|--------------|--------------|------------|----------|--------------|---------------|---------------|
| Planning | 425 | - | - | - | - | - | - | 425 |
| Land | - | - | - | - | - | - | - | - |
| Construction | 4,085 | 1,800 | 1,100 | 500 | - | 8,500 | 12,500 | 28,485 |
| Total Project Estimate | 4,510 | 1,800 | 1,100 | 500 | - | 8,500 | 12,500 | 28,910 |

Funding Sources: (\$ in thousands)

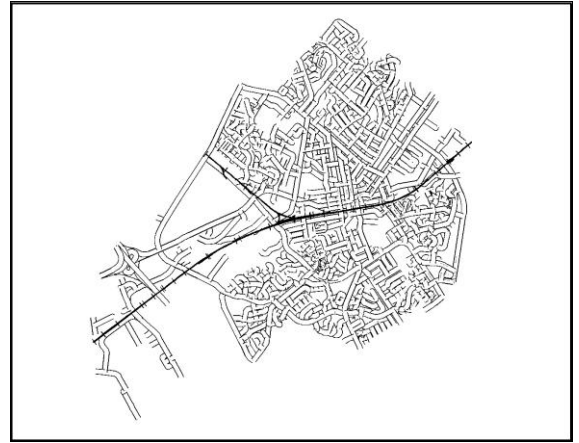
| | | | | | | | | |
|------------------------------|--------------|--------------|--------------|------------|----------|--------------|---------------|---------------|
| General Fund | - | - | - | - | - | - | - | - |
| Enterprise Funds | 4,510 | 1,800 | 1,100 | 500 | - | - | - | 7,910 |
| School Fund | - | - | - | - | - | - | - | - |
| Bonds | - | - | - | - | - | 8,500 | 12,500 | 21,000 |
| Other Local Government | - | - | - | - | - | - | - | - |
| State | - | - | - | - | - | - | - | - |
| Federal | - | - | - | - | - | - | - | - |
| Gas Taxes | - | - | - | - | - | - | - | - |
| Proffers | - | - | - | - | - | - | - | - |
| Storm Water Mgmt Fees | - | - | - | - | - | - | - | - |
| NVTA | - | - | - | - | - | - | - | - |
| Other | - | - | - | - | - | - | - | - |
| Total Funding Sources | 4,510 | 1,800 | 1,100 | 500 | - | 8,500 | 12,500 | 28,910 |

Operating Impacts: (\$ in thousands)

| | | | | | | | | |
|--------------------|----------|----------|----------|----------|----------|----------|-----------------|-----------------|
| Personnel | - | - | - | - | - | - | - | - |
| Revenue Offset | - | - | - | - | - | - | - | - |
| Facility Costs | - | - | - | - | - | - | - | - |
| Program Costs | - | - | - | - | - | - | - | - |
| Debt Service | - | - | - | - | - | - | (31,500) | (31,500) |
| Net Revenue | - | - | - | - | - | - | (31,500) | (31,500) |

W-044 Meter Upgrades

Year Introduced: 2007
Change: No change
Associated Proj: E-029
Program Area: Water
Managing Dept: Utilities
Manager: T. Dawood
Plan Conformance:
 Comprehensive Plan 7.7



Description:

Most meters in the City are 30+ years old. As they age, they lose accuracy and under-register water usage. This project will upgrade the meters by evaluating a substantial meter change-out program and considering automated meter reading alternatives to reduce operating expenses. This will ensure more accurate billing. Note that some other state utility regulators require water replacement on a 10-year cycle.

| PROJECT-TO-DATE | |
|------------------------|--------------|
| Account # | CP3660 |
| Budget: | \$ 2,212,000 |
| Expenditures: | \$ 62,672 |
| Balance: | \$ 2,149,328 |

| Project Estimate: (\$ in thousands) | Prior Years | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | Future | Total Project |
|-------------------------------------|--------------|------------|------------|---------|---------|---------|--------|---------------|
| Planning | - | - | - | - | - | - | - | - |
| Land | - | - | - | - | - | - | - | - |
| Construction | 2,212 | 350 | 150 | - | - | - | - | 2,712 |
| Total Project Estimate | 2,212 | 350 | 150 | - | - | - | - | 2,712 |

Funding Sources: (\$ in thousands)

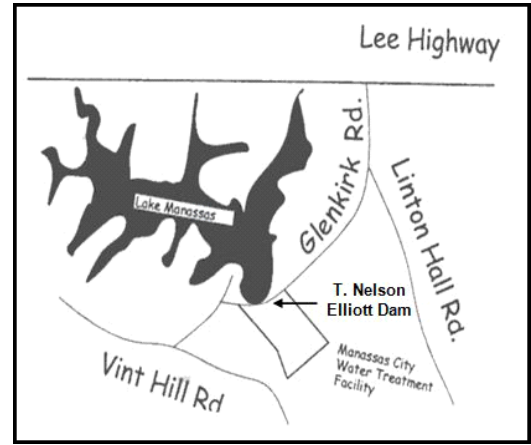
| | | | | | | | | |
|------------------------------|--------------|------------|------------|---|---|---|---|--------------|
| General Fund | - | - | - | - | - | - | - | - |
| Enterprise Funds | 2,212 | 350 | 150 | - | - | - | - | 2,712 |
| School Fund | - | - | - | - | - | - | - | - |
| Bonds | - | - | - | - | - | - | - | - |
| Other Local Government | - | - | - | - | - | - | - | - |
| State | - | - | - | - | - | - | - | - |
| Federal | - | - | - | - | - | - | - | - |
| Gas Taxes | - | - | - | - | - | - | - | - |
| Proffers | - | - | - | - | - | - | - | - |
| Storm Water Mgmt Fees | - | - | - | - | - | - | - | - |
| NVTA | - | - | - | - | - | - | - | - |
| Other | - | - | - | - | - | - | - | - |
| Total Funding Sources | 2,212 | 350 | 150 | - | - | - | - | 2,712 |

Operating Impacts: (\$ in thousands)

| | | | | | | | | |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Personnel | - | - | - | - | - | - | - | - |
| Revenue Offset | - | - | - | - | - | - | - | - |
| Facility Costs | - | - | - | - | - | - | - | - |
| Program Costs | - | - | - | - | - | - | - | - |
| Debt Service | - | - | - | - | - | - | - | - |
| Net Revenue | - | - | - | - | - | - | - | - |

W-045 Raw Water Pump Replacements

Year Introduced: 2007
Change: No change
Associated Proj: N/A
Program Area: Water
Managing Dept: Utilities
Manager: T. Dawood
Plan Conformance:
 Comprehensive Plan 7.7



Description:

Currently, there are three (3) raw water pumps: two 10 million gallons per day (mgd) and one 4 mgd at the head of the Water Treatment Plant. This project will replace the existing 4 mgd raw water pump with a new 10 mgd pump. This upgrade will meet VDH requirements as well as current and future Water Plant needs. This project provides redundancy and protects against extreme drought conditions that could impact lake water levels.

| PROJECT-TO-DATE | |
|------------------------|------------|
| Account # | CP3661 |
| Budget: | \$ 160,000 |
| Expenditures: | \$ 120,132 |
| Balance: | \$ 39,868 |

| Project Estimate: (\$ in thousands) | Prior Years | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | Future | Total Project |
|-------------------------------------|-------------|---------|---------|---------|------------|---------|--------|---------------|
| Planning | - | - | - | - | - | - | - | - |
| Land | - | - | - | - | - | - | - | - |
| Construction | 160 | - | - | - | 170 | - | - | 330 |
| Total Project Estimate | 160 | - | - | - | 170 | - | - | 330 |

| Funding Sources: (\$ in thousands) | Prior Years | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | Future | Total Project |
|------------------------------------|-------------|---------|---------|---------|------------|---------|--------|---------------|
| General Fund | - | - | - | - | - | - | - | - |
| Enterprise Funds | 160 | - | - | - | 170 | - | - | 330 |
| School Fund | - | - | - | - | - | - | - | - |
| Bonds | - | - | - | - | - | - | - | - |
| Other Local Government | - | - | - | - | - | - | - | - |
| State | - | - | - | - | - | - | - | - |
| Federal | - | - | - | - | - | - | - | - |
| Gas Taxes | - | - | - | - | - | - | - | - |
| Proffers | - | - | - | - | - | - | - | - |
| Storm Water Mgmt Fees | - | - | - | - | - | - | - | - |
| NVTA | - | - | - | - | - | - | - | - |
| Other | - | - | - | - | - | - | - | - |
| Total Funding Sources | 160 | - | - | - | 170 | - | - | 330 |

| Operating Impacts: (\$ in thousands) | Prior Years | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | Future | Total Project |
|--------------------------------------|-------------|----------|----------|----------|----------|----------|----------|---------------|
| Personnel | - | - | - | - | - | - | - | - |
| Revenue Offset | - | - | - | - | - | - | - | - |
| Facility Costs | - | - | - | - | - | - | - | - |
| Program Costs | - | - | - | - | - | - | - | - |
| Debt Service | - | - | - | - | - | - | - | - |
| Net Revenue | - | - | - | - | - | - | - | - |

