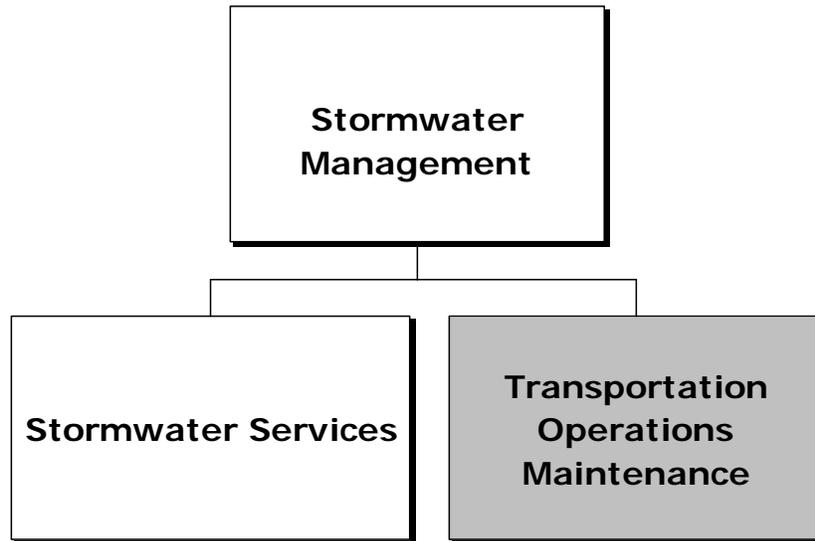


# Fund 40100

## Stormwater Services

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 Denotes functions that are included in both the General Fund, Agency 87, Unclassified Administrative Expenses, and Fund 40010, Stormwater Services.

### Mission

To develop and maintain a comprehensive watershed and infrastructure management program to protect property, health and safety; to enhance the quality of life; to preserve and improve the environment for the benefit of the public. To plan, design, construct, operate, maintain and inspect the infrastructure, and perform environmental assessments through coordinated stormwater and maintenance programs in compliance with all government regulations utilizing innovative techniques, customer feedback and program review; and to be responsive and sensitive to the needs of the residents, customers and public partners.

### Focus

Fund 40100 (formerly Fund 125), Stormwater Services, is essential to protect public safety, preserve property values and support environmental mandates such as those aimed at protecting the Chesapeake Bay and the water quality of other local jurisdictional waterways. Projects include repairs to stormwater infrastructure, measures to improve water quality such as stream stabilization, rehabilitation, safety upgrades of state regulated dams, repair and replacement of underground pipe systems, surface channels, structural flood proofing and best management practices (BMP), site retrofits and improvements. This funding also supports the implementation of watershed master plans, increased public outreach efforts, and stormwater monitoring activities as well as operational maintenance programs related to the existing storm drainage infrastructure as it pertains to stormwater conveyance and stormwater quality improvements.

As part of the FY 2010 Adopted Budget Plan, a special service district was created to support the Stormwater Management Program and provide a dedicated funding source for both operating and capital project requirements, as authorized by Va. Code Ann. Sections 15.2-2400. A stormwater service rate of \$0.15 per \$100 of assessed real estate value had been in place since FY 2011. In FY 2013, the stormwater service rate increased \$0.005 for a total of \$0.020 per \$100 of assessed real estate value. In

## Fund 40100 Stormwater Services

FY 2014, the stormwater service rate will remain at \$0.020 per \$100 of assessed real estate value. The FY 2014 levy of \$0.020 will generate \$41.2 million, supporting \$17.6 million for staff and operational costs, and \$23.6 million for capital project implementation including, infrastructure reinvestment, regulatory requirements, dam safety, and contributory funding requirements.

Stormwater staff is currently evaluating future funding required to meet the increasing federal and state regulatory requirements pertaining to the Municipal Separate Storm Sewer System (MS4) Permit requirements, and State and Federal mandates associated with the Chesapeake Bay. In the next year, staff will develop a five-year rate plan and a phased approach for funding and staffing to support the anticipated regulatory increases.

### Stormwater Services supports the following County Vision Elements:



**Maintaining Safe and Caring Communities**



**Connecting People and Places**



**Practicing Environmental Stewardship**

### Stormwater Services Operational Support

Fund 40100 funds staff salaries, fringe benefits, and operating expenses for all stormwater operations. In addition, Fund 40100 also provides funding for 23/23.0 FTE positions related to transportation operations maintenance provided by the Maintenance and Stormwater Management Division. All funding for the transportation related salary expenses and equipment is recovered from General Fund Agency 87, Department of Public Works and Environmental Services (DPWES) Unclassified Administrative Expenses, as they do not qualify for expenses related to the stormwater service district.

Fund 40100 also supports the Urban Forestry Management Division (UFMD). The UFMD was established to mitigate tree loss and maximize tree planting during land development, enforce tree conservation requirements and suppress populations of Gypsy Moth, Emerald Ash Borer and other forest pests. The division also implements programs needed to sustain the rich level of environmental, ecological and socio-economic services provided by the County's tree canopy. The UFMD is aligned with the mission of Stormwater Services as it strives to "*improve water quality and stormwater management through tree conservation.*" Tree canopy and forest soils contribute significant levels of water pollution and stormwater runoff mitigation services. Recent analysis has estimated that the County would need to invest \$1.9 billion dollars in infrastructure to match the level of stormwater management that is provided by its tree canopy during a ten-year storm event.

### Stormwater Regulatory Program

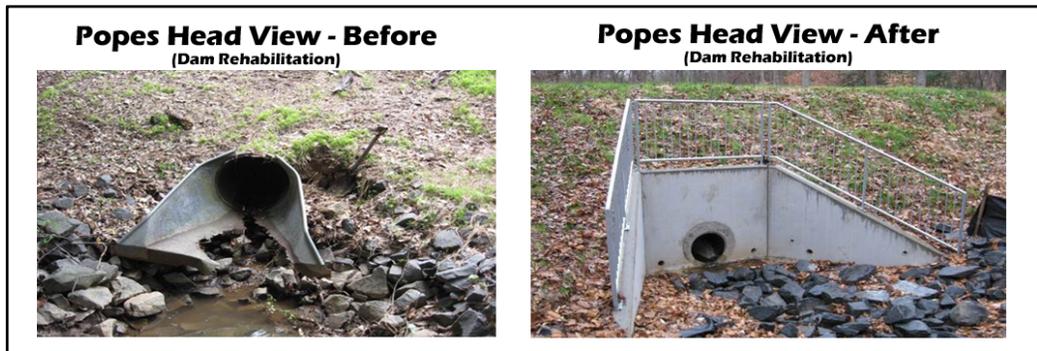
The County is required by Federal Law to operate under the conditions of a state issued Municipal Separate Storm Sewer System (MS4) Permit. The MS4 Permit allows the County to discharge stormwater from its stormwater systems into state and federal waters. The County currently owns and/or operates approximately 7,000 piped outfalls within the stormwater system that are governed by the permit. The current permit was issued in 2002 and expired in 2007, and the County has been operating under a state issued administrative extension, while the state and the EPA agree to new permit requirements. A draft permit has been prepared for the County which indicates that significant enhancements to all facets of the program will be required. In addition to the requirements outlined in the draft permit conditions, a recent EPA audit of the County's program identified the need for the County to initiate a high risk and

## Fund 40100 Stormwater Services

industrial site inspection program for private properties throughout the County. This is anticipated to require a robust inspection and enforcement program to monitor stormwater discharges from all industrial facilities in the County. The permit further requires the County to better document the stormwater management facility inventory, enhance public out-reach and education efforts, increase water quality monitoring efforts, provide stormwater management and stormwater control training to all County employees, and thoroughly document all of these enhanced efforts. County staff are currently developing the procedures to implement these additional requirements. Funding in the amount of \$5.0 million is included for the Stormwater Regulatory Program in FY 2014.

### Dam Safety and Facility Rehabilitation

The County currently has more than 6,000 Stormwater management facilities in service that range in size from small rain gardens to



large state regulated flood control dams, and by permit is responsible for inspecting and maintaining both County owned and privately owned facilities. This inventory increased by over 175 facilities between FY 2010 and FY 2011, and is projected to continually increase as new developments and redevelopment sites are required to install stormwater management controls. In addition, the County is required to provide a facility retrofit program to improve stormwater management controls on all existing stormwater management facilities that were developed and constructed prior to current standards being in place. This program maintains the control structures that include the dams that control and treat the water flowing through County owned facilities. This initiative also includes the removal of sediments that occur in both wet and dry stormwater management facilities to ensure that adequate capacity is maintained to treat the stormwater. The program results in approximately 25 retrofit projects annually that require redesign and construction management activities as well as contract management and maintenance responsibilities. Additionally, this initiative funds the next phase of the Kingstowne Park Dam, which failed in October 2010. Funding in the amount of \$4.0 million is included for Dam Safety and Facility Rehabilitation in FY 2014.

# Fund 40100

## Stormwater Services

### Conveyance System Rehabilitation

The County owns and operates approximately 1,600 miles of underground stormwater pipe and paved channels with estimated replacement value of over one billion dollars. The County began performing internal

inspections of the pipes in FY 2006. The initial results showed that more than 5 percent of the pipes were in complete failure and an additional 15 percent of them

required immediate repair. Increased MS4 permit regulations apply to these 1,600 miles of existing conveyance systems and 43,000 stormwater structures. The permit requirements do not address the current backlog of operational maintenance and rehabilitation needs of the entire stormwater conveyance system infrastructure, but they are additive and significantly increase inspection, reporting and management actions related to the infrastructure system. Acceptable industry standards indicate that one dollar re-invested in infrastructure saves seven dollars in the asset's life and \$70 dollars if asset failure occurs. The goal of this program is to inspect pipes on a 10-year cycle and rehabilitate pipes and paved channels before total failure occurs. Funding in the amount of \$4.5 million is included for Conveyance System Rehabilitation in FY 2014.



### Stream and Water Quality Improvements

This program funds water quality projects necessary to mitigate the impacts to local streams and the Chesapeake Bay resulting from urban stormwater runoff. This includes water quality projects such as construction of stormwater management ponds, implementation of low impact development techniques on stormwater

facilities, stream restorations, and approximately 1,700 water quality projects identified in the completed countywide Watershed Plans. In addition to the new permit requirements, the EPA, who is the



federal regulator that oversees the Federal Clean-Water Act, completed an audit of the County's current Stormwater program in June 2011. The full impact of the audit findings has not been finalized. In addition, the Chesapeake Bay Total Maximum Daily Load (TMDL) requirements are the regulatory process by which pollutants entering impaired water bodies are reduced. The Chesapeake Bay TMDL was established by the EPA and requires that MS4 communities, as well as other dischargers, significantly reduce the nitrogen, phosphorous and sediment loads entering waters draining to the Bay

## **Fund 40100**

### **Stormwater Services**

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by 2025. Compliance with the Bay TMDL will require the County to undertake construction of new stormwater facilities, retrofit existing facilities and properties, and increase maintenance. Preliminary estimates indicate that the projects needed to bring the County's stormwater system into compliance with the Bay TMDL could cost between \$70 and \$90 million per year. The Bay TMDL facility retrofit requirement is additive to the current design and construction efforts associated with 1,700 Watershed Plan projects and ongoing stream and flood mitigation projects. Funding in the amount of \$8.6 million is included for Stream and Water Quality Improvements in FY 2014.

#### Emergency and Flood Control Program

This program supports flood control projects for unanticipated flooding events that impact storm systems and flood residential properties. The program will provide annual funding for scoping, design, and minor construction activities related to flood mitigation projects. Funding in the amount of \$0.9 million is included for the Emergency and Flood Control Program in FY 2014.

#### Stormwater Related Contributory Program

Contributory funds are provided to the Northern Virginia Soil and Water Conservation District (NVSWCD) and the Occoquan Watershed Monitoring Program (OWMP). The NVSWCD is an independent subdivision of the Commonwealth of Virginia that provides leadership in the conservation and protection of Fairfax County's soil and water resources. It is governed by a five-member Board of Directors, three of whom are elected every four years by the voters of Fairfax County and two who are appointed by the Virginia Soil and Water Conservation Board. Accordingly, the work of NVSWCD supports many of the environmental efforts set forth in the Board of Supervisors' Environmental Excellence 20-year Vision Plan. The goal of the NVSWCD is to continue to improve the quality of the environment and general welfare of the citizens of Fairfax County by providing them with a means of dealing with soil, water conservation and related natural resource problems. It provides County agencies with comprehensive environmental evaluations for proposed land use changes with particular attention to the properties of soils, erosion potential, drainage and the impact on the surrounding environment. NVSWCD has consistently been able to create partnerships and leverage state, federal and private resources to benefit natural resources protection in Fairfax County. FY 2014 funding of \$460,064 is included in Fund 40100 for the County contribution to the NVSWCD.

The OWMP and the Occoquan Watershed Monitoring Laboratory (OWML) were established to ensure that water quality is monitored and protected in the Occoquan Watershed. Given the many diverse uses of the land and water resources in the Occoquan Watershed (agriculture, urban residential development, commercial and industrial activity, water supply, and wastewater disposal), the OWMP plays a critical role as the unbiased interpreter of basin water quality information. FY 2014 funding of \$112,559 is included in Fund 40100 for the County contribution to the OWMP.

## Fund 40100 Stormwater Services

### Budget and Staff Resources

Category	FY 2012 Actual	FY 2013 Adopted	FY 2013 Revised	FY 2014 Advertised
<b>FUNDING</b>				
Expenditures:				
Personnel Services	\$11,919,049	\$14,421,771	\$16,117,075	\$16,310,837
Operating Expenses	2,022,960	2,356,435	2,506,224	2,409,495
Capital Equipment	104,845	140,432	238,355	76,000
Capital Projects	13,349,239	25,070,961	46,452,008	23,618,267
<b>Subtotal</b>	<b>\$27,396,093</b>	<b>\$41,989,599</b>	<b>\$65,313,662</b>	<b>\$42,414,599</b>
Less:				
Recovered Costs	(\$1,347,322)	(\$2,214,599)	(\$2,214,599)	(\$2,214,599)
<b>Total Expenditures</b>	<b>\$26,048,771</b>	<b>\$39,775,000</b>	<b>\$63,099,063</b>	<b>\$40,200,000</b>
<b>AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)</b>				
Regular	145 / 145	171 / 171	172 / 172	172 / 172



## Fund 40100 Stormwater Services

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- ◆ **Operational Requirements** **\$1,744,353**

An increase of \$1,744,353 is necessary to fund requirements associated with the Stormwater Services operational budget primarily based on actual experience with both Personnel Services and Fringe Benefits. The change is not related to new positions, but it simply reflects the current salaries and hours worked on capital projects. This increase includes an amount of \$1,691,293 dedicated to Personnel Services and an amount of \$53,060 dedicated to Operating Expenses. The Stormwater Services' operating budget was held at a fairly stable level in the past several years and is in need of realignment to more closely reflect actual experience.
  
- ◆ **Capital Equipment** **\$76,000**

Capital Equipment funding of \$76,000 is included for requirements associated with replacement equipment that has outlived its useful life and new equipment used to carryout stormwater services activities. The equipment includes \$26,000 in replacement equipment, of which, \$16,000 is to replace two material spreaders used to support emergency response efforts; and \$10,000 is to replace two equipment hauler trailers that are essential for the use of hauling medium size equipment such as Bob-Cat skid steers and small Kubota tractors. Funding in the amount of \$50,000 is required for the purchase of new equipment, of which, \$20,000 is for one Yale fork lift with cab used in order to make the delivery of goods and supplies at multiple storage facilities more efficient; and \$30,000 is for one B3300 Kubota tractor with backhoe and bush hog attachments used to support the increasing maintenance service levels for Low Impact Development (LID) facilities.
  
- ◆ **Capital Projects** **\$23,618,267**

Funding in the amount of \$23,618,267 has been included in FY 2014 for priority stormwater capital projects.
  
- ◆ **Transfer to the General Fund for Indirect Costs**

It should be noted that \$1,000,000 is included as a transfer to the General Fund beginning in the FY 2014 Advertised Budget Plan to partially offset central support services supported by the General Fund which benefit Fund 40100, Stormwater Services. These indirect costs include support services such as Human Resources, Purchasing, Budget and other administrative services.

### **Changes to FY 2013 Adopted Budget Plan**

*The following funding adjustments reflect all approved changes in the FY 2013 Revised Budget Plan since passage of the FY 2013 Adopted Budget Plan. Included are all adjustments made as part of the FY 2012 Carryover Review, and all other approved changes through December 31, 2012:*

- ◆ **Carryover Adjustments** **\$23,324,063**

As part of the *FY 2012 Carryover Review*, the Board of Supervisors approved funding of \$23,324,063 due to the carryover of unexpended project balances in the amount of \$23,566,722 and a net decrease to both capital projects and operating expenses of \$242,659. Capital projects were decreased \$438,539 associated with the completion of the rehabilitation of both Lake Woodglen and Lake Barton. In addition, this decrease was partially offset by an increase of \$87,614 in encumbrances, the appropriation of higher than anticipated revenues of \$74,164, and the appropriation of operational savings in FY 2012 of \$34,102.

## Fund 40100 Stormwater Services

- ◆ **Position Movement** \$0  
 During FY 2013, Fund 40140, Refuse Collection and Recycling Operations, transferred 1/1.0 FTE position to Fund 40100, Stormwater Services, to support additional and specialized inspections required at a growing number of Low Impact Development facilities, including facilities with bio-retention, vegetated swales and green roofs.

### Key Performance Measures

Indicator	Prior Year Actuals			Current Estimate
	FY 2010 Actual	FY 2011 Actual	FY 2012 Estimate/Actual	FY 2013
<b>Stormwater Services</b>				
MS4 permit violations received	0	0	0 / 0	0
Percent of Emergency Action Plans current	100%	100%	100% / 100%	100%
Percent of commuter facilities available 365 days per year	100%	100%	100% / 100%	100%

A complete list of performance measures can be viewed at [www.fairfaxcounty.gov/dmb/fy2014/advertised/pm/40100.pdf](http://www.fairfaxcounty.gov/dmb/fy2014/advertised/pm/40100.pdf)

### Performance Measurement Results

In FY 2012, the objective to receive no MS4 permit violations related to inspection and maintenance of public and private stormwater management facilities was met. It should be noted that the current MS4 permit was issued in 2002 and expired in 2007, and the County has been operating under a state issued administrative extension, while the state and the EPA agree to new permit requirements.

The objective to update 100 percent of the emergency action plans that Stormwater is responsible to update annually was met. The emergency program cost, per population, was less than anticipated, due to a lower amount of events requiring an emergency response. The estimated dollar loss based on claims paid out was less than estimated.

Lastly, the objective to keep 100 percent of the commuter facilities operational for 365 days was met. Maintenance costs per vehicle trip were less than anticipated due to reduced snow events in FY 2012, reduction in non-routine work and contract negotiations with a new vendor. Patronage complaints were lower than estimated.

# Fund 40100 Stormwater Services

## FUND STATEMENT

### Fund 40100, Stormwater Services

	FY 2012 Actual	FY 2013 Adopted Budget Plan	FY 2013 Revised Budget Plan	FY 2014 Advertised Budget Plan
<b>Beginning Balance</b>	\$11,986,928	\$0	\$23,243,478	\$0
Revenue:				
Stormwater Service District Levy	\$28,869,611	\$39,775,000	\$39,775,000	\$41,200,000
Federal Emergency Management Agency FEMA Grant	\$711,145	0	80,585	0
American Recovery and Reinvestment Act (ARRA) (Woodglen Lake) <sup>1</sup>	15,134	0	0	0
American Recovery and Reinvestment Act (ARRA) (Lake Barton) <sup>2</sup>	71,787	0	0	0
Miscellaneous	4,553	0	0	0
<b>Total Revenue</b>	<b>\$29,672,230</b>	<b>\$39,775,000</b>	<b>\$39,855,585</b>	<b>\$41,200,000</b>
Transfer In:				
Stormwater Management Fund (318) <sup>3</sup>	\$7,633,091	\$0	\$0	\$0
<b>Total Transfers In</b>	<b>\$7,633,091</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Available</b>	<b>\$49,292,249</b>	<b>\$39,775,000</b>	<b>\$63,099,063</b>	<b>\$41,200,000</b>
Expenditures:				
Personnel Services	\$11,919,049	\$14,421,771	\$16,117,075	\$16,310,837
Operating Expenses	2,022,960	2,356,435	2,506,224	2,409,495
Recovered Costs	(1,347,322)	(2,214,599)	(2,214,599)	(2,214,599)
Capital Equipment	104,845	140,432	238,355	76,000
Capital Projects <sup>3,4</sup>	13,349,239	25,070,961	46,452,008	23,618,267
<b>Total Expenditures</b>	<b>\$26,048,771</b>	<b>\$39,775,000</b>	<b>\$63,099,063</b>	<b>\$40,200,000</b>
Transfers Out:				
General Fund (10001) <sup>4</sup>	\$0	\$0	\$0	\$1,000,000
<b>Total Transfers Out</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,000,000</b>
<b>Total Disbursements</b>	<b>\$26,048,771</b>	<b>\$39,775,000</b>	<b>\$63,099,063</b>	<b>\$41,200,000</b>
<b>Ending Balance<sup>5</sup></b>	<b>\$23,243,478</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Tax Rate Per \$100 of Assessed Value</b>	<b>\$0.015</b>	<b>\$0.020</b>	<b>\$0.020</b>	<b>\$0.020</b>

## **Fund 40100 Stormwater Services**

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<sup>1</sup> On December 7, 2009, the Board of Supervisors approved funding of up to \$2,229,971 associated with a project agreement between the Natural Resources Conservation Service (NRCS) and Fairfax County for the rehabilitation of Woodglen Lake. Funding from the NRCS was available as a result of the American Recovery and Reinvestment Act of 2009. An amount of \$1,123,834 was received and the project is complete.

<sup>2</sup> On July 13, 2010, the Board of Supervisors approved funding of up to \$3,079,789 associated with a project agreement between the Natural Resources Conservation Service (NRCS), the Northern Virginia Soil and Water Conservation District (NVSWCD) and Fairfax County for the rehabilitation of Lake Barton. Funding from the NRCS was available as a result of the American Recovery and Reinvestment Act of 2009. On September 28, 2010 an amendment to this agreement was signed, increasing the total funding to \$3,779,591. An amount of \$2,343,841 was received and the project is complete.

<sup>3</sup> Balances in Fund 318, Stormwater Management Program have been transferred to Fund 40100, Stormwater Services, as originally anticipated at the time Fund 40100, Stormwater Services, was established. The consolidation of stormwater capital project funds in Fund 40100 will allow more efficient management of funding for stormwater projects, as well as prepare for the implementation of the Fairfax County Unified System (FOCUS).

<sup>4</sup> Funding in the amount of \$1,000,000 is transferred to the General Fund to partially offset central support services supported by the General Fund which benefit Fund 40100. These indirect costs include support services such as Human Resources, Purchasing, Budget and other administrative services.

<sup>5</sup> Capital projects are budgeted based on the total project costs. Most projects span multiple years, from design to construction completion. Therefore, funding for capital projects is carried forward each fiscal year, and ending balances fluctuate, reflecting the carryover of these funds.

# Fund 40100 Stormwater Services

## FY 2014 Summary of Capital Projects

### Fund 40100, Stormwater Services

Project #	Description	Total Project Estimate	FY 2012 Actual Expenditures	FY 2013 Revised Budget	FY 2014 Advertised Budget Plan
2G25-006-000	Stormwater Regulatory Program	\$22,496,651	\$3,807,597.30	\$11,094,057.93	\$5,000,000
2G25-007-000	NVSWCD Contributory	1,772,692	429,293.00	460,064.00	460,064
2G25-008-000	Occoquan Monitoring Contributory	450,236	112,559.00	112,559.00	112,559
SD-000031	Stream & Water Quality Improvements	24,559,503	2,323,222.79	12,733,712.11	8,616,095
SD-000032	Emergency and Flood Response Projects	5,236,091	2,333,203.24	1,478,332.95	900,000
SD-000033	Dam Safety and Facility Rehabilitation	15,832,084	1,492,117.14	8,507,619.25	4,029,549
SD-000034	Conveyance System Rehabilitation	22,024,695	2,744,839.43	11,753,908.56	4,500,000
SD-000035	ARRA - Lake Barton	243,312	106,407.20	136,904.59	0
SD-000036	ARRA - Woodglen Lake	174,850	0.00	174,849.52	0
<b>Total</b>		<b>\$92,790,114</b>	<b>\$13,349,239.10</b>	<b>\$46,452,007.91</b>	<b>\$23,618,267</b>