2017 Green Bond Report for the City of Saint Paul

Series 2015B Sewer Revenue Bonds
Series 2016B Sewer Revenue Bonds
Series 2017C Sewer Revenue Bonds

OFFICE OF FINANCIAL SERVICES
Treasury Division, Debt Management

August 2017

700 City Hall, 15 W Kellogg Blvd Saint Paul, MN 55102

A Note from the Finance Director

Mayor Chris Coleman and the Saint Paul City Council are committed to making Saint Paul "The Most Livable City in America" and a leader in sustainable urban living. The City is taking proactive steps toward energy efficiency, alternative fuels and transportation options, recycling and waste reduction, urban reforestation, natural resources management and water resources management.

Since 2015, the City's Office of Financial Services Treasury Division has contributed to the City's efforts on sustainability by giving investors the opportunity to invest directly in environementally-oriented capital invesments through the purchase of "Green Bonds". The City's $8,700,000 Sewer Revenue Green Bonds, Series 2015B were the first sold in the State of Minnesota, as well as one of the first Green Bond issuances under $10,000,000. The City has continued to issue Sewer Revenue Green Bonds subsequently every year. This innovative financing tool accomplished the annual goal of securing the lowest possible cost financing for these important projects, while also advancing the City's goals around sustanbility.

In order to provide investors with ongoing information regarding the projects financed by the City's Green Bonds, the Treasury Division is providing the spending data on projects that have been funded by the City's Green Bonds, and the environmental impact the projects have made.

We hope that you find this report helpful and informative. Thank you for your interest and investment in the City's Green Bond program and sustainability in Saint Paul.

Sincerely,

Todd P. Hurley,
Finance Director, Office of Financial Services

Annual Reporting Commitment

The City of Saint Paul (the "City") intends to report on its Green Bond program at least annually, or until the proceeds of a series have been spent. The City's Sewer Revenue Bonds, Series 2015B; Sewer Revenue Bonds, Series 2016B; and Sewer Revenue Bonds, Series 2017C will be referred to herein as the "Green Bonds".

In the process of issuing the Green Bonds, the City worked with its financial advisor, Springsted, Inc., to ensure that the program complies with the Green Bond Principles (the "Principles") as outlined by the International Capital Market Association. The Principles are voluntary guidelines that recommend transparency and disclosure and promote integrity in the development of the Green Bond market. The Principles include the following four components:

1. Use of proceeds
2. Project Evaluation and Selection
3. Management of Proceeds
4. Reporting

This report shows spending through year end December 31, 2016, and includes financing data for projects in 2017.

Use of Proceeds

The City's annual capital improvement and maintenance plan places a priority on sanitary and storm sewer improvement projects for aging infrastructure that are most likely to allow for exfiltration of untreated wastewater from the infrastructure, inflow and infiltration of clean water into the system, and untreated storm water into the environment.

The City has determined that the projects funded by the Green Bonds meet two categories:

1. **Sustainable Waste Management** (e.g. reducing the exfiltration of contaminated wastewater into the ground or reducing the risk of sewage back-up into the environment)

2. **Sustainable Water Management** (e.g. reducing the amount of clean water entering sewer systems or improving/adding new water treatment systems)

The Green Bonds are secured solely by revenues of the City's Sewer Utility. The table below gives an overview of the proceeds deposited and actual spending for the Green Bonds. Net Proceeds Deposited is the amount of the bond series deposited into the construction account. Actuals is the total amount of bond proceeds spent on expenses for the designated construction projects.

Bond Issuance	Net Proceeds Deposited	Actuals (YE 2016)	Ending Balance**
Sewer Revenue Bonds, Series 2015B	$8,033,304	$8,025,171	-
Sewer Revenue Bonds, Series 2016B	$7,349,679	$5,351,816	$1,997,863
Sewer Revenue Bonds, Series 2017C*	$8,000,000	-	$8,000,000

*The OS for the Series 2017C Bonds is dated March 15, 2017.

**Bonds will be drawn down to a de minimis amount.

The City has established processes and procedures to ensure the segregation of all bond proceeds from other city funds. In accordance with the Green Bond resolutions and IRS regulations, the proceeds from the Green Bonds have been deposited into segregated project accounts to be drawn upon to finance the costs of the individual projects.

Project Selection

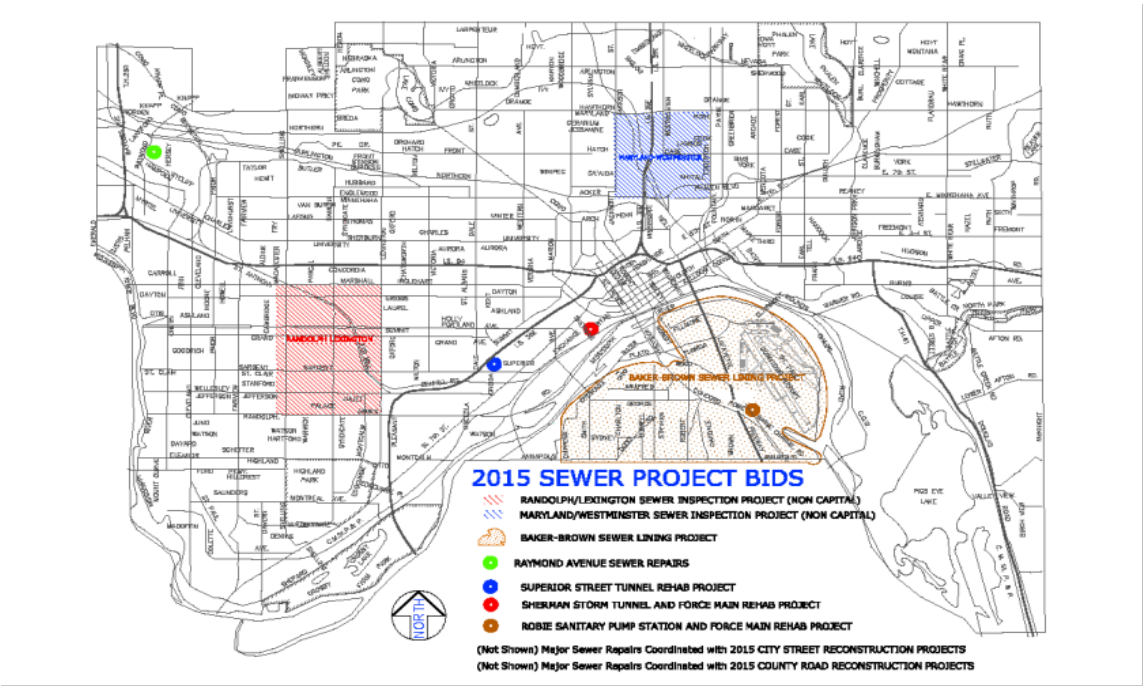
The City owns and maintains approximately 804 miles of sanitary sewer and 450 miles of storm sewer, located in public streets, alleys, or easements. Most of the sanitary sewer system was constructed during the period 1887 to 1958, meaning that most of the system is at least 50 years old and nearly half of it is 75-125 years old.

Projects are identified via a variety of testing processes and procedures, such as smoke testing, video monitoring and manual inspections—portions of which were also financed by the bonds. Smoke testing lasts about 30 minutes, and may be seen coming from manhole covers, storm drains, roof vents and building foundations. The sanitary sewer cleaning and televising program has a goal to clean and inspect approximately 80 miles of sanitary sewers, including manholes, each year. The program helps to evaluate pipes so that any necessary maintenance, repair or replacement can be scheduled to minimize unexpected problems and emergency repairs.

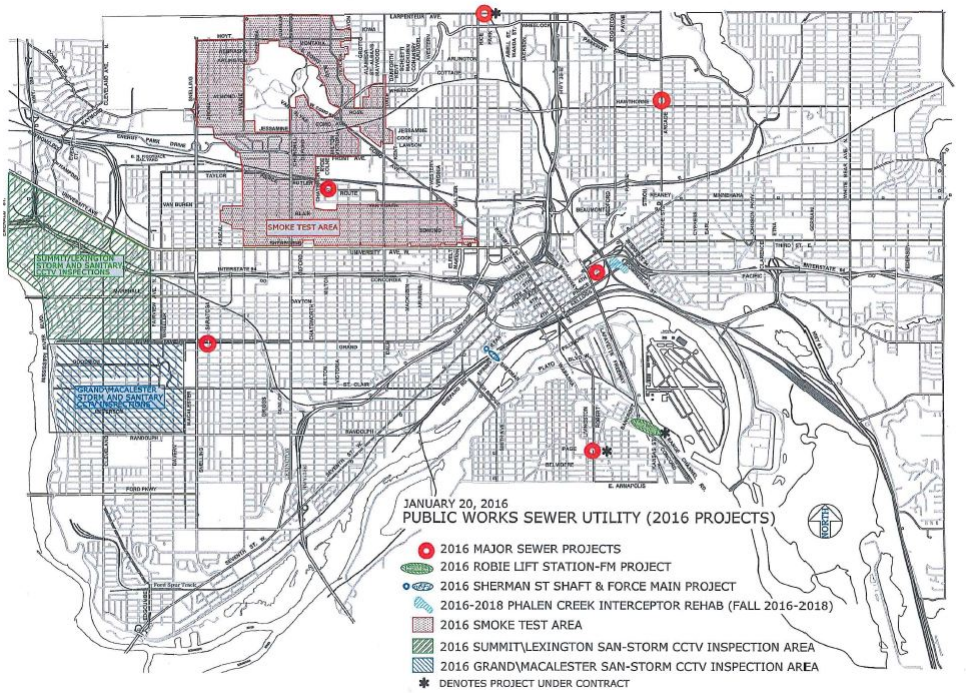
The projects financed include major sanitary sewer repairs and rehabilitation work as well as storm water tunnel rehabilitation and treatment improvements. The objectives of these projects include the proper segregation of wastewater from the environment, reduction of clean water entering the sanitary sewer system and the reduction of polluted storm water entering the environment, especially local bodies of water.

The projects selected are located in many areas across the City, as shown on the project area maps that follow.

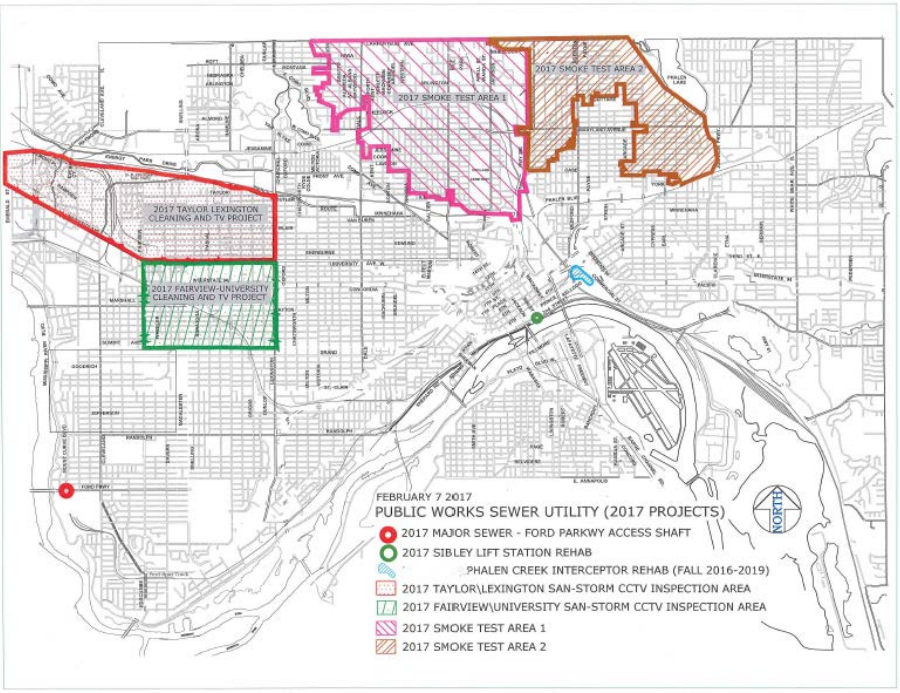
2015 Sewer Utility Projects



2016 Sewer Utility Projects

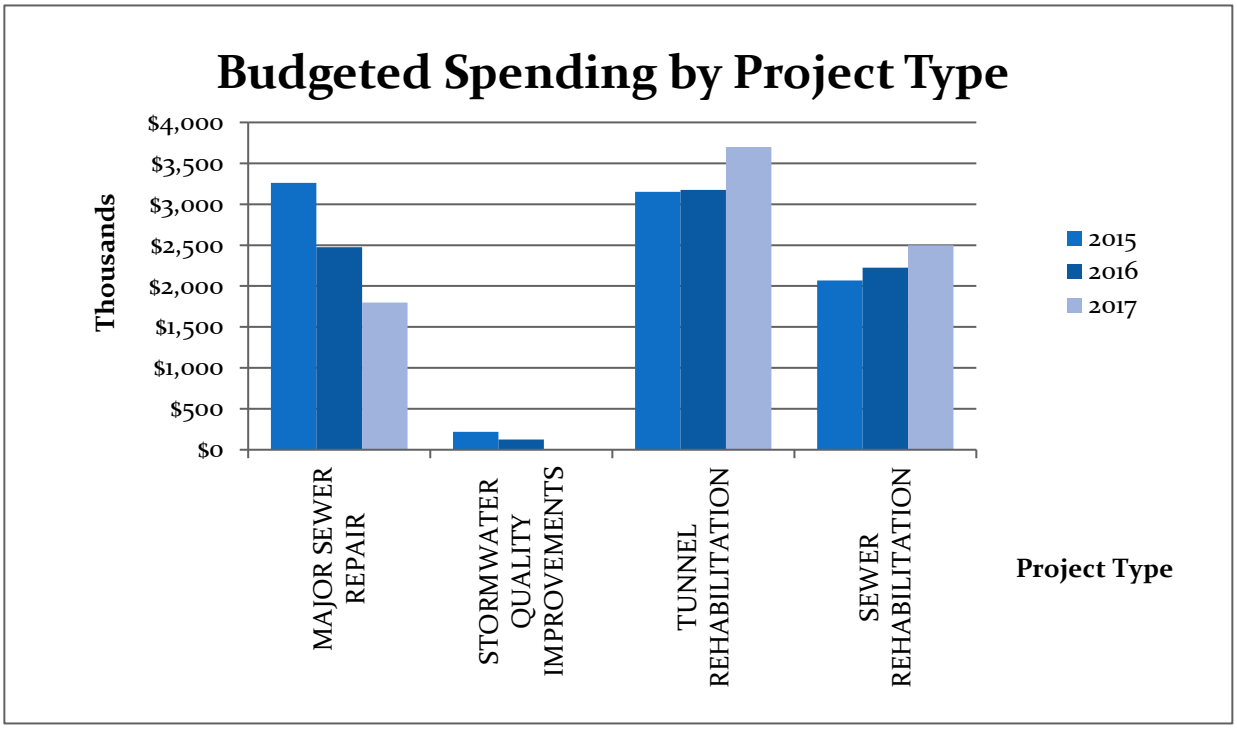


2017 Sewer Utility Projects



Project Spending and Environmental Impacts

The Green Bonds were anticipated to be spent on the project categories shown on the chart below.



Actual project spending and environmental impacts are shown through June 1, 2017, in the tables below.

Major Sewer Repairs

Bond Issue	Project	Actuals	Project Status	Project Description & Environmental Impact
2015B	Coordination with County Road Projects	$219,296	Complete	Replace Brick Sanitary Manholes with New Pre-Cast Concrete to preserve street pavement life, reduce amount of clear water entering sewer systems, and reduce sewage back-up risks.
2015B	Raymond Ave Sewer	$762,172	Complete	Reconstruction of failed Sanitary Sewer and deep sanitary manhole in order to reduce exfiltration of contaminated wastewater into the ground in addition to the risk of sewage back-up into the environment.
2015B	Robie Lift Station Improvements	$1,109,794	Complete	Replace and rehabilitate 50-75 year old sewer force mains, modify dry wall piping, and install back-up power generator to reduce sewage back up risk and maintain service in the case of a power outage with the goal of keeping contaminated wastewater from entering the outside environment.
2015B	Coordination with Street Improvement Projects	$852,241	Complete	Replace brick sanitary sewer manholes with new precast concrete, broken sewer piping, and high maintenance systems in coordination with City and County street improvement projects to reduce the amount of clean water entering the sewer system and reducing the risk of sewer backup.
2016B	Coordination with City/County Road Projects	$416,400	Complete	Replace Brick Sanitary Manholes with New Pre-Cast Concrete to preserve street pavement life, reduce amount of clear water entering sewer systems, and reduce sewage back-up risks.

Bond Issue	Project	Actuals	Project Status	Project Description & Environmental Impact
2016B	Citywide Sewer Repairs	$520,000	Complete	Replace Brick Sanitary Manholes with New Pre-Cast Concrete, Replace Broken Sewer Piping, Replace High Maintenance Sewer Systems to preserve street pavement life, reduce amount of clean water entering sewer systems and reduce sewage back-up risks.
2016B	Sherman Lift Station FM	$1,145,000	Complete	Re-construct failed City sanitary sewer, Re-construct deep sanitary manhole to reduce sewage exfiltration into the ground, and reduce sewage back-up risks.
2016B	Sherman Lift Station Electrical	$395,000	Complete	Install back-up power generator, replace/rehab 50+ and 75+ year old forcemains, and modify dry well piping in order to reduce sewage back-up risks and improve ability to maintain sewer service and during power outages.
2017C	Coordination with City Street Projects	$0	Not Started	Replace Brick Sanitary Manholes with New Pre-Cast Concrete, Replace broken City sewer piping and outside drops, Abandon un-used City sewers to preserve street pavement life, reduce amount of clear water entering sewer systems, reduce sewage back-up risks
2017C	Citywide Sewer Repair Project	$0	Not Started	Re-construct broken City sewers and manholes to reduce sewage exfiltration into the ground, and reduce sewage back-up risks
2017C	Sibley Lift Station Rehab Project	$0	Not Started	Replace deteriorated control cabinet, process piping and valves, and electrical components; Install safety grates on wet well hatches; Relocate electrical power and controls to higher river flood elevation in order to reduce sewage back-up risks and improve the ability to maintain sewer service during Mississippi River flooding events.

Stormwater Quality Improvements

Bond Issue	Project	Actuals	Project Status	Project Description & Environmental Impact
2015B	Como Area	This amount is included with the $852,241 for Coordination with Street Improvement Projects listed above.	Complete	Construct localized storm water treatment including a sand filtration system to reduce the amount of pollutants entering Lake Como.
2016B	Stormwater Quality Improvements	$123,600	Complete	Construct localized storm water treatment feature (sand filtration system) to reduce amount of pollutants entering Lake Como. Constructed as part of the Como-Chatsworth Street Reconstruction Project to reduce amount of polluted storm water from entering Lake Como.

Sewer Tunnel Rehabilitation

Bond Issue	Project	Actuals	Project Status	Project Description & Environmental Impact
2015B	Sherman Tunnel	$2,355,359	Complete	Repair and improvements to storm sewer tunnel, including new access shaft and replacement of more than 70 year old sanitary sewer force main with two new force main pipes to extend service life and improve access for inspections and maintenance with the goal of reducing the risk of sewer backups and entrance of contaminated water into the environment.
2015B	Superior Tunnel	$894,970	Complete	Replace failed sand rock sanitary sewer tunnel including new access shaft, removal of old brick lining and stabilization of the tunnel to extend service life and improve access for inspections and maintenance with the goal of reducing the risk of sewer

Bond Issue	Project	Actuals	Project Status	Project Description & Environmental Impact
				backups and entrance of contaminated water into the environment.
2016B	Phalen Creek Interceptor	$476,250	In Progress	Repair and improvements of Storm Sewer tunnel, including new access shaft and replacement of 70+ year old sanitary forcemain with two new forcemain pipes to extend service life, improve access for inspections/maintenance, reduce risk of sewage back-ups.
2017C	Phase 2 Phalen Creek Storm Tunnel Rehab	$0	Not Started	Rehab sections of Phalen storm tunnel originally constructed in the 1890s. Reinforced concrete liner to be installed to replace deteriorated tunnel roof and invert. Also manhole and access shaft to be constructed for future inspection and maintenance activities in order to extend service life, improve access for inspections/maintenance, reduce risk of sewage back-ups, reduce risk of tunnel collapse

Sewer Rehabilitation

Bond Issue	Project	Actuals	Project Status	Project Description & Environmental Impact
2015B	Baker/Brown Sewer Lining	$1,399,853	Complete	Lining of aging and defective sewer pipes with cured in place pipe lining in order to extend service life, reduce sewage exfiltration into the ground, reduce risk of sewer back-ups, and reduce infiltration of clean water into the sanitary sewer system.
2015B	Jackson Chatsworth Sewer Lining	$431,486	Complete	Lining of aging and defective sewer pipes with cured in place pipe lining in order to extend service life, reduce sewage exfiltration into the ground, reduce risk of sewer back-ups, and reduce infiltration of clean water into the sanitary sewer system.

Bond Issue	Project	Actuals	Project Status	Project Description & Environmental Impact
2016B	Arterial Sewer Lining	$1,657,750	In Progress	Lining of aging and defective Sewer pipes with cured in place pipe lining in order to extend sewer service life, reduce amount of sewage exfiltration into ground, reduce risk of sewer back-ups, reduce amount of clear water (rain & ground water) entering the sanitary sewer system that does not need to be treated by wastewater treatment plant (thereby reduces treatment costs).
2016B	2016 Misc Sewer Lining	$617,816	In Progress	Lining of aging and defective sewer pipes with cured in place pipe lining in order to extend service life, reduce sewage exfiltration into the ground, reduce risk of sewer back-ups, and reduce infiltration of clean water into the sanitary sewer system.
2017C	Ashland-Central Sewer Lining Project	$0	Not Started	Lining of aging and defective Sewer pipes with cured in place pipe lining to extend sewer service life, reduce amount of sewage exfiltration into ground, reduce risk of sewer back-ups, reduce amount of clear water (rain & ground water) entering the sanitary sewer system that does not need to be treated by wastewater treatment plant (thereby reduces treatment costs).
2017C	Misc Sewer Rehab Project	$0	Not Started	Lining of aging and defective Sewer pipes with cured in place pipe lining, and/or brick manhole rehab to extend sewer service life, reduce amount of sewage exfiltration into ground, reduce risk of sewer back-ups, reduce amount of clear water (rain & ground water) entering the sanitary sewer system that does not need to be treated by wastewater treatment plant (thereby reduces treatment costs).

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City of Saint Paul Investor Relations website: https://www.stpaulbonds.com/

The material provided in this report is intended to be informational reporting of project spending of the City of Saint Paul's Green Bonds and is not intended to provide investment advice or professional assessment of project impacts.