

# Fund 402

## Sewer Construction Improvements

### Focus

Fund 402, Sewer Construction Improvements, provides for wastewater management construction projects through a transfer of funds from Fund 400, Sewer Revenue. All projects in Fund 402 are fully supported by sewer system revenues and are included in the Summary of Capital Projects.

In FY 2009, an amount of \$23,500,000 is included in Fund 402, Sewer Construction Improvements. Funding will provide for the installation of 12,000 linear feet of sanitary sewer lines in the River Oaks Road area; replacement of power generators at several pumping stations; the upgrade and replacement of aging pumping stations equipment throughout the County; the replacement of the Dogue Creek Force Main; the



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

installation, repair, replacement and renovation of 20 miles of sewer lines using predominantly "no dig" technologies; and the replacement of equipment and facilities at the Noman G. Cole Pollution Control Plant.

### **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 \$27,039,058 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.

# Fund 402

## Sewer Construction Improvements

### FUND STATEMENT

Fund Type G40, Enterprise Funds

Fund 402, Sewer Construction Improvements

	FY 2007 Actual	FY 2008 Adopted Budget Plan	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan
<b>Beginning Balance</b>	<b>\$40,053,464</b>	<b>\$0</b>	<b>\$27,039,058</b>	<b>\$0</b>
Transfer In:				
Sewer Revenue (400)	\$11,861,000	\$13,550,000	\$13,550,000	\$23,500,000
Total Transfer In	\$11,861,000	\$13,550,000	\$13,550,000	\$23,500,000
<b>Total Available</b>	<b>\$51,914,464</b>	<b>\$13,550,000</b>	<b>\$40,589,058</b>	<b>\$23,500,000</b>
Total Expenditures	\$24,875,406	\$13,550,000	\$40,589,058	\$23,500,000
<b>Total Disbursements</b>	<b>\$24,875,406</b>	<b>\$13,550,000</b>	<b>\$40,589,058</b>	<b>\$23,500,000</b>
<b>Ending Balance<sup>1</sup></b>	<b>\$27,039,058</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

<sup>1</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.

# Fund 402

## Sewer Construction Improvements

### FY 2009 Summary of Capital Projects

#### Fund: 402 Sewer Construction Improvements

Project #	Description	Total Project Estimate	FY 2007 Actual Expenditures	FY 2008 Revised Budget	FY 2009 Advertised Budget Plan
G00901	DC Treatment Center - Blue Plains	\$91,105,605	\$6,248,602.65	\$4,321,012.74	\$0
G00903	Arlington Wastewater Treatment	23,487,392	2,396,932.00	7,010,494.00	0
I00351	Pump Station Renovations		3,683,840.44	3,806,770.59	3,000,000
I00904	ASA Wastewater Treatment Plant	238,751,218	0.00	467,057.70	0
L00117	Dogue Creek Rehab/Replacement		88,369.14	1,754,556.16	4,000,000
N00321	Lower Potomac Exp. 54 MGD	95,949,000	25,000.00	628,589.12	0
T00124	Rocky Run Pump Station	4,335,926	0.00	303,413.98	0
X00445	Integrated Sewer Metering		4,830.58	125,767.28	0
X00823	Extension Projects FY 1993	4,009,003	0.00	147,449.28	0
X00826	Extension Project FY 1996	27,938,799	2,943,253.43	6,948,640.23	5,000,000
X00900	Replacement Transmission		481.17	261,224.02	0
X00905	Replacement & Transmission		5,814,989.13	10,033,586.28	7,500,000
X00906	Sewer Line Enlargement		85,768.74	251,619.72	0
X00908	Sewer Line Replacement - 5 Inch		3,494.71	133,425.33	0
X00910	Replacement and Renewal		3,544,445.87	3,617,250.23	4,000,000
X00930	Sewer Relocation - VADOT		33,954.32	144,723.11	0
X00940	Developer Projects County Costs		192.47	396,470.88	0
X00998	Sewer Contingency Project		0.00	185,686.27	0
X00999	Sewer Revolving Fund		1,251.05	51,320.95	0
<b>Total</b>		<b>\$485,576,943</b>	<b>\$24,875,405.70</b>	<b>\$40,589,057.87</b>	<b>\$23,500,000</b>

## Fund 402 Sewer Construction Improvements

<b>I00351</b>	<b>Pump Station Renovations</b>
Countywide	Countywide
<p><b>Description and Justification:</b> This project provides for the renovation of pumping stations within the Wastewater Management Program. FY 2009 funding in the amount of \$3,000,000 is for repair, renovation, and replacement of various pumping station equipment and upgrade of back-up generators at pumping stations throughout the county. This funding will ensure proper operations in the wastewater conveyance during power outages.</p>	

	Total Project Estimate	Prior Expenditures	FY 2007 Expenditures	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan	Future Years
Land Acquisition		\$36,614	\$0	(\$974)	\$0	\$0
Design and Engineering		3,716,598	327,594	(428,515)	0	0
Construction		12,729,840	3,267,575	4,337,347	3,000,000	0
Other		491,926	88,671	(101,088)	0	0
Total	Continuing	\$16,974,979	\$3,683,840	\$3,806,771	<b>\$3,000,000</b>	\$0

Source of Funding				
General Fund	General Obligation Bonds	Transfers from Other Funds	Sewer Revenue	Total Funding
\$0	\$0	\$0	\$3,000,000	\$3,000,000

## Fund 402 Sewer Construction Improvements

<b>L00117</b>	<b>Dogue Creek Rehab/Replacement</b>
Lower Potomac Sewer Shed	Mt. Vernon
<p><b>Description and Justification:</b> This project provides for the replacement of the Dogue Creek Force Main. The Dogue Creek Force Main is approximately 4,350 linear feet of 36-inch trunk line. FY 2009 funding in the amount of \$4,000,000 will allow for the replacement of back-up power generators and fund repair, renovation and replacement of pumping station equipment.</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		265,183	5,079	(5,079)	0	0
Construction		1,381,199	83,290	1,759,636	4,000,000	2,000,000
Other		18,471	0	0	0	0
<b>Total</b>	Continuing	<b>\$1,664,853</b>	<b>\$88,369</b>	<b>\$1,754,556</b>	<b>\$4,000,000</b>	<b>\$2,000,000</b>

Source of Funding				
General Fund	General Obligation Bonds	Transfers from Other Funds	Sewer Revenue	Total Funding
\$0	\$0	\$0	\$4,000,000	\$4,000,000

## Fund 402 Sewer Construction Improvements

<b>X00826</b>	<b>Extension Projects</b>
Countywide	Countywide
<p><b>Description and Justification:</b> This project provides for the completion of sewer extension and improvement projects in those areas of the County with chronic septic systems failures. FY 2009 funding of \$5,000,000 provides for the installation of approximately 12,000 linear feet of eight-inch sanitary sewer line. This funding will address septic failures for eighty-seven dwellings on River Oaks Road as recommended by the Health Department.</p>	

	Total Project Estimate	Prior Expenditures	FY 2007 Expenditures	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan	Future Years
Land Acquisition	\$1,020,458	\$1,188,147	\$137,413	(\$305,102)	\$0	\$0
Design and Engineering	4,105,586	4,096,401	714,447	(705,262)	0	0
Construction	22,241,113	7,125,148	2,039,169	8,076,797	5,000,000	0
Other	571,641	637,209	52,225	(117,792)	0	0
Total	\$27,938,799	\$13,046,905	\$2,943,253	\$6,948,640	<b>\$5,000,000</b>	\$0

Source of Funding				
General Fund	General Obligation Bonds	Transfers from Other Funds	Sewer Revenue	Total Funding
\$0	\$0	\$0	\$5,000,000	\$5,000,000

## Fund 402 Sewer Construction Improvements

<b>X00905</b>	<b>Replacement and Transmission</b>
Countywide	Countywide
<p><b>Description and Justification:</b> This project provides for the systematic rehabilitation of the County's more than 3,330 miles of sanitary sewer lines. FY 2009 funding of \$7,500,000 includes recurring repair, replacement and renovation of 20 miles of sewer lines using predominantly "no dig" technologies.</p>	

	Total Project Estimate	Prior Expenditures	FY 2007 Expenditures	FY 2008 Revised Budget Plan	FY 2009 Advertised Budget Plan	Future Years
Land Acquisition		\$138,989	\$0	\$20,377	\$0	\$0
Design and Engineering		2,178,225	219,361	(84,882)	0	0
Construction		79,228,949	5,546,402	10,148,192	7,500,000	0
Other		403,516	49,226	(50,101)	0	0
<b>Total</b>	Continuing	<b>\$81,949,680</b>	<b>\$5,814,989</b>	<b>\$10,033,586</b>	<b>\$7,500,000</b>	<b>\$0</b>

Source of Funding				
General Fund	General Obligation Bonds	Transfers from Other Funds	Sewer Revenue	Total Funding
\$0	\$0	\$0	\$7,500,000	\$7,500,000

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<b>X00910</b>	<b>NCPCP Replacement and Renewal</b>
9399 Richmond Highway	Mt. Vernon
<p><b>Description and Justification:</b> This project provides for the replacement of equipment and facilities at the Noman M. Cole Jr. Pollution Control Plant to maintain efficient operations and meet permit requirements. FY 2009 funding in the amount of \$4,000,000 supports the carbon replacement for the plant's filter systems, methanol additional facilities for nitrogen removal, surge suppression of voltage spikes, incinerator rehabilitation, rehabilitation of tertiary clarifiers and grit building rehabilitation, replacement of backup generators, completion of the sludge dewatering facility replacement and provide for a stormwater management plan to control the plant's stormwater runoff.</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		3,590,354	1,010,397	(2,189,968)	0	0
Construction		14,161,651	1,870,707	6,167,867	4,000,000	0
Other		661,953	663,341	(360,649)	0	0
<b>Total</b>	Continuing	<b>\$18,413,958</b>	<b>\$3,544,446</b>	<b>\$3,617,250</b>	<b>\$4,000,000</b>	<b>\$0</b>

<b>Source of Funding</b>				
General Fund	General Obligation Bonds	Transfers from Other Funds	Sewer Revenue	Total Funding
\$0	\$0	\$0	\$4,000,000	\$4,000,000