

# Fund 69300: Sewer Construction Improvements

**Focus** Fund 69300, Sewer Construction Improvements, provides for wastewater management construction projects through a transfer of funds from Fund 69000, Sewer Revenue. All projects in Fund 69300 are fully supported by sewer system revenues.

Funding in the amount of \$86,000,000 is included in Fund 69300, Sewer Construction Improvements, in FY 2022. FY 2022 funding will provide for the following projects:

## Collection System Replacement and Rehabilitation

This is a continuing project established to implement systematic rehabilitation of the County's approximately 3,300 miles of sanitary sewer lines. Rehabilitation includes, among other things, the use of trenchless technology to rehabilitate approximately 20 miles of sewer per year. FY 2022 funding in the amount of \$3,000,000 is included to continue the systematic rehabilitation of the County's sewer lines.

## Extension and Improvement Projects

Funding in the amount of \$1,000,000 is included to satisfy the annual appropriation requirement for the County's Extension and Improvement (E&I) Program as approved by the Board of Supervisors on April 12, 2011. This policy adjusts the Connection Charges such that the future cost of the E&I Program is shared equally between the County's Sewer Fund and the property owners seeking public sewer service when the Health Department determines the properties' septic systems have failed.

## Gravity Sewer Capacity Improvements

This project funds the installation of sewer lines to provide the needed capacity to serve new development within the County. As areas develop, more strain is placed on the sanitary sewer system serving the area. FY 2022 funding in the amount of \$11,000,000 will provide for increasing the size of the gravity sewer or installing parallel gravity sewers.

## Gravity Sewers

This project funds the inspection, repair, and replacement of gravity sewers within the wastewater collection system. FY 2022 funding in the amount of \$20,200,000 will provide for the closed-circuit television (CCTV) inspection of more than 200 miles of sewer and rehabilitation of over 25 miles of sewer using cured-in-place-pipe (CIPP). In addition, funding is provided for the repair and replacement of defective and aging gravity sewers, including emergency repair work. New initiatives for FY 2022 include detailed inflow and infiltration and creek bed investigations.

## Integrated Sewer Metering

This project will provide for the planned replacement of sewer meters throughout the County. FY 2022 funding in the amount of \$1,000,000 is provided for the continuation of replacing sewer meters used for measuring wastewater flow to and from other jurisdictions for billing and monitoring purposes as well as portable meters used in infiltration and inflow studies to measure wet weather flows.

## Large Diameter Pipe Rehabilitation and Replacement

This project supports the condition assessment of 49 miles of sewer lines with a diameter of 15 inches or larger and provides recommendations for the rehabilitation and/or replacement alternatives. FY 2022 funding in the amount of \$1,117,000 will provide for the next phase of this program, which includes construction work.

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Photo of the Noman M. Cole Jr. Pollution Control Plant

## Noman Cole Treatment Plant Renewal

This project provides for the continuation of systematic rehabilitation of structures and equipment at the Noman M. Cole, Jr. Pollution Control Plant (NMCCPP). FY 2022 funding in the amount of \$36,000,000 is included for the rehabilitation and replacement of pumps, gates, and valves; stormwater runoff improvements, and continuation of the rehabilitation of the motor control centers/distribution centers (MCC/DC) and raw wastewater pump station facility.

## Pumping Stations

This project provides for the planned replacement of pumping stations throughout the County. FY 2022 funding of \$12,500,000 is included for the regularly scheduled repair, renovation, and replacement of pumping station equipment and facilities. There will be eight pump stations in the design phase and four pump stations in the construction phase in FY 2022.

## Sewer Sag Program

This project funds the condition assessment of 166 segments of 8 to 15-inch gravity sewer lines and provides recommendations for the rehabilitation and/or replacement alternatives. FY 2022 funding in the amount of \$183,000 will provide for the next phase of this program, which includes construction work.

## Pandemic Response and Impact

The Wastewater Management Program of DPWES has continued to work at full capacity during the COVID-19 pandemic to fulfill the System's responsibilities to its customers. Accomplishing this task has required considerable innovation, hard work, and adaptation (e.g., additional personal protective equipment, facility cleaning, distancing measures, equipment, and new tools) that have increased the System's resource requirements.

The Wastewater Management staff worked with the System's financial advisors to project estimated impacts to revenues and developed financial management strategies. The System's 10-year financial plan has been updated to include adjustments for revenues during the pandemic and staff is closely monitoring unfolding trends throughout the year.

## FY 2022 Funding Adjustments

The following funding adjustments from the FY 2021 Adopted Budget Plan are necessary to support the FY 2022 program:

### Capital Projects

**\$21,000,000**

Funding of \$86,000,000 in Capital Projects, an increase of \$21,000,000 over the FY 2021 Adopted Budget Plan, has been included in FY 2022 for priority wastewater capital projects.

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### **Changes to FY 2021 Adopted Budget Plan**

*The following funding adjustments reflect all approved changes in the FY 2021 Revised Budget Plan since passage of the FY 2021 Adopted Budget Plan. Included are all adjustments made as part of the FY 2020 Carryover Review, FY 2021 Mid-Year Review, and all other approved changes through December 31, 2020:*

#### **Carryover Adjustments**

**\$68,386,732**

As part of the *FY 2020 Carryover Review*, the Board of Supervisors approved funding of \$68,386,732 due to the carryover of unexpended project balances in the amount of \$56,386,732 and an adjustment of \$12,000,000 to support Fairfax County's share of facility improvements at the Alexandria Wastewater Treatment Plant to comply with nutrient discharge limits.

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## FUND STATEMENT

| Category                              | FY 2020<br>Actual    | FY 2021<br>Adopted<br>Budget Plan | FY 2021<br>Revised<br>Budget Plan | FY 2022<br>Advertised<br>Budget Plan |
|---------------------------------------|----------------------|-----------------------------------|-----------------------------------|--------------------------------------|
| <b>Beginning Balance</b>              | <b>\$56,355,117</b>  | <b>\$0</b>                        | <b>\$54,311,053</b>               | <b>\$0</b>                           |
| <b>Transfer In:</b>                   |                      |                                   |                                   |                                      |
| Sewer Revenue (69000) <sup>1</sup>    | \$75,000,000         | \$65,000,000                      | \$77,000,000                      | \$86,000,000                         |
| <b>Total Transfers In</b>             | <b>\$75,000,000</b>  | <b>\$65,000,000</b>               | <b>\$77,000,000</b>               | <b>\$86,000,000</b>                  |
| <b>Total Available</b>                | <b>\$131,355,117</b> | <b>\$65,000,000</b>               | <b>\$131,311,053</b>              | <b>\$86,000,000</b>                  |
| <b>Total Expenditures<sup>2</sup></b> | <b>\$77,044,064</b>  | <b>\$65,000,000</b>               | <b>\$131,311,053</b>              | <b>\$86,000,000</b>                  |
| <b>Total Disbursements</b>            | <b>\$77,044,064</b>  | <b>\$65,000,000</b>               | <b>\$131,311,053</b>              | <b>\$86,000,000</b>                  |
| <b>Ending Balance<sup>3</sup></b>     | <b>\$54,311,053</b>  | <b>\$0</b>                        | <b>\$0</b>                        | <b>\$0</b>                           |

<sup>1</sup> Additional FY 2021 funding was provided to support Fairfax County's share of facility improvements at the Alexandria Wastewater Treatment Plant (WW-000021) to comply with nutrient discharge limits.

<sup>2</sup> In order to account for revenues and expenditures in the proper fiscal year, audit adjustments in the amount of \$2,075,678.75 have been reflected as an increase to the FY 2020 Total Expenditures. This impacted the amount carried forward and resulted in a decrease of \$2,075,678.75 to the FY 2021 Revised Budget Plan. The projects affected by this adjustment were WW-000001, Pumping Station Rehabilitation, WW-000009, Noman Cole Treatment Plant Renewal, WW-000020, Arlington WWTP Upgrades and Rehab, WW-000021, Alexandria WWTP Upgrades and Rehab, WW-000022, Blue Plains WWTP Upgrades and Rehab, WW-000028, Gravity Sewers, and WW-000032, Gravity Sewer Capacity Improvements. The audit adjustments were included in the FY 2020 Comprehensive Annual Financial Report (CAFR). Details of the audit adjustments were included in the FY 2021 Mid-Year Package.

<sup>3</sup> The capital projects in this sewer fund are budgeted based on the total project costs. Most projects span multiple years, from design to construction completion. Therefore, funding for capital projects is carried forward each fiscal year, and ending balances fluctuate, reflecting the carryover of these funds.

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### SUMMARY OF CAPITAL PROJECTS

| Project  | Total Project Estimate | FY 2020 Actual Expenditures | FY 2021 Revised Budget  | FY 2022 Advertised Budget Plan |
|--|------------------------|-----------------------------|-------------------------|--------------------------------|
| Alexandria WWTP Upgrades and Rehab (WW-000021)                 |                        | \$13,751,760.76             | \$20,342,342.02         | \$0                            |
| Arlington WWTP Upgrades and Rehab (WW-000020)                  |                        | 622,306.00                  | 1,638,073.00            | 0                              |
| Blue Plains WWTP Upgrades and Rehab (WW-000022)                |                        | 8,345,079.66                | 9,859,355.94            | 0                              |
| Colfax Gravity Sanitary Sewer Line Project (WW-000027)         |                        | (74,295.07)                 | 1,245,670.00            | 0                              |
| Collection System Replacement and Rehab (WW-000007)            |                        | 4,945,285.35                | 8,427,043.66            | 3,000,000                      |
| Dogue Creek Rehabilitation and Replacement (WW-000002)         | 22,838,600             | 0.00                        | 344.13                  | 0                              |
| Extension and Improvement Projects (WW-000006)                 |                        | 1,038,338.58                | 3,930,301.44            | 1,000,000                      |
| Force Main Rehabilitation (WW-000008)                          |                        | 729,549.56                  | 5,244,477.20            | 0                              |
| Gravity Sewer Capacity Improvements (WW-000032)                | 25,600,000             | 261,712.53                  | 14,338,287.22           | 11,000,000                     |
| Gravity Sewers (WW-000028)                                     |                        | 5,957,647.10                | 15,084,112.63           | 20,200,000                     |
| Integrated Sewer Metering (WW-000005)                          | 5,163,906              | 65,186.81                   | 2,735,648.15            | 1,000,000                      |
| Large Diameter Pipe Rehabilitation and Replacement (WW-000026) |                        | 1,541,599.33                | 2,572,585.14            | 1,117,000                      |
| Laurel Hill Adaptive Reuse (WW-000023)                         | 650,000                | 34,546.71                   | 44,860.78               | 0                              |
| Noman Cole Treatment Plant Renewal (WW-000009)                 |                        | 31,591,687.10               | 17,001,045.55           | 36,000,000                     |
| Pumping Station Rehabilitation (WW-000001)                     |                        | 7,779,398.57                | 17,189,739.68           | 12,500,000                     |
| Robert P. McMath Facility Improvements (WW-000004)             | 2,425,000              | 96,273.55                   | 620,519.16              | 0                              |
| Sewer Sag Program (WW-000024)                                  |                        | 341,121.65                  | 10,415,263.29           | 183,000                        |
| Wastewater Facility Share (WW-000030)                          | 432,000                | 16,865.50                   | 415,134.50              | 0                              |
| Wastewater Operations & Maintenance (WW-000031)                | 210,000                | 0.00                        | 206,250.00              | 0                              |
| <b>Total</b>   | <b>\$57,319,506</b>    | <b>\$77,044,063.69</b>      | <b>\$131,311,053.49</b> | <b>\$86,000,000</b>            |