

# Fund 408

## Sewer Bond Construction

### Focus

Fund 408, Sewer Bond Construction, provides for major sewer system construction projects including upgrades and expansions of sewer treatment plants utilized by Fairfax County residents that are funded from the sale of sewer revenue bonds, other shorter-term financing, and/or sewer system revenues. Funding has been provided in recent years in Fund 408, Sewer Bond Construction to begin to meet new state regulatory requirements for nitrogen removal and plant upgrades at the District of Columbia Water and Sewer Authority (DCWASA), the Alexandria Sanitation Authority (ASA), the Arlington County Treatment Plant, the Loudoun County Sanitation Authority (LCSA) treatment plant; and the Noman M. Cole Jr. Pollution Control Plant.

The new Chesapeake Bay water quality program requires reductions in the amount of nutrient pollutants. In December 2004, the state notified the County that the renewal of County's National Pollutant Discharge Elimination System (NPDES) permit will include a requirement that nutrient removal be performed at the "Limits of Technology." Current technology allows for discharge limits of less than 3.0 milligrams per liter for nitrogen and 0.1 milligrams per liter for phosphorus. The County has the capability to meet voluntary nitrogen removal standard of 8.0 milligrams per liter. A phased approach is recommended to renovate and upgrade current plant facilities to accommodate new more stringent nutrient discharge requirements.



A Sewer Revenue Bond sale in the amount of \$150 million was planned to support the Chesapeake Bay water quality program requirements for the operations of the Wastewater Management Program. This included bond proceeds of \$140,294,000 in this fund and \$9,706,000 reserved in Fund 406, Sewer Bond Debt Reserve for legal requirements. As outlined in the 1986 Bond Resolution, this reserve is required to be the lesser of the maximum principal and interest requirements for any bond year or 125 percent of the average annual principal and interest requirements for the bonds. Instead, shorter-term financing options will be pursued in FY 2008 and FY 2009 once projects are ready to begin in order to maximize flexibility. The necessary adjustments will be made to Fund 408, Sewer Bond Construction at an upcoming quarterly review when more definitive project schedules and financing options have been determined. In addition, interest is earned on the fund balance in this fund, and an amount of \$1,000,000 is anticipated in interest earnings in FY 2009.

### Changes to FY 2008 Adopted Budget Plan

*The following funding adjustments reflect all approved changes in the FY 2008 Revised Budget Plan since passage of the FY 2008 Adopted Budget Plan. Included are all adjustments made as part of the FY 2007 Carryover Review and all other approved changes through December 31, 2007:*

- ◆ As part of the FY 2007 Carryover Review, the Board of Supervisors approved an increase of \$67,935,338 due to the carryover of unexpended project balances.

A Fund Statement, a Summary of Capital Projects, and Project Detail Tables for each project funded in FY 2009 are provided on the following pages. The Summary of Capital Projects may include some projects without a Total Project Estimate amount. These projects are considered "continuing" projects or projects for which funding is necessary on an ongoing basis (e.g., a contingency or planning project). The Project Detail Tables include project location, description, source of funding, and completion schedules.

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### FUND STATEMENT

Fund Type G40, Enterprise Funds

Fund 408, Sewer Bond Construction

	FY 2007 Actual	FY 2008 Adopted Budget Plan	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan
<b>Beginning Balance</b>	<b>\$18,972,199</b>	<b>\$85,857,719</b>	<b>\$15,326,144</b>	<b>\$88,434,806</b>
Revenue:				
Revenue from the Commonwealth	\$351,247	\$0	\$0	\$0
Sale of Bonds <sup>1</sup>	0	0	140,294,000	0
Interest on Investments <sup>2</sup>	1,639,891	750,000	750,000	1,000,000
<b>Total Revenue</b>	<b>\$1,991,138</b>	<b>\$750,000</b>	<b>\$141,044,000</b>	<b>\$1,000,000</b>
Transfer In:				
Sewer Revenue (400)	\$0	\$0	\$0	\$0
<b>Total Transfer In</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Available</b>	<b>\$20,963,337</b>	<b>\$86,607,719</b>	<b>\$156,370,144</b>	<b>\$89,434,806</b>
Total Expenditures	\$5,637,193	\$0	\$67,935,338	\$74,000,000
<b>Total Disbursements</b>	<b>\$5,637,193</b>	<b>\$0</b>	<b>\$67,935,338</b>	<b>\$74,000,000</b>
<b>Ending Balance<sup>3</sup></b>	<b>\$15,326,144</b>	<b>\$86,607,719</b>	<b>\$88,434,806</b>	<b>\$15,434,806</b>

<sup>1</sup> An amount of \$150 million in revenue bonds was anticipated to be issued in FY 2007 to support capital program requirements for the operations of the Wastewater Management Program including \$140.3 million in this fund and \$9.7 million to be reserved in Fund 406, Sewer Bond Debt Reserve for legal requirements. However, based on the timing of revised project schedules, the planned 2007 Sewer Revenue Bond Sale did not occur and funding was not required in FY 2007. Therefore, projects in FY 2008 and FY 2009 will instead be funded using other shorter-term financing mechanisms. The necessary adjustments will be made to Fund 408, Sewer Bond Construction and Fund 406, Sewer Bond Debt Reserve at an upcoming quarterly review when more definitive project schedules and financing options have been determined.

<sup>2</sup> In order to account for revenues and expenditures in the proper fiscal year, an audit adjustment in the amount of \$101,986 has been reflected as an increase to FY 2007 revenues to reflect actual interest on investments. The audit adjustment has been included in the FY 2007 Comprehensive Annual Financial Report (CAFR). Details of the FY 2007 audit adjustments will be included in the FY 2008 Third Quarter 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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### FY 2009 Summary of Capital Projects

#### Fund: 408 Sewer Bond Construction

Project #	Description	Total Project Estimate	FY 2007 Actual Expenditures	FY 2008 Revised Budget	FY 2009 Advertised Budget Plan
G00902	DC Blue Plains Exp 309 MGD		\$0.00	\$8,743,000.00	\$10,000,000
G00904	Arlington Treatment Plant Upgrade	25,750,000	2,952,572.00	10,797,428.00	12,000,000
I00906	ASA Plant Improvements		0.00	5,351,000.00	25,000,000
J00901	LCSA Plant Upgrade	21,500,000	0.00	21,500,000.00	0
N00322	Lower Potomac 67 MGD	137,366,502	2,684,620.75	7,043,909.74	15,000,000
X00911	Noman M. Cole, Jr. Pollution Control Plant Renovations	118,829,000	0.00	14,500,000.00	12,000,000
<b>Total</b>		<b>\$303,445,502</b>	<b>\$5,637,192.75</b>	<b>\$67,935,337.74</b>	<b>\$74,000,000</b>

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<b>G00902</b>	<b>DC Treatment Blue Plains</b>
Blue Plains Sewer Shed	Countywide
<p><b>Description and Justification:</b> This project provides for the payment to District of Columbia Water and Sewer Authority (DCWASA) for Fairfax County's share of the project costs associated with upgrades to the Plant. The County pays for approximately 8.4 percent of the total costs for the design and construction of the upgrade for nitrification and sludge handling facilities. FY 2009 funding in the amount of \$10,000,000 is required to meet the County's obligation and is based on the projected construction schedule. Initial design expenditures were funded in Fund 402, Sewer Construction Improvements.</p>	

	Total Project Estimate	Prior Expenditures	FY 2007 Expenditures	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan	Future Years
Land Acquisition		\$0	\$0	\$0	\$0	\$0
Design and Engineering		0	0	0	0	0
Construction		8,917,726	0	8,743,000	10,000,000	0
Other		26,514,347	0	0	0	3,708,711
<b>Total</b>	Continuing	<b>\$35,432,073</b>	<b>\$0</b>	<b>\$8,743,000</b>	<b>\$10,000,000</b>	<b>\$3,708,711</b>

Source of Funding				
General Fund	Sewer Revenue Bonds	Transfers from Other Funds	Other	Total Funding
\$0	\$10,000,000	\$0	\$0	\$10,000,000

## Fund 408 Sewer Bond Construction

<b>G00904</b>	<b>Arlington Treatment Plant Upgrade</b>
Arlington Sewer Shed	Countywide
<p><b>Description and Justification:</b> This project provides for the expansion and improvement of the Arlington County Wastewater Treatment Plant for enhanced nitrogen removal. The Fairfax County Board of Supervisors renewed the service agreement with Arlington County in July 1994 for the purchase of permanent sewage treatment capacity allocation of three million gallons per day in the expanded and improved Arlington Wastewater Treatment Plant. FY 2009 funding in the amount of \$12,000,000 is required to meet the County's obligation and is based on the current construction schedule. Initial design expenditures were funded in Fund 402, Sewer Construction Improvements.</p>	

	Total Project Estimate	Prior Expenditures	FY 2007 Expenditures	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan	Future Years
Land Acquisition	\$0	\$0	\$0	\$0	\$0	\$0
Design and Engineering	0	0	0	0	0	0
Construction	25,750,000	0	2,952,572	10,797,428	12,000,000	0
Other	0	0	0	0	0	0
<b>Total</b>	<b>\$25,750,000</b>	<b>\$0</b>	<b>\$2,952,572</b>	<b>\$10,797,428</b>	<b>\$12,000,000</b>	<b>\$0</b>

<b>Source of Funding</b>				
General Fund	Sewer Revenue Bonds	Transfers from Other Funds	Other	Total Funding
\$0	\$12,000,000	\$0	\$0	\$12,000,000

## Fund 408 Sewer Bond Construction

<b>100906</b>	<b>ASA Plant Improvements</b>
ASA Sewer Shed	Various
<p><b>Description and Justification:</b> This project funds the payment of the Alexandria Sanitation Authority for Fairfax County's 60 percent share of costs associated with plant upgrades to the Alexandria Wastewater Treatment Plant. FY 2009 funding in the amount of \$25,000,000 provides for the County's share of land acquisition costs and is based on the current construction schedule. Initial design expenditures were funded in Fund 402, Sewer Construction Improvements.</p>	

	Total Project Estimate	Prior Expenditures	FY 2007 Expenditures	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan	Future Years
Land Acquisition		\$0	\$0	\$0	\$0	\$0
Design and Engineering		0	0	0	0	0
Construction		0	0	5,351,000	25,000,000	0
Other		0	0	0	0	0
<b>Total</b>	Continuing	\$0	\$0	\$5,351,000	\$25,000,000	\$0

Source of Funding				
General Fund	Sewer Revenue Bonds	Transfers from Other Funds	Other	Total Funding
\$0	\$25,000,000	\$0	\$0	\$25,000,000

## Fund 408 Sewer Bond Construction

<b>N00322</b>	<b>Noman M. Cole, Jr. Pollution Control Plant Upgrade</b>	
9399 Richmond Highway		Mt. Vernon
<p><b>Description and Justification:</b> This project provides for the upgrade to the Noman M. Cole, Jr. Pollution Control Plant. FY 2009 funding in the amount of \$15,000,000 funds the plant upgrades to meet nitrogen removal standards. Currently, the plant has the capabilities of meeting the current nitrogen removal target of 8.0 milligrams per liter. However, the State is requiring that the plant meet a standard of 3.0 milligrams per liter. In order to meet the 3.0 milligrams per liter limit, an upgrade of the plant's current nitrogen removal process will be required. Initial design expenditures were funded in Fund 402, Sewer Construction Improvements.</p>		

	Total Project Estimate	Prior Expenditures	FY 2007 Expenditures	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan	Future Years
Land Acquisition	\$958,624	\$958,624	\$0	\$0	\$0	\$0
Design and Engineering	0	0	277,112	(277,112)	0	0
Construction	135,744,376	111,015,846	2,407,509	7,321,022	15,000,000	0
Other	663,502	663,502	0	0	0	0
<b>Total</b>	<b>\$137,366,502</b>	<b>\$112,637,972</b>	<b>\$2,684,621</b>	<b>\$7,043,910</b>	<b>\$15,000,000</b>	<b>\$0</b>

<b>Source of Funding</b>				
General Fund	Sewer Revenue Bonds	Transfers from Other Funds	Other	Total Funding
\$0	\$15,000,000	\$0	\$0	\$15,000,000

## Fund 408 Sewer Bond Construction

<b>X00911</b>	<b>Noman M. Cole, Jr. Pollution Control Plant Renovations</b>	
9399 Richmond Highway		Mt. Vernon
<p><b>Description and Justification:</b> This project provides for major repair, replacement, and renovation of facilities at the Noman M. Cole, Jr. Pollution Control Plant to maintain efficient operations and meet permit requirements. FY 2009 funding of \$12,000,000 supports the carbon replacement of the plant's filter systems, surge suppression of voltage, spikes, incinerator rehabilitation, treatment clarifiers and grit building rehabilitation, installation of backup generators, the final phase of sludge dewatering facility replacement and the stormwater management plan to control the plant's stormwater runoff. Initial design expenditures were funded in Fund 402, Sewer Construction Improvements.</p>		

	Total Project Estimate	Prior Expenditures	FY 2007 Expenditures	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan	Future Years
Land Acquisition	\$0	\$0	\$0	\$0	\$0	\$0
Design and Engineering	0	0	0	0	0	0
Construction	118,829,000	0	0	14,500,000	12,000,000	92,329,000
Other	0	0	0	0	0	0
<b>Total</b>	<b>\$118,829,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$14,500,000</b>	<b>\$12,000,000</b>	<b>\$92,329,000</b>

<b>Source of Funding</b>				
General Fund	Sewer Revenue Bonds	Transfers from Other Funds	Other	Total Funding
\$0	\$12,000,000	\$0	\$0	\$12,000,000