

Project Summary

Project Number: **18-150**
 Project Title: **Maintenance & Operations Equipment Replacement**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Equipment Budget Year: 2018
 Year Identified: 2011
 Start Date: 7/1/2011 Project Status: Fully Funded
 Est. Completion Date: 7/30/2017 Region:

Description:

This project will provide for the replacement of equipment for the Maintenance & Operations facility.

Justification:

Replace aging and non-replaced yard equipment at the Maintenance & Operations facility to optimize field operations.

Comments:

Remaining funds of \$77,516 to be combined with capital portion of sewer operating budget to purchase replacement vehicles.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Fund Balance - Utilities	1,550,000				1,550,000
Total Revenue		1,550,000				1,550,000
Expense						
	Equipment	1,550,000				1,550,000
Total Expense		1,550,000				1,550,000
Obligated to Date:						1,550,000
						100.00 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **28-170**
 Project Title: **Manhole Rehabilitation (1709 Vertical Feet)**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Renovation or Rehabilitation Budget Year: 2018
 Year Identified: 2013
 Start Date: 7/1/2013 Project Status: Fully Funded
 Est. Completion Date: 6/30/2018 Region:

Description:

This project will provide funding for manhole rehabilitation projects.

Justification:

This project is needed to rehabilitate sanitary sewer manholes not currently identified that may be the cause of leaks, cave-ins, or other operational issues.

Comments:

One manhole on Willow Avenue and one manhole on Mooney Road have been replaced. Other manhole repairs are being identified and are currently underway. Appropriated funds will be continuously used to rehabilitate additional manholes throughout the City.

On July 12, 2016, City Council approved a change of funding source for project expenses incurred through June 15, 2016 from future revenue bonds to cash in the amount of \$149,845.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Revenue Bonds - Utility Fund	772,155				772,155
	Cash - Utilities	149,845				149,845
Total Revenue		922,000				922,000
Expense						
	Construction	922,000				922,000
Total Expense		922,000				922,000
					Obligated to Date:	232,100
						25.17 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **40-130**
 Project Title: **Murray Dr. and Whittamore Rd. Water Project**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Addition or Expansion Budget Year: 2018
 Year Identified: 2009
 Start Date: 7/1/2009 Project Status: Fully Funded
 Est. Completion Date: 6/30/2018 Region:

Description:

This project will provide design services and construction for water for neighborhoods in the vicinity of the Battlefield Golf Club. (Funded by Dominion Power). This project will consist of installation of a 16" water main along Centerville Turnpike from Etheridge Manor Boulevard to the existing 16" City water main near Albemarle Acres. Additionally, 8" and 10" water mains will be extended on Murray Drive and Whittamore Road.

Justification:

Due to concerns of the quality of the water from the wells in the vicinity of Battlefield Golf Club, this project will review all possible alternatives and recommend the most efficient method to provide potable water to the existing residences and businesses in this vicinity.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Fund Balance - Utilities	6,000,000				6,000,000
Total Revenue		6,000,000				6,000,000
Expense						
	Design & Engineering	750,000				750,000
	Construction	4,650,000				4,650,000
	Land Acquisition	100,000				100,000
	Other	500,000				500,000
Total Expense		6,000,000				6,000,000
Obligated to Date:						4,567,016
						76.12 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number:	54-120		
Project Title:	Northwest River WTP - 30" Raw Water Main		
Asset Type:			
Division:	Public Utilities Capital Projects		
Project Type:	Replacement	Budget Year:	2018
Year Identified:	2008	Project Status:	Fully Funded
Start Date:	7/5/2009	Region:	
Est. Completion Date:	6/30/2018		

Description:

This project will install a ductile iron pipeline parallel to the existing fiberglass 30" raw water main serving the Northwest River Water Treatment Plant, which will enhance system reliability.

Justification:

The existing raw water main is made from fiberglass and is easily damaged. It has been in service for approximately 30 years. The parallel ductile iron pipeline will enhance system reliability.

Comments:

On September 13, 2016, City Council approved an amendment to the FY 2017 CIP Budget to change the funding source for \$337,156 of this project's budget from revenue bonds to cash, and to transfer that \$337,156 in cash funding from this project to the Unserved Areas project (as outlined in Item 21).

On July 12, 2016, City Council approved a change of funding source for project expenses incurred through June 15, 2016 from future revenue bonds to cash in the amount of \$113,216.

On April 28, 2015, Council approved an additional \$991,510.64 for this project by transferring/appropriating available funding from six closed/lapsed public utilities capital projects. Design is complete, however, additional funding was needed to proceed with construction due to higher than anticipated costs for easement acquisitions, unit construction costs, and soil costs.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Revenue Bonds - Utility Fund	2,856,214				2,856,214
	Cash - Utilities	1,633,018				1,633,018
	Total Revenue	4,489,232				4,489,232
Expense						
	Design & Engineering	466,500				466,500
	Construction	3,055,638				3,055,638
	Equipment	967,094				967,094
	Total Expense	4,489,232				4,489,232
					Obligated to Date:	2,615,574
						58.26 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **40-120**
 Project Title: **Northwest River WTP - Basin Cover Replacement**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Replacement Budget Year: 2018
 Year Identified: 2008 Project Status: Fully Funded
 Start Date: 7/1/2008 Region:
 Est. Completion Date: 7/30/2017

Description:

This project will replace the original settling basin and media filter protective covers at the Northwest River Water Treatment Plant.

Justification:

Protective covers are required over the plant settling basins and media filters to limit algae growth which fouls RO membrane elements. The original covers were installed in 1998 and have a 10 year life expectancy.

Comments:

On September 13, 2016, City Council approved an amendment to the FY 2017 CIP Budget to transfer \$69,319 in cash funding from this project to the Unserved Areas project (as outlined in Item 21).

Only project close-out remains to be completed.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Fund Balance - Utilities	763,554				763,554
Total Revenue		763,554				763,554
Expense						
	Design & Engineering	35,000				35,000
	Construction	583,554				583,554
	Equipment	145,000				145,000
Total Expense		763,554				763,554
Obligated to Date:						763,554
						100.00 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **05-190**
 Project Title: **Oak Grove Elevated Tank Standpipe Replacement**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Replacement Budget Year: 2018
 Year Identified: 2015 Project Status: Fully Funded
 Start Date: 7/1/2014 Region:
 Est. Completion Date: 6/30/2018

Description:

Replace the main water pipe (standpipe) that runs from the bottom of the tank to the "bowl" at the top of the tank on the elevated water tower.

Justification:

The standpipe allows the tank to fill and empty and runs up through the "stem" of the water tower.

Comments:

When the tank was painted in 2009, the standpipe was observed to have deteriorated to the point that replacement was recommended. The pipe is not in danger of imminent failure, but replacement is recommended so it can be scheduled with the least impact on the system (with regard to seasonal demand).

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Fund Balance - Utilities	200,000				200,000
Total Revenue		200,000				200,000
Expense						
	Equipment	200,000				200,000
Total Expense		200,000				200,000
Obligated to Date:						50,445
						25.22 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **02-140**
 Project Title: **Pump Station and Wet Well Upgrading - Phase IV**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Replacement Budget Year: 2018
 Year Identified: 2010 Project Status: Fully Funded
 Start Date: 7/1/2012 Region:
 Est. Completion Date: 6/1/2018

Description:

This project will provide for the replacement of worn-out equipment to meet Department of Environmental Quality regulations.

Justification:

Equipment in stations has a limited useful life. As a result it must be periodically replaced to ensure that the facilities remain in operation preventing sewer overflows. Structural repairs to buildings and structures are also periodically required.

Comments:

On September 13, 2016, City Council approved an amendment to the FY 2017 CIP Budget to transfer \$14,181 in cash funding from this project to the Unserved Areas project (as outlined in Item 21). This reduced this project's budget from \$300,000 to \$285,819.

Funds for this project have been combined with the capital portion of the sewer operating budget to replace pumps in FY 2015.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Fund Balance - Utilities	285,819				285,819
Total Revenue		285,819				285,819
Expense						
	Equipment	285,819				285,819
Total Expense		285,819				285,819
Obligated to Date:						285,819
						100.00 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **17-140**
 Project Title: **Red Top Tank and Raw Water Pump Station**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Addition or Expansion Budget Year: 2018
 Year Identified: 2010
 Start Date: 7/1/2013 Project Status: Fully Funded
 Est. Completion Date: 6/30/2018 Region:

Description:

This project will provide for installation of a raw water tank and pump station to allow utilization of Lake Gaston Water.

Justification:

This project will help the City meet future water demands.

Comments:

Design is underway (90% complete). Task Order 3-N is routed for approval. This Task Order will complete design work and carry project through to construction. Coordination with Norfolk and Virginia Beach is also underway, and the Virginia Power Work Order has been submitted.

On July 12, 2016, City Council approved a change of funding source for project expenses incurred through June 15, 2016 from future revenue bonds to cash in the amount of \$1,210,920.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Revenue Bonds - Utility Fund	4,160,450				4,160,450
	Cash - Utilities	1,210,920				1,210,920
Total Revenue		5,371,370				5,371,370
Expense						
	Construction	5,371,370				5,371,370
Total Expense		5,371,370				5,371,370
					Obligated to Date:	3,851,926
						71.71 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number:	27-120		
Project Title:	Sanitary Sewer Evaluation Study		
Asset Type:			
Division:	Public Utilities Capital Projects		
Project Type:	Study	Budget Year:	2018
Year Identified:	2008		
Start Date:	7/1/2007	Project Status:	Fully Funded
Est. Completion Date:	6/30/2018	Region:	

Description:

This project will provide for the completion of a Sanitary Sewer Evaluation Study (SSES).

Justification:

This study and associated activities are required by proposed consent order from Virginia Department of Environmental Quality (DEQ).

Comments:

Per the consent order, ongoing studies of the sewer systems and pump stations are underway.

On July 12, 2016, City Council approved a change of funding source for project expenses incurred through June 15, 2016 from future revenue bonds to cash in the amount of \$834,874.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Revenue Bonds - Utility Fund	7,655,606				7,655,606
	Cash - Utilities	834,874				834,874
	Fund Balance - Utilities	169,599				169,599
Total Revenue		8,660,079				8,660,079
Expense						
	Design & Engineering	6,404,708				6,404,708
	Construction	655,371				655,371
	Other	1,600,000				1,600,000
Total Expense		8,660,079				8,660,079
					Obligated to Date:	7,164,993
						82.74 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **15-170**
 Project Title: **Sewer Renewal: 18th Street**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Replacement Budget Year: 2018
 Year Identified: 2013
 Start Date: 7/2/2016 Project Status: Fully Funded
 Est. Completion Date: 6/2/2018 Region:

Description:

This project will provide for the renewal or replacement of approximately 1,250 of the existing 8" and 12" sewer mains along 18th Street between its intersection with "D" Street and its intersection with Seaboard Avenue in South Norfolk.

Justification:

TV inspection and excessive maintenance indicates severe deterioration requiring replacement.

Comments:

The previous estimate has been revised to reflect most up to date quantities and pricing. Project to begin in July 2016.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Revenue Bonds - Utility Fund	580,738				580,738
	Cash - Utilities	155,532				155,532
Total Revenue		736,270				736,270
Expense						
	Construction	736,270				736,270
Total Expense		736,270				736,270
Obligated to Date:						0
						0.00 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **29-170**
 Project Title: **Sewer Renewal: Melton St.**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Replacement Budget Year: 2018
 Year Identified: 2013
 Start Date: 7/2/2015 Project Status: Fully Funded
 Est. Completion Date: 6/2/2018 Region:

Description:

This project will provide for the replacement of approximately 480 feet of gravity sewer along the full length of Melton Street.

Justification:

TV inspection and excessive maintenance indicates severe deterioration requiring replacement.

Comments:

On July 12, 2016, City Council approved a change of funding source for project expenses incurred through June 15, 2016 from future revenue bonds to cash in the amount of \$29,844.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Cash - Utilities		247,160			247,160
Total Revenue			247,160			247,160
Expense						
	Construction		247,160			247,160
Total Expense			247,160			247,160
Obligated to Date:						205,823
						83.28 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number:	32-120		
Project Title:	Sewer Renewal: SSES Implementation - Phase I		
Asset Type:			
Division:	Public Utilities Capital Projects		
Project Type:	Replacement	Budget Year:	2018
Year Identified:	2008	Project Status:	Fully Funded
Start Date:	7/2/2010	Region:	
Est. Completion Date:	6/30/2018		

Description:

This project will provide for sewer renewal in two distinct service areas: Indian River and Rosemont Avenue. Plans will replace deficient sanitary sewer components identified as critical in the Sewer System Evaluation Survey (SSES). Phase I will improve the gravity sewer system for the Indian River service area by replacing pipes at Pump Station #3 located within the Indian River Estates subdivision and in swampy areas. It will also replace old sanitary sewer lines from Pump Station #7 north to Rosemont Avenue.

Justification:

TV inspection and excessive maintenance indicate severe deterioration requiring replacement.

Comments:

On September 13, 2016, City Council approved an amendment to the FY 2017 CIP Budget to transfer \$324 in cash funding from this project to the Unserved Areas project (as outlined in Item 21).

On July 12, 2016, City Council approved a change of funding source for project expenses incurred through June 15, 2016 from future revenue bonds to cash in the amount of \$353,745.

Indian River Estates Pump Station #3: Project is currently under construction. (Location: Washington Borough). Rosemont Avenue Pump Station #7: TV inspection and excessive maintenance indicates severe deterioration. (Location: South Norfolk Borough).

Since Public Utilities will be doing construction behind the South Norfolk Museum, along Godwin Avenue and Rosemont Avenue, the department will explore replacing the 12" force main behind the museum, an old 4" water main in the Godwin area, and an old 2" galvanized water line and loop it into the existing 6" water on Franklin Street. Public Utilities will also design and construct some storm drainage improvements in the area in cooperation with Public Works.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Revenue Bonds - Utility Fund	1,633,044				1,633,044
	Cash - Utilities	2,882,668				2,882,668
Total Revenue		4,515,712				4,515,712
Expense						
	Design & Engineering	200,000				200,000
	Construction	4,315,712				4,315,712
Total Expense		4,515,712				4,515,712
					Obligated to Date:	237,218
						5.25 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **31-120**
 Project Title: **Sewer System Repairs - Phase I**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Replacement Budget Year: 2018
 Year Identified: 2008 Project Status: Fully Funded
 Start Date: 7/1/2007 Region:
 Est. Completion Date: 7/30/2017

Description:

This project will provide funding to complete minor unanticipated sewer line and manhole replacement.

Justification:

This project will replace sewer lines not currently identified that may occur as the result of problems experienced with leaks, cave-ins, or other operational issues.

Comments:

Ongoing annual repairs to the gravity sewer collection system is underway. The most recent repairs include: sewer replacement on Liberty, main line valve repair at Pump Station # 165, gravity sewer lining on Atlantic Avenue, and gravity sewer lining in Fernwood Farms. (See project # 04-140 for Phase II).

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Fund Balance - Utilities	1,696,100				1,696,100
Total Revenue		1,696,100				1,696,100
Expense						
	Construction	1,696,100				1,696,100
Total Expense		1,696,100				1,696,100
Obligated to Date:						1,694,744
						99.92 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **04-140**
 Project Title: **Sewer System Repairs - Phase II**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Replacement Budget Year: 2018
 Year Identified: 2010 Project Status: Fully Funded
 Start Date: 7/1/2012 Region:
 Est. Completion Date: 7/1/2018

Description:

This provide will provide funding for minor unanticipated sewer line and manhole replacement.

Justification:

This project will replace sewer lines not currently identified that may occur as the result of problems experienced with leaks, cave-ins, or other operational issues.

Comments:

On September 13, 2016, City Council approved an amendment to the FY 2017 CIP Budget to transfer \$5,389 in cash funding from this project to the Unserved Areas project (as outlined in Item 21). This reduced this project's budget from \$250,000 to \$244,611.

Allocated funds will be used once Phase I is completed. (See project # 31-120 for Phase I).

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Fund Balance - Utilities	244,611				244,611
Total Revenue		244,611				244,611
Expense						
	Construction	244,611				244,611
Total Expense		244,611				244,611
Obligated to Date:						232,706
						95.13 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number:	45-120		
Project Title:	South Norfolk Improvements		
Asset Type:			
Division:	Public Utilities Capital Projects		
Project Type:	Replacement	Budget Year:	2018
Year Identified:	2008	Project Status:	Fully Funded
Start Date:	7/1/2008	Region:	
Est. Completion Date:	7/1/2019		

Description:

This project will install new water mains and replace substandard water mains and appurtenances at various locations in South Norfolk.

Justification:

This project will improve the City's water supply and reliability considering recent and upcoming growth in South Norfolk. The project consists of improvements to the City's water distribution system to allow transfer of demand to the Northwest River/Lake Gaston supply. A master plan will be developed from hydraulic modeling of the City's system using the DHI Mike Urban software. Specific improvements will be designed and constructed in phases and will include upgrades to existing mains and new water main loops and interconnections in the South Norfolk and Washington Boroughs, which are presently supplied by Norfolk water.

Comments:

Poindexter Streetscape Phase II Additional Work: Sewer renewal along Decatur Street is complete. Sewer renewal and water service line replacement along Chesapeake Avenue has started. The water main on Lincoln Street is being renewed through Crestwood Sewer - Phase I.

On July 12, 2016, City Council approved a change of funding source for project expenses incurred through June 15, 2016 from future revenue bonds to cash in the amount of \$98,362.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Revenue Bonds - Utility Fund	2,751,638				2,751,638
	Cash - Utilities	98,362				98,362
Total Revenue		2,850,000				2,850,000
Expense						
	Design & Engineering	2,850,000				2,850,000
Total Expense		2,850,000				2,850,000
					Obligated to Date:	959,104
						33.65 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **51-129**
 Project Title: **Unserviced Areas: Battlewood Meadows Sewer Cost Participation**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: **New Facility** Budget Year: **2018**
 Year Identified: **2014**
 Start Date: **5/1/2015** Project Status: **Fully Funded**
 Est. Completion Date: **6/30/2018** Region:

Description:

This project will install approximately 10,000 linear feet of gravity sewer and build a sanitary sewer pumping station to serve the Battlewood Meadows Subdivision as approved by the City Council as part of the Cost Participation Program.

Justification:

This project will provide a sewer system in this unserved area of the City as approved by the City Council as part of the Cost Participation Program.

Comments:

Project is currently under design, and is expected to be advertised for construction bids during February 2017.

On September 13, 2016, City Council approved an amendment to the FY 2017 CIP Budget to transfer \$2,203,000 in cash funding from various projects to this project (as outlined in Item 21). This project requires additional funding due to the location of the land that was available to be purchased for the new sewer pump station and the deep gravity sewer line that will be required. Revised estimates anticipate the project will cost \$6.65 million.

On July 12, 2016, City Council approved a change of funding source for project expenses incurred through June 15, 2016 from future revenue bonds to cash in the amount of \$240,763.

Project was identified in the FY 2015 CIP as a sub-project. Plans are currently under design. Proceeding with the preliminary engineering report. New gravity sanitary sewer system will result in a nominal increase to the annual operations, maintenance, and electrical costs.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Cash - Utilities	6,654,774				6,654,774
Total Revenue		6,654,774				6,654,774
Expense						
	Construction	6,654,774				6,654,774
Total Expense		6,654,774				6,654,774
Obligated to Date:						647,283
						9.73 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **51-128**
 Project Title: **Unserviced Areas: Wampler, Manning, Vico, Jolliff Sewer Cost Participation**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: New Facility Budget Year: 2018
 Year Identified: 2014 Project Status: Fully Funded
 Start Date: 12/1/2015 Region:
 Est. Completion Date: 6/30/2018

Description:

This project will install approximately 3,360 linear feet of 8" gravity sewer on Jolliff Road, Manning Drive, Wampler Place, and Vico Court in the unserved area of the City as approved by the City Council as part of the Cost Participation Program. This project may also install water mains in a portion of the same area.

Justification:

This project will provide a sewer system in this unserved area of the City as approved by the City Council as part of the Cost Participation Program.

Comments:

Project is currently under design, and is expected to be advertised for construction bids during fall 2016.

On September 13, 2016, City Council approved an amendment to the FY 2017 CIP Budget to transfer \$782,000 in cash funding from various projects to this project (as outlined in Item 21). This project requires additional funding due cost increases needed to address the size, alignment, and elevations of other utilities in Jolliff Road. Revised estimates anticipate the project will cost \$3.4 million.

On July 12, 2016, City Council approved a change of funding source for project expenses incurred through June 15, 2016 from future revenue bonds to cash in the amount of \$100,116.

Project was identified in the FY 2015 CIP as a sub-project. Project is awaiting project design and Notice to Proceed. New gravity sanitary sewer system will result in a nominal increase to the annual operation and maintenance costs. (Location: Western Branch Borough.)

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Cash - Utilities	3,395,186				3,395,186
Total Revenue		3,395,186				3,395,186
Expense						
	Construction	3,395,186				3,395,186
Total Expense		3,395,186				3,395,186
Obligated to Date:						2,066,387
						60.86 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **24-200**
 Project Title: **Water Renewal: Buchanan St.**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Replacement Budget Year: 2018
 Year Identified: 2016 Project Status: Fully Funded
 Start Date: 7/2/2016 Region:
 Est. Completion Date: 6/30/2018

Description:

This project will replace 1100 feet of existing antiquated and undersized water main on Buchanan Street with a minimum 8" watermain.

Justification:

Existing water main is antiquated and undersized; replacement is need to restore functional service to customers.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Cash - Utilities	256,870				256,870
Total Revenue		256,870				256,870
Expense						
	Design & Engineering	59,278				59,278
	Construction	197,592				197,592
Total Expense		256,870				256,870
Obligated to Date:						0
						0.00 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **71-120**
 Project Title: **Water Renewals: Waterline Upgrades - Phase I**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Replacement Budget Year: 2018
 Year Identified: 2008 Project Status: Fully Funded
 Start Date: 7/1/2009 Region:
 Est. Completion Date: 7/1/2021

Description:

This project will provide for replacement of water mains and appurtenances with adequate sizes and proper materials at various locations throughout the City.

Justification:

These improvements are necessary to provide fire protection and increase flows and pressures creating reliable flow patterns in the system to meet peak demands.

Comments:

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Fund Balance - Utilities	2,030,558				2,030,558
Total Revenue		2,030,558				2,030,558
Expense						
	Construction	2,030,558				2,030,558
Total Expense		2,030,558				2,030,558
Obligated to Date:						1,311,674
						64.60 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **24-120**
 Project Title: **Water System Renewal - Phase I**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Replacement Budget Year: 2018
 Year Identified: 2008 Project Status: Fully Funded
 Start Date: 7/1/2009 Region:
 Est. Completion Date: 7/1/2018

Description:

This project will provide for replacement of small water lines and antiquated appurtenances not currently identified that may occur as the result of problems experienced with leaks or other operational issues.

Justification:

This project is needed to provide funding for small capital replacement of water lines which will include replacing the offset at creek crossing along Deep Creek Boulevard; replacing fire hydrants; upgrading six large meter vaults; replacing 2" galvanized water lines on Port Chambers Court, Collins Court and Vallejo Place; and transferring service from 6" water main to 12" water main on Stewart Street (from Park Avenue to Jefferson Street).

Comments:

Recently replaced water main along Herrington Lane and contracted curb&gutter work at Battlefield and Oak Grove. Additional projects are currently in the planning process. These projects will include replacing fire hydrants, water lines on Port Chambers Court, Collins Court, and Vallejo Place. (See also project # 21-150 for Phase II).

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Fund Balance - Utilities	893,000				893,000
Total Revenue		893,000				893,000
Expense						
	Construction	893,000				893,000
Total Expense		893,000				893,000
Obligated to Date:						507,672
						56.85 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **47-120**
 Project Title: **Western Branch Interconnect to Lake Gaston WTP**
 Asset Type:
 Division: **Public Utilities Capital Projects**
 Project Type: Addition or Expansion Budget Year: 2018
 Year Identified: 2008
 Start Date: 7/1/2008 Project Status: Fully Funded
 Est. Completion Date: 6/30/2018 Region:

Description:

This project will install water mains along Jolliff Road, which will bridge the gap between the existing mains and crossing I-664. This project will also connect the water mains of the Western Branch plant to the Cavalier Industrial Park and Deep Creek area of the City.

Justification:

This project will improve system hydraulics and reliability. It will offer the flexibility to use either the Portsmouth or Chesapeake systems to serve Western Branch. This connection will allow the Western Branch Elevated Water Tank and the Cavalier Elevated Water Tank to be able to support either system if either tank was offline.

Comments:

This project has two phases. Phase I will install 1,817 feet of 20" water main and 2,969 feet of a 16" water main along Jolliff Road in order to bridge the gap between the existing 12" water main adjacent to Jolliff Middle School and the existing 20" water main at the intersection of Jolliff Road and David's Mill Drive. The water main route will take it across I-664. Phase II will connect the Western Branch plant to the Cavalier Industrial Park and Deep Creek area of the City, and consists of approximately 6,000 feet of water main from near Cavalier Industrial Park to Jolliff Road at Airline Boulevard. The size of the water main will be determined by modeling the City's water system. Public Utilities has issued the Notice to Proceed for the hydraulic study, and Kimley-Horne will present the hydraulic modeling to Public Utilities.

Project Forecast

Year	Total Expense	Total Revenue	Difference
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Project Details 2018

Account	Description	Prior Years	2018	2019 - 22	Future Years	Total Amount
Revenue						
	Revenue Bonds - Utility Fund	5,220,500				5,220,500
	Fund Balance - Utilities	3,077,500				3,077,500
Total Revenue		8,298,000				8,298,000
Expense						
	Construction	8,298,000				8,298,000
Total Expense		8,298,000				8,298,000
Obligated to Date:						2,296,283
						27.67 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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