



## Grant All-Detail Report Projects and Practices 2016

**Grant Title** - SWWD Lakes Targeted Retrofit

**Grant ID** - C16-3460

**Organization** - South Washington WD

Grant Awarded Amount	<b>\$180,000.00</b>	Grant Execution Date	<b>3/4/2016</b>
Required Match Amount	\$45,000.00	Grant End Date	12/31/2018
Required Match %	25%	Grant Day To Day Contact	John Loomis

### Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$180,000.00	\$68,144.79	\$111,855.21
Total Match Amount	\$45,000.00	\$0.00	\$45,000.00
Total Other Funds	\$32,500.00	\$0.00	\$32,500.00
<b>Total</b>	<b>\$257,500.00</b>	<b>\$68,144.79</b>	<b>\$189,355.21</b>

*\*Grant balance remaining is the difference between the Awarded Amount and the Spent Amount. Other values compare budgeted and spent amounts.*

### Budget Details

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Match
Administration and Reporting	Administration /Coordination	Local Fund	SWWD Levy Funds	\$2,500.00			N

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction	
						Date	Match
Project Outreach	Urban Stormwater Management Practices	Local Fund	SWWD and City funds	\$5,000.00			N
ROW Bioretention	Urban Stormwater Management Practices	Current State Grant	SWWD Lakes Targeted Retrofit	\$80,000.00	\$68,144.79	11/9/2016	N
ROW Bioretention	Urban Stormwater Management Practices	Local Fund	SWWD SUF Funds	\$20,000.00			Y
ROW Bioretention - Design	Technical/Engineering Assistance	Local Fund	SWWD Levy Funds	\$10,000.00			N
Wilmes IESF	Urban Stormwater Management Practices	Current State Grant	SWWD Lakes Targeted Retrofit	\$100,000.00			N
Wilmes IESF	Urban Stormwater Management Practices	Local Fund	SWWD SUF Funds	\$25,000.00			Y
Wilmes IESF Engineering	Technical/Engineering Assistance	Local Fund	City of Woodbury	\$15,000.00			N

### Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
712M - Bioretention Basin	7	7	8 COUNT	7 COUNT
155M - Storm Water Retention Basins	1	0	0.0425 AC	0 AC

## Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
<b>Valley Crossing Re-use System</b>	VOLUME REDUCED (ACRE- FEET/YEAR)	6.2 ACRE-FEET/YR	Colby	Other	Calculated values from Ramsey Washington Metro Watershed District Stormwater Reuse Calculator.
<b>Wilmes IESF</b>	PHOSPHORUS (EST. REDUCTION)	16 LBS/YR	Wilmes	WINSLAMM	
<b>Valley Crossing Re-use System</b>	PHOSPHORUS (EST. REDUCTION)	3 LBS/YR	Colby Lake	Other	Calculated values from Ramsey Washington Metro Watershed District's Stormwater Reuse Calculator.
<b>ROW Bioretention</b>	PHOSPHORUS (EST. REDUCTION)	5.25 LBS/YR	Powers, Wilmes, Colby Lakes	WINSLAMM	

## Final Indicators Summary

Indicator Name	Total Value	Unit
<b>PHOSPHORUS (EST. REDUCTION)</b>	20.11	LBS/YR

## Grant Activity

### Grant Activity - Administration and Reporting

Description	Activity includes project management and grant administration and reporting the the FY 2016 CWF Targeted Lakes Retrofit grant. Specific tasks include but are not limited to grant administration and reporting and development of landowner and partner agreements. John Loomis, SWWD Water Resource Program Manager, will complete activities under this item.		
Category	ADMINISTRATION/COORDINATION		
Start Date	1-Jan-16	End Date	31-Jan-18
Has Rates and Hours?	No		
Actual Results			

### Grant Activity - Project Outreach

Description	<p>This activity includes all public outreach for projects. Outreach activities include a public meeting with identified stakeholders located near the identified BMP locations within City ROW. This will include the IESF and one of the bioretention basins. These meetings will allow stakeholders to better understand the water quality issues leading to the identification and prioritization of the proposed BMPs, and details on the form and function of the proposed BMPs. Stakeholders will be able to provide feedback on the BMP projects; enough time is allowed in the construction schedule to make any design changes born from this stakeholder participation process.</p> <p>Outreach efforts of the bioretention basins located on both City ROW and private property will consist of multiple design meetings with each landowner where water quality issues and benefits of the proposed activity are discussed in detail.</p> <p>Andy Schilling, MLA, SWWD Watershed Restoration Specialist, is responsible for all public outreach activities.</p>		
Category	URBAN STORMWATER MANAGEMENT PRACTICES		
Start Date	1-Mar-16	End Date	30-Apr-16
Has Rates and Hours?	No		
Actual Results			

Grant Activity - ROW Bioretention			
Description	<p>Up to 8 Bioretention BMPs placed in priority catchments within Powers, Wilmes, and Colby subwatersheds. These will be located largely within City ROW receiving runoff from street gutter flows. BMPs will be installed in conjunction with City street improvements. Each BMP will have a pretreatment device - sump. Anticipated benefit of the practices, combined, is over 5.25 lbs/yr total phosphorus.</p> <p>The bioretention BMPs will be designed per MN Stormwater Manual guidance and designed by City Professional Engineering consultant or by SWWD staff (Andy Schilling), MLA with Technical Approval Authority in Bioretention.</p>		
Category	URBAN STORMWATER MANAGEMENT PRACTICES		
Start Date	3-Oct-16	End Date	31-Jul-17
Has Rates and Hours?	No		
Actual Results	In the fall of 2016, 7 bioretention basins were installed - 2 in Colby lake subwatershed, 1 in Wilmes lake subwatershed, and 4 in Powers lake subwatershed. The estimated reduction in total phosphorus is 4.11 lbs/year (WinSLAMM). Each basin has a pretreatment sump, underdrain and gate valve (outflow attenuation).		

Activity Action - ROW Bioretention - Powers, Colby and Wilmes Lakes Subsheds			
Practice	712M - Bioretention Basin	Count of Activities	7
Description	7 Bioretention practices were installed in fall, 2016. 2 in Colby lake subshed, 1 in Wilmes lake subshed, and 4 in Powers lake subshed. 6 of the 7 locations were located primarily on ROW with a small percentage of area on residential landowner property. 1 project is located entirely on city property (Powers lake subshed). SWWD will provide maintenance for first 3 years with landowner assuming maintenance after 3 yr period. City is responsible for cleaning and maintaining sumps and below-ground infrastructure affiliated with the bioretention systems.		
Proposed Size / Units	8.00 COUNT	Lifespan	10 Years
Actual Size/Units	7.00 COUNT	Installed Date	31-Oct-16
Mapped Activities	7 Point(s)		

Final Indicator for ROW Bioretention - Powers, Colby and Wilmes Lakes Subsheds			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	2.8
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	WINSLAMM
Waterbody	Powers Lake		
Final Indicator for ROW Bioretention - Powers, Colby and Wilmes Lakes Subsheds			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	.51

Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	WINSLAMM
Waterbody	Wilmes Lake		
Final Indicator for ROW Bioretention - Powers, Colby and Wilmes Lakes Subsheds			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	.8
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	WINSLAMM
Waterbody	Colby Lake		

Grant Activity - ROW Bioretention - Design			
Description	Design will be completed in-house. Work is currently underway, prior to execution of the grant agreement to ensure that work can proceed on schedule. No grant funds will be expended on this effort. Local funds are not counted as required match. Upon completion, SWWD will provide an estimate of the work effort. Andy Schilling, MLA will complete all design.		
Category	TECHNICAL/ENGINEERING ASSISTANCE		
Start Date	1-Jan-16	End Date	31-Jul-17
Has Rates and Hours?	No		
Actual Results			

Grant Activity - Wilmes IESF			
Description	<p>An iron-enhanced sand filter will be added to a small stormwater pond at the outlet of catchment 1072_1 adjacent to South Wilmes Lake. Costs include significant retaining walls (2' – 3' are needed) to provide a 10' wide bench at 180' in length, a new outlet structure to accommodate IESF underdrains and a weir.</p> <p>The anticipated benefit of the practice is removal of over 16 lbs/yr of total phosphorus which would otherwise flow into Wilmes Lake.</p> <p>The IESF will be designed following current Minnesota Filter guidance by licensed professional engineers.</p>		
Category	URBAN STORMWATER MANAGEMENT PRACTICES		
Start Date	1-Jun-16	End Date	31-Jul-17
Has Rates and Hours?	No		
Actual Results			

Activity Action - Wilmes Iron Enhanced Sand Filter			
Practice	155M - Storm Water Retention Basins	Count of Activities	1
Description	Retrofit of an existing stormwater pond adjacent to Wilmes Lake to incorporate iron enhanced sand filtration. Specifications will follow MN Stormwater Manual Design Criteria		
Proposed Size / Units	0.04 AC	Lifespan	25 Years
Actual Size/Units	AC	Installed Date	
Mapped Activities	No		

Final Indicator for Wilmes Iron Enhanced Sand Filter			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	16
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	WINSLAMM
Waterbody	Wilmes Lake		

Grant Activity - Wilmes IESF Engineering			
Description	This activity includes engineering and technical assistance during installation for the Wilmes IESF practice. Services will be provided by City of Woodbury consultants and are not covered by grant funds or counted as required match. The IESF will be designed following current Minnesota Filter guidance and optimized for the targeted location. All plans will be completed and signed by a licensed professional engineer.		
Category	TECHNICAL/ENGINEERING ASSISTANCE		
Start Date	1-Jan-16	End Date	31-Dec-16
Has Rates and Hours?	No		
Actual Results			

### Grant Attachments

Document Name	Document Type	Description
2016 Competitive Grant	Grant Agreement	2016 Competitive Grant - South Washington WD
2016 Competitive Grant executed	Grant Agreement	2016 Competitive Grant - South Washington WD
2016 year end financial report	Grant	SWWD Lakes Targeted Retrofit
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 12/20/2016

Document Name	Document Type	Description
<b>Application</b>	Workflow Generated	Workflow Generated - Application - 08/27/2015
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 02/12/2016
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 12/16/2015
<b>grantmap_14549_2015-08-17_12-54-43-PM.jpg</b>	Grant	SWWD Lakes Targeted Retrofit