

# Stormwater Management (SWM) Program Overview

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## **Description:**

The projects in the Stormwater Management (SWM) Program Area provide for the planning, study, design and construction of stormwater management facilities, stream restoration projects and storm drain conveyance projects. These projects support the Federal Clean Water Act and the goals of the NPDES (National Pollutant Discharge Elimination System) program by restoring, protecting, and maintaining the physical, chemical, and biological integrity of the nation's waters, including the restoration and recovery of Rockville's streams, the Potomac River and the Chesapeake Bay. The City of Rockville holds a NPDES general permit for ongoing stormwater runoff discharges from the City's storm drain network into the Rock Creek, Cabin John Creek, and Watts Branch watersheds. This permit requires the City to undertake a variety of measures to ensure that polluted water is kept out of the storm drains. Among other requirements, Rockville's current permit commits Rockville to inspecting and ensuring upgrades to both private and public stormwater facilities. Projects in this program are funded through the Stormwater Management Fund.

## **Goals:**

- To enhance the environment and provide a sense of community that is responsive to the diverse cultural, social, and physical needs of Rockville residents as well as maintain Rockville's image of being a pleasant and desirable City in which to live, work, and play.
- To enhance Rockville's streams by improving stream water quality and reducing stream bank erosion.
- To include community involvement as an integral part of the Department of Public Works' SWM implementation, beginning in the watershed management planning stage and continuing throughout the project design stage.
- To ensure SWM facilities are designed to preserve our streams and minimize the adverse effects of development on local and state ecosystems and waterways.
- To find opportunities to provide SWM to areas of the City developed without modern SWM.

## **Objectives:**

- Plan, design, and construct SWM facilities and stream restoration projects based on adopted watershed studies with community involvement which will improve the aquatic habitat, reduce stream bank erosion, and improve the quality of water in Rockville's streams and the Chesapeake Bay.
- Plan, design, and construct storm sewer extensions and rehabilitation projects based on the preventative maintenance program which will reduce neighborhood flooding and ensure structural integrity of existing underground piping infrastructure.

## FY 2011 - 2015 SWM Appropriation and Funding Schedules

Appropriation Schedule	Prior Approps	New Approps	Future Appropriation Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
College Gardens Park SWM Pond	1,288,500	-	-	-	-	-	-	1,288,500
Glenora SWM Pond	-	-	292,000	-	1,079,000	-	-	1,371,000
Glenora Tributary — Middle	100,000	-	590,000	-	-	-	-	690,000
Horizon Hill SWM Ponds	230,000	-	850,000	-	-	-	-	1,080,000
Lakewood SWM Pond	273,000	-	-	-	-	-	-	273,000
Storm Drain Improvements	-	550,000	-	-	-	-	-	550,000
Storm Sewer Rehabilitation	1,275,100	-	180,000	180,000	180,000	180,000	-	1,995,100
Watts Branch — Upper Stream	-	330,000	-	1,810,000	-	-	-	2,140,000
Welsh Park SWM Pond	-	-	-	-	-	-	670,000	670,000
Woodley Gardens — Stream	1,311,840	-	-	-	-	-	-	1,311,840
Woottons Mill Park — Lower	-	-	140,000	-	850,000	-	-	990,000
<b>Total</b>	<b>4,478,440</b>	<b>880,000</b>	<b>2,052,000</b>	<b>1,990,000</b>	<b>2,109,000</b>	<b>180,000</b>	<b>670,000</b>	<b>12,359,440</b>

Funding Schedule	Prior Funding	New Funding	Future Funding Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Capital Projects	276,500	-	-	-	-	-	-	276,500
Bond Proceeds (Capital)	226,000	-	-	-	-	-	-	226,000
State Grant (Capital)	267,600	-	-	-	-	-	-	267,600
<b>Capital Projects Fund Total</b>	<b>770,100</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>770,100</b>

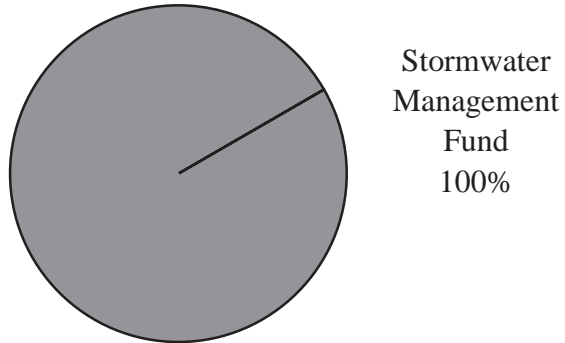
Stormwater Management Fund	2,253,070	880,000	2,052,000	1,990,000	2,109,000	180,000	670,000	10,134,070
Federal Grant (SWM)	33,740	-	-	-	-	-	-	33,740
State Grant (SWM)	423,430	-	-	-	-	-	-	423,430
State Loan (SWM)	998,100	-	-	-	-	-	-	998,100
<b>Stormwater Mgmt Fund Total</b>	<b>3,708,340</b>	<b>880,000</b>	<b>2,052,000</b>	<b>1,990,000</b>	<b>2,109,000</b>	<b>180,000</b>	<b>670,000</b>	<b>11,589,340</b>

<b>Total</b>	<b>4,478,440</b>	<b>880,000</b>	<b>2,052,000</b>	<b>1,990,000</b>	<b>2,109,000</b>	<b>180,000</b>	<b>670,000</b>	<b>12,359,440</b>
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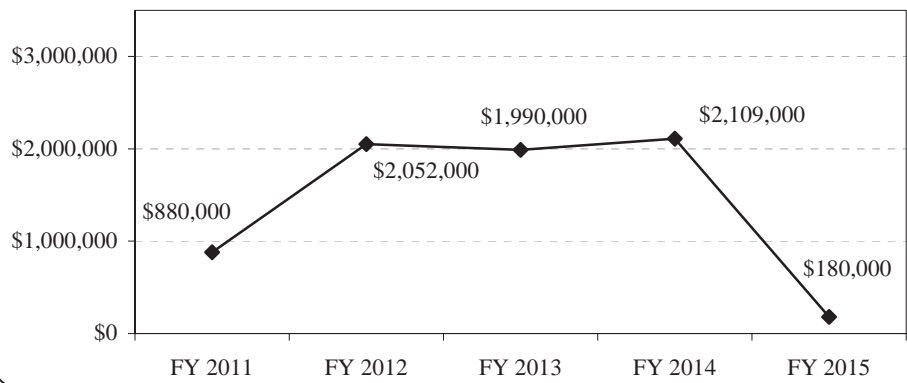
# FY 2011 - 2015 Stormwater Management Funding Schedule

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**FY 2011 New Funding of \$880,000**



**FY 2011 - FY 2015 New Funding Schedule**



## FY 2011 Stormwater Management Appropriation Summary

Total FY 2011 Appropriations	Capital Projects	Water	Sewer	SWM	Refuse	Golf	Speed	Current Total
Prior Year Appropriations	770,100	-	-	3,708,340	-	-	-	4,478,440
Less Expended as of 04/01/10	(732,498)	-	-	(2,213,779)	-	-	-	(2,946,277)
Prior Year Funds Carried Over	37,602	-	-	1,494,561	-	-	-	1,532,163
Add New Appropriations	-	-	-	880,000	-	-	-	880,000
<b>Total</b>	<b>37,602</b>	<b>-</b>	<b>-</b>	<b>2,374,561</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,412,163</b>

FY 2011 Appropriations by Project	Capital Projects	Water	Sewer	SWM	Refuse	Golf	Speed	Current Total
College Gardens Park SWM Pond	-	-	-	188,376	-	-	-	188,376
Glenora SWM Pond	-	-	-	-	-	-	-	-
Glenora Tributary — Middle	-	-	-	100,000	-	-	-	100,000
Horizon Hill SWM Ponds	-	-	-	186,312	-	-	-	186,312
Lakewood SWM Pond	-	-	-	80,087	-	-	-	80,087
Storm Drain Improvements	-	-	-	550,000	-	-	-	550,000
Storm Sewer Rehabilitation	37,602	-	-	74,960	-	-	-	112,562
Watts Branch — Upper Stream	-	-	-	330,000	-	-	-	330,000
Welsh Park SWM Pond	-	-	-	-	-	-	-	-
Woodley Gardens — Stream	-	-	-	864,826	-	-	-	864,826
Woottons Mill Park — Lower	-	-	-	-	-	-	-	-
<b>Total</b>	<b>37,602</b>	<b>-</b>	<b>-</b>	<b>2,374,561</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,412,163</b>

## FY 2011 - 2015 Stormwater Management Program Area Summary

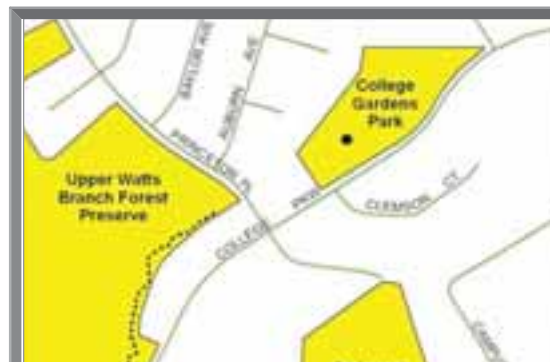
### OPERATING COST IMPACT

Stormwater Management Fund	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs
College Gardens Park SWM Pond	3,000	9,800	-	-	-	-
Glenora SWM Pond	-	-	-	-	2,000	18,400
Glenora Tributary — Middle	-	-	-	13,100	-	-
Horizon Hill SWM Ponds	-	-	5,000	31,000	-	-
Lakewood SWM Pond	500	-	-	-	-	-
Storm Drain Improvements	-	1,000	-	-	-	-
Watts Branch — Upper Stream	-	-	-	-	27,400	-
Welsh Park SWM Pond	-	-	-	-	-	13,400
Woodley Gardens — Stream	-	40,700	-	-	-	-
Woottons Mill Park — Lower	-	-	-	-	-	16,200
<b>Total</b>	<b>3,500</b>	<b>51,500</b>	<b>5,000</b>	<b>44,100</b>	<b>29,400</b>	<b>48,000</b>

### UNFUNDED SCHEDULE

Stormwater Management Fund	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs
Horizon Hill SWM Ponds	-	115,000	-	-	-	-
<b>Total</b>	<b>-</b>	<b>115,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**Project Name:** College Gardens Park SWM Pond  
**Project Number:** 330-850-2B59  
**Program Area:** Stormwater Management



**Prior Appropriations:** 1,288,500  
 Add New Appropriations: -  
 Add Future Appropriations: -  
**Current Project Total:** 1,288,500  
 Add Unfunded: -  
**Current Project Total with Unfunded:** 1,288,500

**Status of Prior Year Appropriations as of 04/01/10:**

**Prior Year Appropriations:** 1,288,500  
 Less Expended: 1,100,124  
**Prior Year Funds Carried Over:** 188,376  
 Add New Appropriations: -  
**Total FY 2011 Appropriations:** 188,376

**Percent Expended:** 85%

**Project Snapshot**

Original Project Total w/Unfunded: 278,000  
 Current Project Total w/Unfunded: 1,288,500  
 Percent Change: 363%  
 Percent Completed: 99%  
 Est. Completion Year: FY 2011

**Description:** This CIP project funds two watershed assessment and improvement efforts: the 2006 Low Impact Development (LID) Stormwater Management (SWM) Approaches to College Gardens, and a concept design study for College Gardens Park/Pond which were outcomes of the 2001 Watts Branch Watershed Study. This project currently provides final engineering design and construction of a SWM pond retrofit in College Gardens Park. The existing farm pond will be expanded and improved to provide full water quantity control and partial water quality treatment for the 78 acre drainage area. This project also includes design, construction, and post-construction stream monitoring of about 500 linear feet of stream restoration below Princeton Place to complement the SWM retrofit. Final design and construction of concurrent park rehabilitation was provided through a separate project in the Recreation and Parks CIP. City staff has teamed with community stakeholders to finalize design details.

Appropriation Schedule	Prior Approps	New Approps	Future Appropriation Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Plan/Design/Insp	235,500	-	-	-	-	-	-	235,500
Construction	1,053,000	-	-	-	-	-	-	1,053,000
<b>Total</b>	<b>1,288,500</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,288,500</b>

Funding Schedule	Prior Funding	New Funding	Future Funding Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Stormwater Mgmt Fund	865,070	-	-	-	-	-	-	865,070
State Grant (SWM)	423,430	-	-	-	-	-	-	423,430
<b>Total</b>	<b>1,288,500</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,288,500</b>

Unfunded Schedule	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	Total
Unfunded	-	-	-	-	-	-	-

Operating Cost Impact	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs
Stormwater Mgmt Fund	3,000	9,800	-	-	-	-

**Explanation of impact:** Completion of this project added \$3,000 to fund contracted pond maintenance and lawn mowing in FY 2011 and will add \$9,800 for the continued management of non-native invasive species plants to the FY 2012 operating budget.

**Schedule:** Prior year work to be completed — Process grant close-out and receive final reimbursement.

**Status:** Close-out. This project, formally called College Gardens Park — SWM, first appeared in the FY 2002 CIP.

**Coordination:** College Gardens Task Force; Neighborhood Civic Associations and Adjacent Landowners; Development Review Committee; Maryland Department of Environment, Army Corps of Engineers and Natural Resources Conservation Service; Montgomery County Public Schools (MCPS); Recreation and Parks Department.

**Staff contact:** Department of Public Works. Lise Soukup, Civil Engineer III, 240-314-8500.

**Project Name:** Glenora SWM Pond  
**Project Number:** 330-850-9B59  
**Program Area:** Stormwater Management



**Project Snapshot**

Original Project Total w/Unfunded: N/A  
 Current Project Total w/Unfunded: 1,371,000  
 Percent Change: N/A  
 Percent Completed: 0%  
 Est. Completion Year: FY 2015

<b>Prior Appropriations:</b>	-
Add New Appropriations:	-
Add Future Appropriations:	1,371,000
<b>Current Project Total:</b>	1,371,000
Add Unfunded:	-
<b>Current Project Total with Unfunded:</b>	1,371,000

**Status of Prior Year Appropriations as of 04/01/10:**

<b>Prior Year Appropriations:</b>	-
Less Expended:	-
<b>Prior Year Funds Carried Over:</b>	-
Add New Appropriations:	-
<b>Total FY 2011 Appropriations:</b>	-
<b>Percent Expended:</b>	0%

**Description:** This project funds the concept development, design and construction of a new stormwater management (SWM) pond in Glenora Park and ancillary stream improvements below the new pond. This SWM project, recommended in the 2001 Watts Branch Watershed Study, will provide full water quantity control and partial water quality treatment for the 115-acre drainage area and will stabilize the stream below the pond. Stream improvements for lower Glenora Tributary adjacent to Bouldercrest Ct. are provided in a separate CIP project. Staff will work closely with the community and the Recreation and Parks Department in the concept development and design phases to reduce the impact on the forest, wetland, and recreation areas, as well as evaluate the need for park upgrades beyond the scope of the SWM project. Implementing this project supports Rockville's contribution to Maryland's Chesapeake Bay 2000 Agreement, and compliance with National Pollutant Discharge Elimination System (NPDES).

Appropriation Schedule	Prior Approps	New Approps	Future Appropriation Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Plan/Design/Insp	-	-	292,000	-	-	-	-	292,000
Construction	-	-	-	-	1,079,000	-	-	1,079,000
<b>Total</b>	-	-	292,000	-	1,079,000	-	-	1,371,000

Funding Schedule	Prior Funding	New Funding	Future Funding Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Stormwater Mgmt Fund	-	-	292,000	-	1,079,000	-	-	1,371,000
<b>Total</b>	-	-	292,000	-	1,079,000	-	-	1,371,000

Unfunded Schedule	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	Total
Unfunded	-	-	-	-	-	-	-

Operating Cost Impact	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs
Stormwater Mgmt Fund	-	-	-	-	2,000	18,400

**Explanation of impact:** The completion of this project will add \$2,000 to the FY 2015 operating budget to fund pond maintenance and lawn mowing costs, and \$18,400 to the Future Years operating budget for the management of non-native invasive species plants and post construction and continuing stream monitoring.

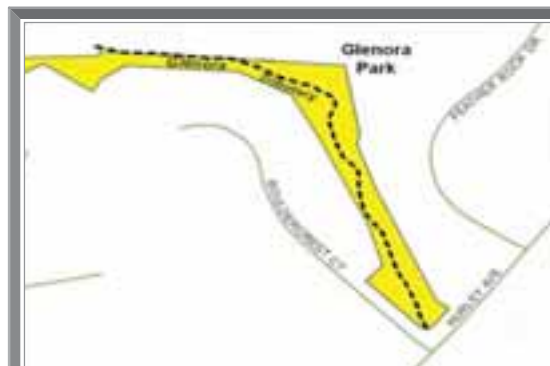
**Schedule:** FY 2012 — Concept development and design. FY 2014 — Construction.

**Status:** Concept. This project first appeared in the FY 2009 CIP. This project is scheduled to begin conceptual development in FY 2012. *Funding Note:* Park upgrades that are beyond the scope of this SWM project will be explored with the community during the concept development phase. If recommended, Capital Projects funding will be requested for FY 2013 for design and FY 2014 for construction.

**Coordination:** Neighborhood Civic Associations and Adjacent Landowners; Maryland Department of the Environment, Army Corps of Engineers and Natural Resources Conservation Service; Neighborhood Resource Team; Recreation and Parks Department; Glenora Tributary — Middle project (330-850-9C59).

**Staff contact:** Department of Public Works. Mary Fertig, Civil Engineer II, 240-314-8500.

**Project Name:** Glenora Tributary — Middle  
**Project Number:** 330-850-9C59  
**Program Area:** Stormwater Management



**Prior Appropriations:** 100,000  
 Add New Appropriations: -  
 Add Future Appropriations: 590,000  
**Current Project Total:** 690,000  
 Add Unfunded: -  
**Current Project Total with Unfunded:** 690,000

**Status of Prior Year Appropriations as of 04/01/10:**

**Prior Year Appropriations:** 100,000  
 Less Expended: -  
**Prior Year Funds Carried Over:** 100,000  
 Add New Appropriations: -  
**Total FY 2011 Appropriations:** 100,000  
**Percent Expended:** 0%

**Project Snapshot**

Original Project Total w/Unfunded: 690,000  
 Current Project Total w/Unfunded: 690,000  
 Percent Change: 0%  
 Percent Completed: 0%  
 Est. Completion Year: FY 2013

**Description:** This project funds repairs to specific stream valley erosion problems identified in the 2001 Watts Branch Watershed Study. This project will address approximately 1,100 linear feet of stream restoration between Hurley Avenue and the northern end of Bouldercrest Court. This project was initially included with the Glenora SWM Pond project but was separated to address the immediate erosion concern that is threatening private property. Staff will work closely with the community and the Department of Recreation and Parks staff in the concept-refinement phase to reduce the impact on the forest, wetlands, and recreational areas. Implementing this project supports Rockville's contribution to Maryland's Chesapeake Bay 2000 Agreement, and compliance with National Pollutant Discharge Elimination System (NPDES).

Appropriation Schedule	Prior Approps	New Approps	Future Appropriation Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Plan/Design/Insp	100,000	-	-	-	-	-	-	100,000
Construction	-	-	590,000	-	-	-	-	590,000
<b>Total</b>	<b>100,000</b>	<b>-</b>	<b>590,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>690,000</b>

Funding Schedule	Prior Funding	New Funding	Future Funding Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Stormwater Mgmt Fund	100,000	-	590,000	-	-	-	-	690,000
<b>Total</b>	<b>100,000</b>	<b>-</b>	<b>590,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>690,000</b>

Unfunded Schedule	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	Total
Unfunded	-	-	-	-	-	-	-

Operating Cost Impact	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs
Stormwater Mgmt Fund	-	-	-	13,100	-	-

**Explanation of impact:** The completion of this project will add \$13,100 to the FY 2014 operating budget for the management of non-native invasive species plants and monitoring required by regulatory agencies.

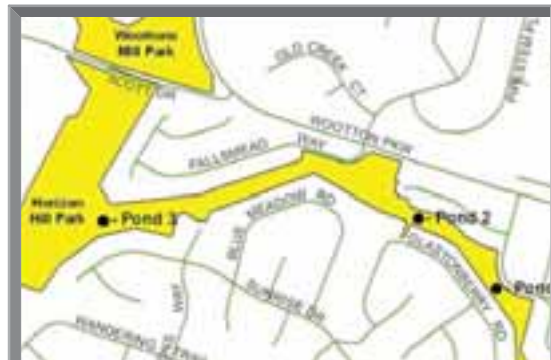
**Schedule:** Prior year work to be completed — Design. FY 2012 — Construction.

**Status:** Design. This project was created mid-year in FY 2009.

**Coordination:** Neighborhood Civic Associations; Adjacent Landowners; Army Corps of Engineers; Maryland Department of the Environment; Maryland Department of Natural Resources; Neighborhood Resource Team; Glenora Park SWM project (330-850-9B59); Sewer Rehabilitation project (220-850-9G34) in Utilities Program Area.

**Staff contact:** Department of Public Works. John Scabis, Civil Engineer II, 240-314-8500.

**Project Name:** Horizon Hill SWM Ponds  
**Project Number:** 330-850-2C59  
**Program Area:** Stormwater Management

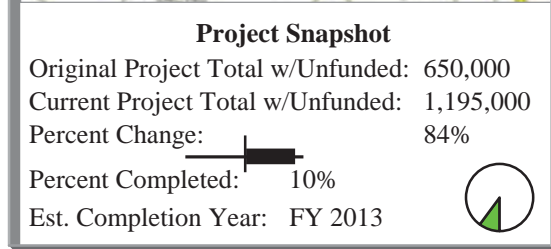


**Prior Appropriations:** 230,000  
 Add New Appropriations: -  
 Add Future Appropriations: 850,000  
**Current Project Total:** 1,080,000  
 Add Unfunded: 115,000  
**Current Project Total with Unfunded:** 1,195,000

**Status of Prior Year Appropriations as of 04/01/10:**

**Prior Year Appropriations:** 230,000  
 Less Expended: 43,688  
**Prior Year Funds Carried Over:** 186,312  
 Add New Appropriations: -  
**Total FY 2011 Appropriations:** 186,312

**Percent Expended:** 4%



**Description:** This project funds the concept development, design and construction to the Horizon Hill Park stream valley, including modifications to three existing SWM dry ponds. During the concept development phase staff will work with the community to identify options which will improve specific watershed, park, and forestry goals, as well as evaluate the need for park upgrades beyond the scope of the SWM project. This project, which was recommended in the *2001 Watts Branch Watershed Study*, will restore and protect the stream valley buffer, enhance water quality, increase groundwater recharge, comply with the National Pollutant Discharge Elimination System (NPDES) requirements, and contribute to the Chesapeake Bay 2000 Agreement. The project will also provide reforestation/afforestation where appropriate. Park and recreation enhancements may be included in the project to ensure the community's needs are being met and funding is available. Community outreach will be an integral part of this project.

Appropriation Schedule	Prior Approps	New Approps	Future Appropriation Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Plan/Design/Insp	230,000	-	-	-	-	-	-	230,000
Construction	-	-	850,000	-	-	-	-	850,000
<b>Total</b>	<b>230,000</b>	<b>-</b>	<b>850,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,080,000</b>

Funding Schedule	Prior Funding	New Funding	Future Funding Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Stormwater Mgmt Fund	230,000	-	850,000	-	-	-	-	1,080,000
<b>Total</b>	<b>230,000</b>	<b>-</b>	<b>850,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,080,000</b>

Unfunded Schedule	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	Total
Unfunded	-	115,000	-	-	-	-	115,000

Operating Cost Impact	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs
Stormwater Mgmt Fund	-	-	5,000	31,000	-	-

**Explanation of impact:** The completion of this project will add \$5,000 to the operating budget in FY 2013 to fund pond maintenance and lawn mowing; and \$31,000 to the operating budget in FY 2014 for post construction and continuing stream monitoring and continued management of non-native invasive species plants.

**Schedule:** Prior year work to be completed — Design. FY 2012 — Construct SWM facilities.

**Status:** Design. This project first appeared in the FY 2002 CIP. *Funding Note:* Park upgrades that are beyond the scope of this SWM project will be explored with the community. If recommended, Capital Projects funding will be requested for FY 2012 for design and construction, which is currently unfunded in FY 2012.

**Coordination:** Neighborhood Civic Associations and Adjacent Landowners; Maryland Department of the Environment, Army Corps of Engineers and Natural Resource Conservation Service; Neighborhood Resource Team; Development Review Committee; Department of Recreation and Parks.

**Staff contact:** Department of Public Works. Mary Fertig, Civil Engineer II, 240-314-8500.

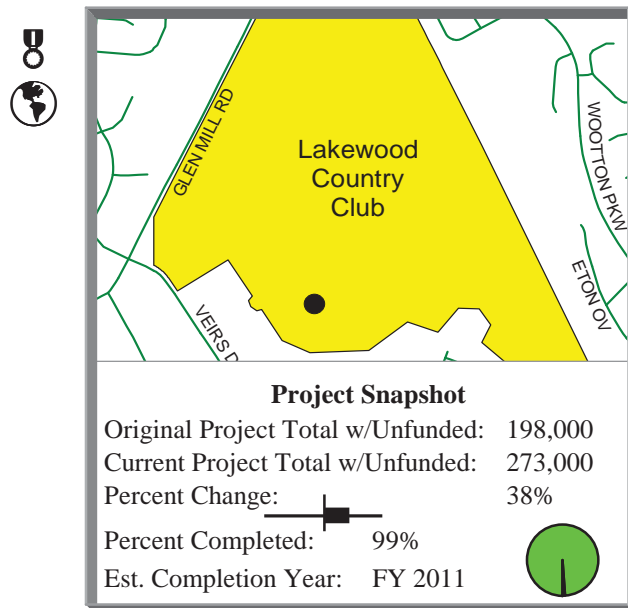
**Project Name:** Lakewood SWM Pond  
**Project Number:** 330-850-5A59  
**Program Area:** Stormwater Management

**Prior Appropriations:** 273,000  
 Add New Appropriations: -  
 Add Future Appropriations: -  
**Current Project Total:** 273,000  
 Add Unfunded: -  
**Current Project Total with Unfunded:** 273,000

**Status of Prior Year Appropriations as of 04/01/10:**

**Prior Year Appropriations:** 273,000  
 Less Expended: 192,913  
**Prior Year Funds Carried Over:** 80,087  
 Add New Appropriations: -  
**Total FY 2011 Appropriations:** 80,087

**Percent Expended:** 71%



**Description:** This project funds the retrofit of an existing public stormwater management (SWM) pond on the Lakewood Country Club Golf Course in the lower Watts Branch Watershed. The retrofit includes modernizing the pond to provide full channel protection storage (one-year, 24-hour extended detention) and full water quality storage for the 46-acre drainage area. This SWM improvement was recommended in the 2001 Watts Branch Watershed Study. In addition, implementing this watershed improvement project supports Rockville's contribution to Maryland's Chesapeake Bay 2000 Agreement, as well as supports mandatory compliance with National Pollutant Discharge Elimination System (NPDES) and Total Maximum Daily Load (TMDL) requirements. Staff will work closely with the Lakewood Country Club through construction to minimize golf course disruption and the impacts on trees. Funding for design and permitting (not shown on this sheet) was provided by a private developer, the National Lutheran Home, as part of a development project.

Appropriation Schedule	Prior Approps	New Approps	Future Appropriation Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Construction	273,000	-	-	-	-	-	-	273,000
Total	273,000	-	-	-	-	-	-	273,000

Funding Schedule	Prior Funding	New Funding	Future Funding Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Stormwater Mgmt Fund	273,000	-	-	-	-	-	-	273,000
Total	273,000	-	-	-	-	-	-	273,000

Unfunded Schedule	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	Total
Unfunded	-	-	-	-	-	-	-

Operating Cost Impact	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs
Stormwater Mgmt Fund	500	-	-	-	-	-

**Explanation of impact:** The completion of this project added \$500 to the FY 2011 operating budget to fund contracted pond maintenance.

**Schedule:** Prior year work to be completed — Complete the final "punchlist" of remaining construction items and process final payments to contractors.

**Status:** Close-out. This project first appeared in the FY 2005 CIP.

**Coordination:** Lakewood Country Club and National Lutheran Home; Maryland Department of the Environment; Army Corps of Engineers and Natural Resource Conservation Service; Development Review Committee; Recreation and Parks Department.

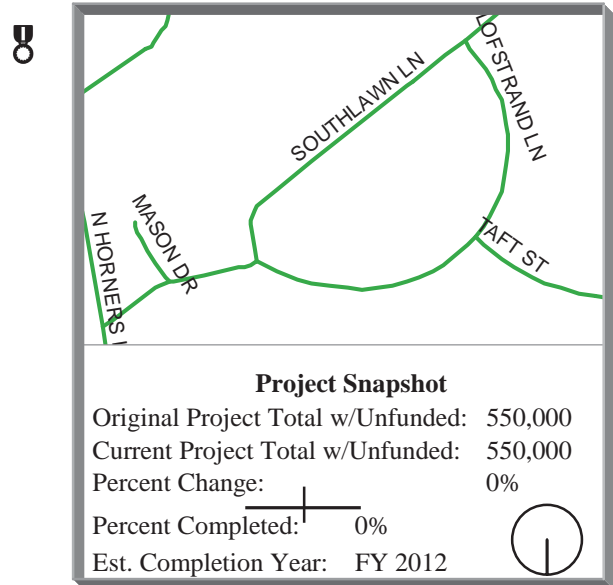
**Staff contact:** Department of Public Works. Dan Kane, Civil Engineer II, 240-314-8500.

**Project Name:** Storm Drain Improvements  
**Project Number:** 330-850-0A59  
**Program Area:** Stormwater Management

**Prior Appropriations:** -  
 Add New Appropriations: 550,000  
 Add Future Appropriations: -  
**Current Project Total:** 550,000  
 Add Unfunded: -  
**Current Project Total with Unfunded:** 550,000

**Status of Prior Year Appropriations as of 04/01/10:**

**Prior Year Appropriations:** -  
 Less Expended: -  
**Prior Year Funds Carried Over:** -  
 Add New Appropriations: 550,000  
**Total FY 2011 Appropriations:** 550,000  
**Percent Expended:** 0%



**Description:** This project funds the design and construction of storm drain pipes required to convey public stormwater runoff to eliminate localized flooding in the public right-of-way and adjacent private properties. Projects will include extending storm drains, upgrading existing undersized systems to increase conveyance capacity, and installing pipes to collect sump pump discharges from residential properties. Two areas along Southlawn Lane (near its intersections with both ends of Lofstrand Lane) currently experience periodic flooding due to flat topography and inadequate drainage systems. Improvements will consist of additional inlets and storm drains to convey runoff. Other upgrades will be identified and implemented in the future.

Appropriation Schedule	Prior Approps	New Approps	Future Appropriation Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Plan/Design/Insp	-	55,000	-	-	-	-	-	55,000
Construction	-	495,000	-	-	-	-	-	495,000
<b>Total</b>	-	<b>550,000</b>	-	-	-	-	-	<b>550,000</b>

Funding Schedule	Prior Funding	New Funding	Future Funding Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Stormwater Mgmt Fund	-	550,000	-	-	-	-	-	550,000
<b>Total</b>	-	<b>550,000</b>	-	-	-	-	-	<b>550,000</b>

Unfunded Schedule	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	Total
Unfunded	-	-	-	-	-	-	-

Operating Cost Impact	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs
Stormwater Mgmt	-	1,000	-	-	-	-

**Explanation of impact:** The completion of this project will add \$1,000 to the FY 2012 operating budget to fund storm drain pipe and structure cleaning and contracted maintenance.

**Schedule:** FY 2011 — Design and construct Southlawn Lane drainage improvements at its intersections with both ends of Lofstrand Lane. Improvements along Southlawn Lane were moved forward to coordinate with water system improvements in the project area.

**Status:** Implementation. This was a new project for the FY 2010 CIP that replaced the Drainage Improvements (330/420-850-7A31) project.

**Coordination:** Neighborhood Civic Associations and Adjacent Landowners; Army Corps of Engineers; Maryland Department of the Environment; Southlawn Lane project (380-850-6A11) in the Transportation Program Area; and Southlawn Lane Water Main project (210-850-3E45) in the Utilities Program Area.

**Staff contact:** Department of Public Works. Dan Kane, Civil Engineer II, 240-314-8500.

**Project Name:** Storm Sewer Rehabilitation  
**Project Number:** 330/420-850-8A41  
**Program Area:** Stormwater Management

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**Prior Appropriations:** 1,275,100  
 Add New Appropriations: -  
 Add Future Appropriations: 720,000  
**Current Project Total:** 1,995,100  
 Add Unfunded: -  
**Current Project Total with Unfunded:** 1,995,100

**Status of Prior Year Appropriations as of 04/01/10:**

**Prior Year Appropriations:** 1,275,100  
 Less Expended: 1,162,538  
**Prior Year Funds Carried Over:** 112,562  
 Add New Appropriations: -  
**Total FY 2011 Appropriations:** 112,562  
**Percent Expended:** 58%

**Project Snapshot**

Original Project Total w/Unfunded: N/A  
 Current Project Total w/Unfunded: 1,995,100  
 Percent Change: N/A  
 Percent Completed: N/A  
 Est. Completion Year: On-going

**Description:** This project funds rehabilitation of storm sewers. Phase 1, completed in 2009, included assessment and rehabilitation of large diameter (48 inches or greater) corrugated metal pipe (CMP) storm sewers. CMP was used in the late 1960s as a means to install new drainage systems economically. Most of the systems have exceeded their design life, and need repeated maintenance, generally due to rust. Phase 1 pipes were rehabilitated by lining the inverts with concrete. The next phase will assess the remainder of the storm sewer system, including small diameter CMP and all other storm sewers, regardless of the pipe material. Public Works maintenance staff will inspect and assess the condition of the pipes through the storm sewer preventative maintenance program; recommended improvements will be funded by this project.

Appropriation Schedule	Prior Approps	New Approps	Future Appropriation Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Plan/Design/Insp	105,000	-	30,000	30,000	30,000	30,000	-	225,000
Construction	1,170,100	-	150,000	150,000	150,000	150,000	-	1,770,100
<b>Total</b>	<b>1,275,100</b>	<b>-</b>	<b>180,000</b>	<b>180,000</b>	<b>180,000</b>	<b>180,000</b>	<b>-</b>	<b>1,995,100</b>

Funding Schedule	Prior Funding	New Funding	Future Funding Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Capital Projects	276,500	-	-	-	-	-	-	276,500
Bond Proceeds (Capital)	226,000	-	-	-	-	-	-	226,000
State Grant (Capital)	267,600	-	-	-	-	-	-	267,600
Stormwater Mgmt Fund	505,000	-	180,000	180,000	180,000	180,000	-	1,225,000
<b>Total</b>	<b>1,275,100</b>	<b>-</b>	<b>180,000</b>	<b>180,000</b>	<b>180,000</b>	<b>180,000</b>	<b>-</b>	<b>1,995,100</b>

Unfunded Schedule	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	Total
Unfunded	-	-	-	-	-	-	-

Operating Cost Impact	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs
General Fund	-	-	-	-	-	-

**Explanation of impact:** The completion of this project will have no measurable impact on the operating budget.

**Schedule:** Prior year work to be completed — Repair storm sewers identified from storm sewer preventative maintenance program. FY 2012 through FY 2015 — Continue to repair storm sewers identified from the storm sewer preventative maintenance program.

**Status:** Implementation. This project first appeared in the FY 1998 CIP. Completed projects: Congressional Tower CMP Rehabilitation; Phase 1- Large Diameter CMP Lining. *Funding Note:* Grant funding was used on the Congressional Towers CMP Rehabilitation project.

**Coordination:** Neighborhood Civic Associations and Adjacent Landowners; Neighborhood Resource Team.

**Staff contact:** Department of Public Works. Dan Kane, Civil Engineer II, 240-314-8500.

**Project Name:** Watts Branch — Upper Stream  
**Project Number:** 330-850-2E59  
**Program Area:** Stormwater Management



**Prior Appropriations:** -  
 Add New Appropriations: 330,000  
 Add Future Appropriations: 1,810,000  
**Current Project Total:** 2,140,000  
 Add Unfunded: -  
**Current Project Total with Unfunded:** 2,140,000

**Status of Prior Year Appropriations as of 04/01/10:**

**Prior Year Appropriations:** -  
 Less Expended: -  
**Prior Year Funds Carried Over:** -  
 Add New Appropriations: 330,000  
**Total FY 2011 Appropriations:** 330,000  
**Percent Expended:** 0%

**Project Snapshot**  
 Original Project Total w/Unfunded: 2,140,000  
 Current Project Total w/Unfunded: 2,140,000  
 Percent Change: 0%  
 Percent Completed: 0%  
 Est. Completion Year: FY 2014

**Description:** This project funds repairs to specific stream valley erosion problems identified in the 2001 Watts Branch Watershed Study. The work area is between Nelson Street and Gude Drive along the main stem of Watts Branch. This project will address approximately 3,200 linear feet of stream and two eroded storm drain outfalls on the west side of Watts Branch near Azalea Drive and Aster Boulevard. Additional investigation will be completed to evaluate Native American artifacts within the project limits. Staff will work closely with the community in the concept-refinement phase to evaluate project goals and construction access to minimize the impacts on the forest, and active and passive recreational areas. In addition, implementing this watershed improvement project supports Rockville's contribution to Maryland's Chesapeake Bay 2000 Agreement, as well as supports mandatory compliance with National Pollutant Discharge Elimination System (NPDES) and potential Total Maximum Daily Load (TMDL) requirements.

Appropriation Schedule	Prior Approps	New Approps	Future Appropriation Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Plan/Design/Insp	-	330,000	-	-	-	-	-	330,000
Construction	-	-	-	1,810,000	-	-	-	1,810,000
<b>Total</b>	-	330,000	-	1,810,000	-	-	-	2,140,000

Funding Schedule	Prior Funding	New Funding	Future Funding Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Stormwater Mgmt Fund	-	330,000	-	1,810,000	-	-	-	2,140,000
<b>Total</b>	-	330,000	-	1,810,000	-	-	-	2,140,000

Unfunded Schedule	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	Total
Unfunded	-	-	-	-	-	-	-

Operating Cost Impact	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs
Stormwater Mgmt Fund	-	-	-	-	27,400	-

**Explanation of impact:** The completion of this project will add \$27,400 to the FY 2015 operating budget for the continued management of non-native invasive species plants and monitoring required by regulatory agencies.

**Schedule:** FY 2011 — Design. FY 2013 — Construction.

**Status:** Design. This project first appeared in the FY 2002 CIP.

**Coordination:** Neighborhood Civic Associations; Adjacent Landowners; Neighborhood Resource Team; Department of Recreation and Parks; Historic Preservation; Army Corps of Engineers; Maryland Department of the Environment; Maryland Department of Natural Resources; Washington Suburban Sanitary Commission; Sewer Rehabilitation project (220-850-9G34) in Utilities Program Area.

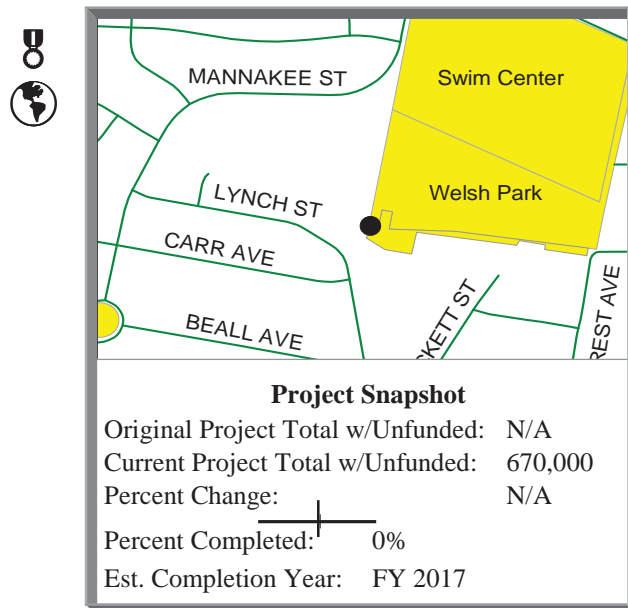
**Staff contact:** Department of Public Works. John Scabis, Civil Engineer II, 240-314-8500.

**Project Name:** Welsh Park SWM Pond  
**Project Number:** 330-850-2F59  
**Program Area:** Stormwater Management

**Prior Appropriations:** -  
 Add New Appropriations: -  
 Add Future Appropriations: 670,000  
**Current Project Total:** 670,000  
 Add Unfunded: -  
**Current Project Total with Unfunded:** 670,000

**Status of Prior Year Appropriations as of 04/01/10:**

**Prior Year Appropriations:** -  
 Less Expended: -  
**Prior Year Funds Carried Over:** -  
 Add New Appropriations: -  
**Total FY 2011 Appropriations:** -  
**Percent Expended:** 0%



**Description:** This project funds concept development and design for a new Stormwater Management (SWM) pond upstream of the pedestrian bridge at the lower end of Welsh Park near Lynch Street. A SWM pond was recommended in the 2001 *Watts Branch Watershed Study* for the 53-acre drainage area. The goals for this SWM pond will be explored through the concept development stage, which will be funded in the operating budget in FY 2013. The goals could range from full channel protection storage with partial water quality to flood control for the 10-year storm to address capacity issues in the Lynch Street storm drain. Staff will work closely with the community in the concept development and design phases to reduce the potential impact on the forest, wetlands, and recreational areas. Implementing this project supports Rockville's contribution to Maryland's Chesapeake Bay 2000 Agreement, and compliance with National Pollutant Discharge Elimination System (NPDES) and potential Total Maximum Daily Load (TMDL) requirements.

Appropriation Schedule	Prior Approps	New Approps	Future Appropriation Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Plan/Design/Insp	-	-	-	-	-	-	156,000	156,000
Construction	-	-	-	-	-	-	514,000	514,000
Total	-	-	-	-	-	-	670,000	670,000

Funding Schedule	Prior Funding	New Funding	Future Funding Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Stormwater Mgmt Fund	-	-	-	-	-	-	670,000	670,000
Total	-	-	-	-	-	-	670,000	670,000

Unfunded Schedule	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	Total
Unfunded	-	-	-	-	-	-	-

Operating Cost Impact	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs
Stormwater Mgmt Fund	-	-	-	-	-	13,400

**Explanation of impact:** The completion of this project will require funding in the Future Years operating budget to fund contracted pond maintenance and lawn mowing, management of non-native and invasive plant material, and post construction and continuing stream monitoring.

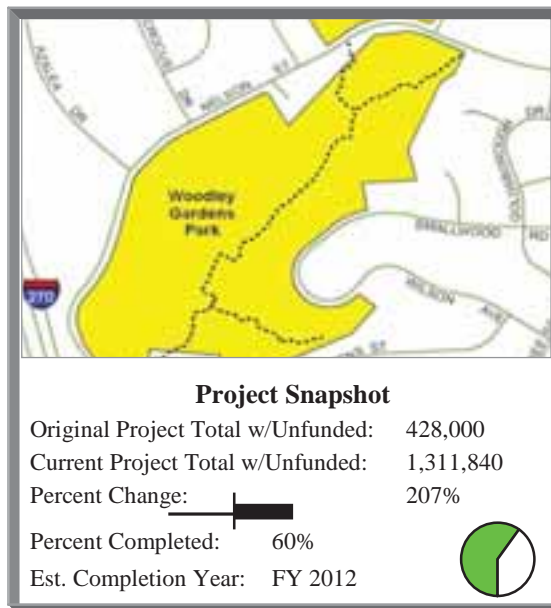
**Schedule:** Future Years — Design and Construction.

**Status:** Concept. This project first appeared in the FY 2002 CIP.

**Coordination:** Neighborhood Civic Associations and Adjacent Landowners; Beall Elementary School; Maryland Department of the Environment; Army Corps of Engineers and Natural Resource Conservation Service; Neighborhood Resource Team; Development Review Committee; Department of Recreation and Parks.

**Staff contact:** Department of Public Works. Mary Fertig, Civil Engineer II, 240-314-8500.

<b>Project Name:</b>	Woodley Gardens — Stream
<b>Project Number:</b>	330-850-2G59
<b>Program Area:</b>	Stormwater Management
<b>Prior Appropriations:</b>	1,311,840
Add New Appropriations:	-
Add Future Appropriations:	-
<b>Current Project Total:</b>	1,311,840
Add Unfunded:	-
<b>Current Project Total with Unfunded:</b>	1,311,840
<b>Status of Prior Year Appropriations as of 04/01/10:</b>	
<b>Prior Year Appropriations:</b>	1,311,840
Less Expended:	447,014
<b>Prior Year Funds Carried Over:</b>	864,826
Add New Appropriations:	-
<b>Total FY 2011 Appropriations:</b>	864,826
<b>Percent Expended:</b>	34%



**Description:** This project funds repairs to specific stream valley erosion problems identified in the *2001 Watts Branch Watershed Study*. The work area is within Woodley Gardens Park along the main stem of Watts Branch and a side tributary near Wilson Avenue. This project will address 5,100 linear feet of stream. In addition, implementing this watershed improvement project supports Rockville's contribution to Maryland's Chesapeake Bay 2000 Agreement, as well as supports mandatory compliance with National Pollutant Discharge Elimination System (NPDES) requirements.

Appropriation Schedule	Prior Approps	New Approps	Future Appropriation Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Plan/Design/Insp	313,740	-	-	-	-	-	-	313,740
Construction	998,100	-	-	-	-	-	-	998,100
<b>Total</b>	<b>1,311,840</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,311,840</b>

Funding Schedule	Prior Funding	New Funding	Future Funding Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Stormwater Mgmt Fund	280,000	-	-	-	-	-	-	280,000
Federal Grant (SWM)	33,740	-	-	-	-	-	-	33,740
State Loan (SWM)	998,100	-	-	-	-	-	-	998,100
<b>Total</b>	<b>1,311,840</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,311,840</b>

Unfunded Schedule	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	Total
Unfunded	-	-	-	-	-	-	-

Operating Cost Impact	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs
Stormwater Mgmt Fund	-	40,700	-	-	-	-

**Explanation of impact:** The completion of this project will add \$40,700 to the FY 2012 operating budget for the continued management of non-native invasive species plants and monitoring required by regulatory agencies.

**Schedule:** Prior year work to be completed — Construction.

**Status:** Construction. This project first appeared in the FY 2002 CIP. Design started in summer 2008. *Funding Note:* Increase in funding due to preliminary nature of scope and cost estimate provided in the *2001 Watts Branch Watershed Study*. American Recovery and Reinvestment Act (ARRA) loan resulted in a compressed design schedule and earlier start of construction than planned in the FY 2010 Adopted CIP.

**Coordination:** Neighborhood Civic Associations and Adjacent Landowners; Neighborhood Resource Team; Department of Recreation and Parks; Army Corps of Engineers; Maryland Department of the Environment; Maryland Department of Natural Resources; Sewer Rehabilitation — Watts Branch project (220-850-7B45) in the Utilities Program Area.

**Staff contact:** Department of Public Works. John Scabis, Civil Engineer II, 240-314-8500.

**Project Name:** Woottons Mill Park — Lower  
**Project Number:** 330-850-5D59  
**Program Area:** Stormwater Management



**Prior Appropriations:** -  
 Add New Appropriations: -  
 Add Future Appropriations: 990,000  
**Current Project Total:** 990,000  
 Add Unfunded: -  
**Current Project Total with Unfunded:** 990,000

**Status of Prior Year Appropriations as of 04/01/10:**

**Prior Year Appropriations:** -  
 Less Expended: -  
**Prior Year Funds Carried Over:** -  
 Add New Appropriations: -  
**Total FY 2011 Appropriations:** -  
**Percent Expended:** 0%

**Project Snapshot**

Original Project Total w/Unfunded: 990,000  
 Current Project Total w/Unfunded: 990,000  
 Percent Change: 0%  
 Percent Completed: 0%  
 Est. Completion Year: FY 2015

**Description:** This project funds stabilization repairs to stream valley erosion problems in Woottons Mill Park, below Wootton Parkway, along the main stem of Watts Branch as identified in the 2001 Watts Branch Watershed Study. The project will address approximately 1,600 linear feet of stream. Staff will work closely with the community in the concept-refinement phase to evaluate project goals and construction access to minimize the impacts on the forest, and active and passive recreational areas. In addition, implementing this watershed improvement project supports Rockville's contribution to Maryland's Chesapeake Bay 2000 Agreement, as well as supports mandatory compliance with national pollutant discharge elimination system (NPDES) and potential total maximum daily load (TMDL) requirements. Sewer repair and protection work will be conducted concurrently, as needed.

Appropriation Schedule	Prior Approps	New Approps	Future Appropriation Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Plan/Design/Insp	-	-	140,000	-	-	-	-	140,000
Construction	-	-	-	-	850,000	-	-	850,000
<b>Total</b>	-	-	140,000	-	850,000	-	-	990,000

Funding Schedule	Prior Funding	New Funding	Future Funding Schedule					Current Total
			FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	
Stormwater Mgmt Fund	-	-	140,000	-	850,000	-	-	990,000
<b>Total</b>	-	-	140,000	-	850,000	-	-	990,000

Unfunded Schedule	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs	Total
Unfunded	-	-	-	-	-	-	-

Operating Cost Impact	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Future Yrs
Stormwater Mgmt Fund	-	-	-	-	-	16,200

**Explanation of impact:** The completion of this project will add \$16,200 to the FY 2016 operating budget for the continued management of non-native invasive species plants and monitoring required by regulatory agencies.

**Schedule:** FY 2012 — Design. FY 2014 — Construction.

**Status:** Concept. This project first appeared in the FY 2005 CIP.

**Coordination:** Neighborhood Civic Associations; Adjacent Landowners; Army Corps of Engineers; Maryland Department of the Environment; Maryland Department of Natural Resources, Neighborhood Resource Team; Sewer Rehabilitation project (220-850-9G34) in the Utilities Program Area.

**Staff contact:** Department of Public Works. John Scabis, Civil Engineer II, 240-314-8500.