

Project Summary

Project Number: **73-120**
 Project Title: **BMP Restoration Citywide**
 Asset Type:
 Division: **Storm Water Capital Projects**
 Project Type: **Renovation or Rehabilitation** Budget Year: **2016**
 Year Identified: **2011**
 Start Date: **7/1/2011** Project Status: **Funded**
 Est. Completion Date: **12/2/2019** Region:

Description:

The project includes the removal of significant accumulated amounts of sediment and silt in order to restore storage capacity and improve control of storm water.

Justification:

Over the years significant amounts of silt and sediment have accumulated within City retention ponds limiting their capacity. This project is needed to maintain the hydraulic capacity and maintain the water quality function by limiting runoff to area creeks and streams.

Project Forecast

Year	Total Expense	Total Revenue	Difference
2016	100,000	100,000	0
2017	300,000	300,000	0
2018	200,000	200,000	0
2019	400,000	400,000	0
2020	300,000	300,000	0
	1,300,000	1,300,000	0

Project Details 2016

Account	Description	Prior Years	2016	2017 - 20	Future Years	Total Amount
Revenue						
	Cash - Stormwater	1,300,000	100,000	1,200,000		2,600,000
Total Revenue		1,300,000	100,000	1,200,000		2,600,000
Expense						
	Construction	1,300,000	100,000	1,200,000		2,600,000
Total Expense		1,300,000	100,000	1,200,000		2,600,000
Obligated to Date:						34,467
						1.33 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **03-160**
 Project Title: **Citywide Outfall Re-Grading and Restoration**
 Asset Type:
 Division: **Storm Water Capital Projects**
 Project Type: **Renovation or Rehabilitation** Budget Year: **2016**
 Year Identified: **2012**
 Start Date: **7/1/2012** Project Status: **Funded**
 Est. Completion Date: **12/1/2019** Region:

Description:

This project will remove accumulated sediment and silt from ditches and outfalls.

Justification:

Accumulated sediment and silt removal is required on a regular basis in order to maintain ditch capacity and improve stormwater runoff quality.

Project Forecast

Year	Total Expense	Total Revenue	Difference
2016	100,000	100,000	0
2017	200,000	200,000	0
2018	100,000	100,000	0
2019	150,000	150,000	0
2020	150,000	150,000	0
	700,000	700,000	0

Project Details 2016

Account	Description	Prior Years	2016	2017 - 20	Future Years	Total Amount
Revenue						
	Cash - Stormwater	720,000	100,000	600,000		1,420,000
Total Revenue		720,000	100,000	600,000		1,420,000
Expense						
	Construction	520,000	50,000	400,000		970,000
	Land Acquisition	200,000	50,000	200,000		450,000
Total Expense		720,000	100,000	600,000		1,420,000
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: **43-170**
 Project Title: **Citywide System Rehab**
 Asset Type:
 Division: **Storm Water Capital Projects**
 Project Type: **Renovation or Rehabilitation** Budget Year: **2016**
 Year Identified: **2012**
 Start Date: **7/1/2012** Project Status: **Funded**
 Est. Completion Date: **12/1/2019** Region:

Description:

The project includes the replacement and upgrade of aging pipe systems and structures within selected neighborhoods in order to provide a ten year level of protection.

Justification:

The presence of numerous reported cave-ins and sinkholes within an area indicates there is a need for a system type improvement.

Project Forecast

Year	Total Expense	Total Revenue	Difference
2016	300,000	300,000	0
2017	400,000	400,000	0
2018	500,000	500,000	0
2019	500,000	500,000	0
2020	500,000	500,000	0
	2,200,000	2,200,000	0

Project Details 2016

Account	Description	Prior Years	2016	2017 - 20	Future Years	Total Amount
Revenue						
	Cash - Stormwater	1,200,000	300,000	1,900,000		3,400,000
	Total Revenue	1,200,000	300,000	1,900,000		3,400,000
Expense						
	Design & Engineering	150,000	100,000	500,000		750,000
	Construction	1,050,000	200,000	1,400,000		2,650,000
	Total Expense	1,200,000	300,000	1,900,000		3,400,000
					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: **07-150**
 Project Title: **Citywide Undesignated Drainage - Phase III**
 Asset Type:
 Division: **Storm Water Capital Projects**
 Project Type: **Renovation or Rehabilitation** Budget Year: **2016**
 Year Identified: **2012**
 Start Date: **7/1/2012** Project Status: **Funded**
 Est. Completion Date: **12/1/2019** Region:

Description:

Citywide drainage improvements including acquisition of easements, replacement of pipes, regrading ditches and associated activities.

Justification:

Major expenditures are necessary to increase drainage capacity in systems that experienced flooding from recent storm events. Many of these were brought to the City's attention by citizens' concerns raised during and after the 1999 hurricane season.

Project Forecast

Year	Total Expense	Total Revenue	Difference
2017	50,000	50,000	0
2018	50,000	50,000	0
2019	100,000	100,000	0
2020	100,000	100,000	0
	300,000	300,000	0

Project Details 2016

Account	Description	Prior Years	2016	2017 - 20	Future Years	Total Amount
Revenue						
	Cash - Stormwater	506,347		300,000		806,347
	Total Revenue	506,347		300,000		806,347
Expense						
	Construction	506,347		300,000		806,347
	Total Expense	506,347		300,000		806,347
					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: **07-180**
 Project Title: **Major Equipment Purchases - PW Stormwater Division**
 Asset Type:
 Division: **Storm Water Capital Projects**
 Project Type: Equipment Budget Year: 2016
 Year Identified: 2014
 Start Date: 3/1/2014 Project Status: Funded
 Est. Completion Date: Region:

Description:

To purchase replacement vehicles and major equipment in the Public Works Stormwater Division.

Justification:

Over 50% of the current fleet have exceeded their service life, resulting in increasing maintenance costs and more equipment down time.

Project Forecast

Year	Total Expense	Total Revenue	Difference
2016	666,000	666,000	0
	666,000	666,000	0

Project Details 2016

Account	Description	Prior Years	2016	2017 - 20	Future Years	Total Amount
Revenue						
	Cash - Stormwater	3,308,000	666,000			3,974,000
Total Revenue		3,308,000	666,000			3,974,000
Expense						
	Equipment	3,308,000	666,000			3,974,000
Total Expense		3,308,000	666,000			3,974,000
Obligated to Date:						1,103,322
						27.76 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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Project Summary

Project Number: **08-150**
 Project Title: **Neighborhood Drainage Improvements II**
 Asset Type:
 Division: **Storm Water Capital Projects**
 Project Type: **Renovation or Rehabilitation** Budget Year: **2016**
 Year Identified: **2012**
 Start Date: **7/1/2012** Project Status: **Funded**
 Est. Completion Date: Region:

Description:

Citywide drainage improvements including acquisition of easements, replacement of pipes, regrading ditches and associated activities to address existing neighborhood drainage deficiencies .

Justification:

Major expenditures are necessary to increase drainage capacity and upgrade deficient drainage systems in existing neighborhoods citywide.

Project Forecast

Year	Total Expense	Total Revenue	Difference
2016	600,000	600,000	0
2017	500,000	500,000	0
2018	570,000	570,000	0
2019	650,000	650,000	0
2020	750,000	750,000	0
	3,070,000	3,070,000	0

Project Details 2016

Account	Description	Prior Years	2016	2017 - 20	Future Years	Total Amount
Revenue						
	Cash - Stormwater	1,224,600	600,000	2,470,000		4,294,600
Total Revenue		1,224,600	600,000	2,470,000		4,294,600
Expense						
	Construction	1,224,600	600,000	2,470,000		4,294,600
Total Expense		1,224,600	600,000	2,470,000		4,294,600

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: **09-150**
 Project Title: **Oakdale Area BMP and Drainage Improvements**
 Asset Type:
 Division: **Storm Water Capital Projects**
 Project Type: Addition or Expansion Budget Year: 2016
 Year Identified: 2014
 Start Date: 1/1/2017 Project Status: Funded
 Est. Completion Date: 12/1/2020 Region:

Description:

The project will include an updated study, construction of stormwater pipes, ditches and lakes/BMPs to provide flood and water quality improvements.

Justification:

This area experiences frequent flooding due to the old and undersized drainage system. A study completed in 1999 recommended several large size drainage facilities to improve the conditions and prevent flooding.

Project Forecast

Year	Total Expense	Total Revenue	Difference
2017	500,000	500,000	0
2018	1,500,000	1,500,000	0
2019	2,000,000	2,000,000	0
2020	1,000,000	1,000,000	0
	5,000,000	5,000,000	0

Project Details 2016

Account	Description	Prior Years	2016	2017 - 20	Future Years	Total Amount
Revenue						
	Cash - Stormwater			5,000,000		5,000,000
Total Revenue				5,000,000		5,000,000
Expense						
	Design & Engineering			200,000		200,000
	Construction			4,500,000		4,500,000
	Land Acquisition			300,000		300,000
Total Expense				5,000,000		5,000,000
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: **77-120**
 Project Title: **Shillelagh Rd. Drainage Outfall Improvement**
 Asset Type:
 Division: **Storm Water Capital Projects**
 Project Type: Addition or Expansion Budget Year: 2016
 Year Identified: 2014
 Start Date: 9/1/2016 Project Status: Funded
 Est. Completion Date: 12/1/2018 Region:

Description:

Improve and widen the main outfall for Shillelagh Road and upgrade the downstream culvert crossing to prevent frequent flooding in the area.

Justification:

The Shillelagh Road/Herring ditch community was identified after the storms of 1999 as one of the drainage areas to study. The study, completed in 1999, recommended widening the outfall ditch and upgrading the downstream culverts.

Project Forecast

Year	Total Expense	Total Revenue	Difference
2016	2,000,000	2,000,000	0
2017	1,100,000	1,100,000	0
	3,100,000	3,100,000	0

Project Details 2016

Account	Description	Prior Years	2016	2017 - 20	Future Years	Total Amount
Revenue						
	Cash - Stormwater		2,000,000	1,100,000		3,100,000
Total Revenue			2,000,000	1,100,000		3,100,000
Expense						
	Design & Engineering		500,000			500,000
	Construction		1,500,000	1,100,000		2,600,000
Total Expense			2,000,000	1,100,000		3,100,000
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: **10-150**
 Project Title: **Stormwater Mapping & Master Drainage Plan III**
 Asset Type:
 Division: **Storm Water Capital Projects**
 Project Type: Study Budget Year: 2016
 Year Identified: 2012 Project Status: Funded
 Start Date: 7/1/2012 Region:
 Est. Completion Date:

Description:

This project continues updating of the Stormwater Inventory Mapping and Master Drainage Plan.

Justification:

The updating of the Stormwater Inventory Mapping and Master Drainage Plan is essential in providing quick, accurate information to City staff, consultants and the general public. The mapping will provide inventory mapping to support emergency responses and GASB 34 accounting.

Project Forecast

Year	Total Expense	Total Revenue	Difference
2016	100,000	100,000	0
2017	200,000	200,000	0
2018	100,000	100,000	0
2019	200,000	200,000	0
2020	200,000	200,000	0
	800,000	800,000	0

Project Details 2016

Account	Description	Prior Years	2016	2017 - 20	Future Years	Total Amount
Revenue						
	Cash - Stormwater	200,000	100,000	700,000		1,000,000
	Total Revenue	200,000	100,000	700,000		1,000,000
Expense						
	Design & Engineering	200,000	100,000	700,000		1,000,000
	Total Expense	200,000	100,000	700,000		1,000,000

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: **11-150**
 Project Title: **Stormwater Quality Program - Phase II**
 Asset Type:
 Division: **Storm Water Capital Projects**
 Project Type: Study Budget Year: 2016
 Year Identified: 2012 Project Status: Funded
 Start Date: 9/1/2012 Region:
 Est. Completion Date:

Description:

This program is to ensure compliance with the Virginia Pollution Discharge Elimination System Permit and to update the City's MS4 (Municipal separate stormwater sewer system) program plan. This project will include the development of PARS system (regional stormwater tracking and reporting system), extensive data collection and inspection of all stormwater management facilities in accordance with the new permit requirements and establishing a monitoring and sampling program to comply with the new TMDL requirements. Also, as part of the permit requirements, the City will be completing stormwater retrofit projects to address stormwater runoff discharge into waterways and creeks.

Justification:

The City and neighboring localities are currently working with Virginia Department of Conservation and Recreation (VDCR) and Environmental Protection Agency (EPA) to finalize the new MS4 permit requirements. Once a permit is issued then the City is required to comply with the new permit and this project is needed to meet permit compliance. Also, Chesapeake and all localities within the Chesapeake Bay watershed are required to comply with an EPA Watershed Implementation Plan (WIP) to address pollutant TMDL (also know as the pollution diet) for the Chesapeake Bay.

Project Forecast

Year	Total Expense	Total Revenue	Difference
2017	2,000,000	2,000,000	0
2018	2,000,000	2,000,000	0
2019	1,500,000	1,500,000	0
2020	2,500,000	2,500,000	0
	8,000,000	8,000,000	0

Project Details 2016

Account	Description	Prior Years	2016	2017 - 20	Future Years	Total Amount
Revenue						
	Cash - Stormwater	340,565		8,000,000		8,340,565
	Total Revenue	340,565		8,000,000		8,340,565
Expense						
	Design & Engineering	340,565		2,000,000		2,340,565
	Construction			6,000,000		6,000,000
	Total Expense	340,565		8,000,000		8,340,565
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: **13-130**
 Project Title: **Sunray Area Outfall Re-Grading**
 Asset Type:
 Division: **Storm Water Capital Projects**
 Project Type: **Renovation or Rehabilitation** Budget Year: **2016**
 Year Identified: **2014**
 Start Date: **3/1/2016** Project Status: **Funded**
 Est. Completion Date: **12/1/2017** Region:

Description:

The project includes the excavation and re-grading along the outfall due to the significant accumulation of sediment and silt which needs to be removed to maintain the hydraulic capacity needed for this major stormwater drainage facility in this watershed.

Justification:

Over the years, significant amounts of silt and sediment have accumulated along the ditch and particularly close to roadway crossings. The project is needed to maintain the hydraulic capacity needed to serve the Sunray Ditch Watershed.

Project Forecast

Year	Total Expense	Total Revenue	Difference
2016	1,200,000	1,200,000	0
	1,200,000	1,200,000	0

Project Details 2016

Account	Description	Prior Years	2016	2017 - 20	Future Years	Total Amount
Revenue						
	Cash - Stormwater		1,200,000			1,200,000
Total Revenue			1,200,000			1,200,000
Expense						
	Design & Engineering		100,000			100,000
	Construction		1,000,000			1,000,000
	Land Acquisition		100,000			100,000
Total Expense			1,200,000			1,200,000
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: **19-200**
 Project Title: **Welch Ln. Drainage Improvements**
 Asset Type:
 Division: **Storm Water Capital Projects**
 Project Type: **Renovation or Rehabilitation** Budget Year: **2016**
 Year Identified: **2016**
 Start Date: Project Status: **Funded**
 Est. Completion Date: Region:

Description:

Neighborhood drainage improvement including the replacement and addition to the existing inadequate stormwater system to improve the level of protection to current stormwater design requirements.

Justification:

This existing stormwater system along Welch Lane is inadequate to handle the amount of runoff. In some cases the system is not in place to provide a conveyance system to carry runoff to the outfall.

Comments:

Many complaints have been received from this area for a number of years for poor drainage and flooding.

Project Forecast

Year	Total Expense	Total Revenue	Difference
2018	480,000	480,000	0
	480,000	480,000	0

Project Details 2016

Account	Description	Prior Years	2016	2017 - 20	Future Years	Total Amount
Revenue						
	Cash - Stormwater			480,000		480,000
	Total Revenue			480,000		480,000
Expense						
	Design & Engineering			50,000		50,000
	Construction			400,000		400,000
	Land Acquisition			30,000		30,000
	Total Expense			480,000		480,000
				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: **20-200**
 Project Title: **Whittamore Rd. Outfall Improvements**
 Asset Type:
 Division: **Storm Water Capital Projects**
 Project Type: **Renovation or Rehabilitation** Budget Year: **2016**
 Year Identified: **2016**
 Start Date: Project Status: **Funded**
 Est. Completion Date: Region:

Description:

Project includes the widening and improving of the outfall cross section to improve the system capacity.

Justification:

The existing stormwater outfall system is inadequate to handle the amount of runoff. This causes flooding of adjacent areas.

Comments:

Many complaints have been received from this area for a number of years for poor drainage and flooding.

Project Forecast

Year	Total Expense	Total Revenue	Difference
2017	300,000	300,000	0
	300,000	300,000	0

Project Details 2016

Account	Description	Prior Years	2016	2017 - 20	Future Years	Total Amount
Revenue						
	Cash - Stormwater			300,000		300,000
Total Revenue				300,000		300,000
Expense						
	Design & Engineering			30,000		30,000
	Construction			250,000		250,000
	Land Acquisition			20,000		20,000
Total Expense				300,000		300,000
Obligated to Date:						0
						0.00 %

Related Projects

Operating Budget Impact

Budget Year	Exp (Rev)	FTE Impact
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