



PARTNERS FOR A CLEANER ENVIRONMENT

Climate Bonds INITIATIVE



GREEN BOND FRAMEWORK

**Milwaukee Metropolitan Sewerage District
Capital Budget Plans and Upcoming Green Bonds**



February 18, 2020

1. INTRODUCTION

The Milwaukee Metropolitan Sewerage District (MMSD or the District) provides sewerage services in Milwaukee, Wisconsin. MMSD captures and treats 98.5% of the wastewater generated across its service area, comprising urban and unincorporated areas along the southwest shore of Lake Michigan. MMSD ranks among the largest sewerage utilities in the country, encompassing a service area of nearly 411 square miles with a population of about 1.1 million across 28 municipalities.

To fulfill MMSD's primary mission of protecting public health and the environment through world-class, cost-effective water resource management, leadership, and partnership, MMSD operates and maintains an extensive array of facilities. Two water reclamation facilities—Jones Island and South Shore, with a combined maximum plant capacity of 630 million gallons daily—are the centers of MMSD's services and the main focus of funding along with other system-wide improvements.

MMSD has set aggressive goals to improve its environmental impact and sustainability (see Appendix C) and is committed to protecting the natural environment as it carries out its mandate to provide cost-effective sanitary sewer services. This commitment is reflected in the organization's core values and environmental stewardship, which guide behavior and decision-making surrounding investments into water treatment infrastructure and assets. MMSD's commitment to sustainability is reflected in its formally adopted plans which collectively address integrated watershed management, climate change mitigation/adaptation with an emphasis on energy efficiency, and greenhouse gas reporting. Examples of MMSD's proactive efforts include:

- **Energy Plan** – MMSD has goals to meet 100 percent of energy needs with renewable energy sources and 80 percent of energy needs with internal, renewable energy sources.
- **Landfill Gas Project** – This project produces the majority of energy needed at the Jones Island Water Reclamation Facility during dry weather.
- **Solar Power** – Solar panels at the Jones Island Water Reclamation Facility have offset over 300 metric tons of carbon to date.
- **The “Food is Fuel” Program** – This program encourages use of food waste to produce energy and fertilizer and diverts waste from landfills.
- **MMSD Climate Change Vulnerability Report**
- **Green House Gas Inventory**

More on these plans and programs, as well as MMSD's Sustainability Plan and vision, can be found at: www.mmsd.com/what-we-do/sustainability

In line with these sustainability objectives and plans, MMSD intends to issue green bonds to finance eligible projects.

2. GREEN BOND FRAMEWORK

In support of the green bonds to be issued by MMSD, a framework has been created that lays out the four pillars of the Green Bond Principles (“GBP”) and Climate Bonds Initiative (“CBI”) Standard. These include:

- Use of Proceeds;
- Project Evaluation and Selection Process;
- Management of Proceeds; and
- Reporting.

2.1 Use of Proceeds

MMSD projects to be financed with green bonds must meet criteria in one or more of the following green bonds categories:

Climate Bonds Initiative (Eligible Sectors)
Water Infrastructure: Installation or upgrade of water treatment infrastructure
Low Carbon Transport: Low carbon fueling infrastructure
Solar Energy
Green Bond Principles (Eligible Project Categories)
Pollution prevention and control
Renewable energy
Sustainable water and wastewater management
Climate change adaptation
Clean transportation
Energy Efficiency

Aligned with its mission, MMSD has adopted a 2019-2021 Strategic Plan that augments existing efforts to maintain, identify and rehabilitate problem areas within its sewer system. Investment actions by the organization will enhance its ability to meet its mission. MMSD has identified candidate projects aimed at making its infrastructure more sustainable, which include one or more of the following activities:

Water Infrastructure

- Installation of high-efficiency wastewater processing equipment, pumps, motors, and valves
- Sewer system rehabilitation to prevent overflow in waterways
- Sewer line blockage assessments
- Polychlorinated Biphenyls (PCB) remediation and rehabilitation
- Installation of new equipment and systems
- Information technology software upgrades
- Advanced mixing systems
- Reducing infiltration and inflow from local sewers
- Install enhanced power reliability equipment at water reclamation facilities

Low Carbon Transport

- Electric vehicle charging infrastructure

Energy Efficiency

- Energy efficient HVAC improvements
- Energy efficient lighting fixture replacements across facilities
- Additional landfill gas for renewable energy source

Climate Change Adaptation

- Community based green infrastructure

Additional Activities

- Greenseams® is an innovative flood management program that permanently protects key lands containing water-absorbing soils and sequesters carbon. MMSD has implemented this program to help municipalities in the District meet their commitments to address stormwater runoff and improve water quality. Green infrastructure also helps reduce inflows to the MMSD system. Green infrastructure projects are a high priority for the District due to their multiple community benefits.
- Milorganite® fertilizer facility improvements (see Appendix D for more information)

Projects focused on the activities above, as well as additional projects provided in Appendix A, are eligible to be funded in whole or in part with green bonds.

2.2 Project Evaluation and Selection Process

MMSD utilizes a robust and transparent annual process to prioritize capital improvements for financing, and the District maintains long-range financing plans for its Operation and Maintenance and Capital budgets. The Capital Improvements Program identifies the project list, which is presented in Appendix A of this Framework, as a priority for bond financing.

The typical budget process involves:

- Budget requests identifying total needs, wants, and priorities are submitted by staff and stakeholders
- Budget staff review the budget requests and work with stakeholders
- Review, analysis, and prioritization to create a budget

The timeline for this process is outlined in Figure 1.

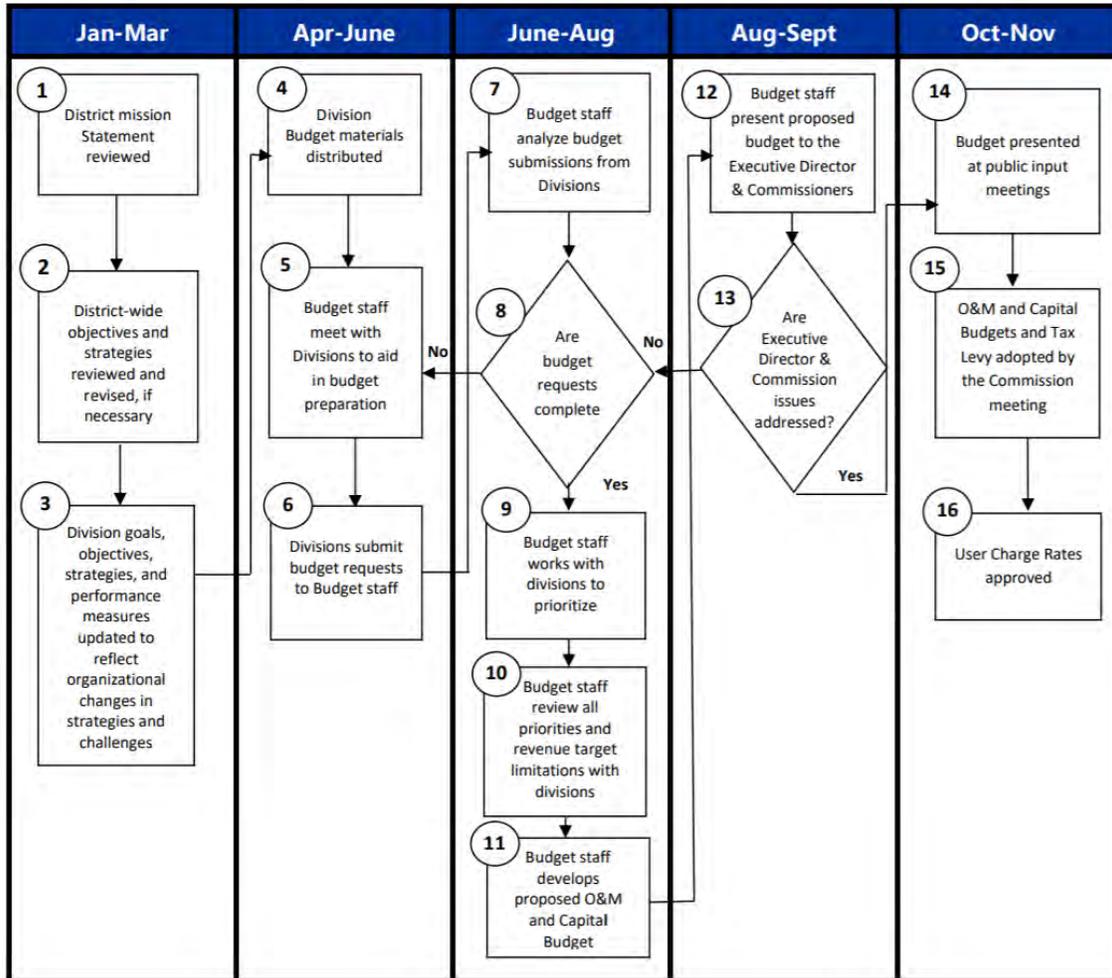


Figure 1: Budget Timeline and Process from MMSD 2020 Operations and Maintenance and Capital Budgets Document

Projects to be financed are evaluated and selected based on:

- a) Alignment with the current Strategic Plan, Facilities Plan and asset management needs; Total Maximum Daily Load (TMDL) for the Milwaukee River Basin; and 2035 Vision;
- b) Business case studies and community benefits (identify need, options, and preferred solution);
- c) A thorough vetting process including stakeholder consultation; and
- d) Review by Budget Staff and final approval by Executive Director and Commissioners.

Staff of MMSD compiles project recommendations which are presented to the Commission through either the Operations Committee or the Policy, Finance and Personnel Committee.

MMSD will engage an accredited External Reviewer to evaluate how selected projects meet the specific criteria for each green bond category or Climate Bond sector criteria. Only bond financings with eligible projects that meet the criteria will be nominated for financing with green bonds.

2.3 Management of Proceeds

Proceeds from green bonds will be specifically directed to pay the costs of design, construction, property acquisition, and other related expenses necessary for the eligible projects. Ensuring that green bond proceeds are allocated only to designated green projects and activities will be the responsibility of MMSD's Director of Finance/Treasurer, Ms. Mickie Pearsall.

MMSD's green bond proceeds will be held in a segregated account and used exclusively to finance eligible green projects. A record of such will be maintained by MMSD. Green bond proceeds may also be used to pay the cost of issuance and underwriter's fees related to this transaction. These costs will be specifically delineated in closing documents.

MMSD provides a Comprehensive Annual Financial Statement which is prepared by an independent auditor. The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the District for its comprehensive annual financial report (CAFR) for the fiscal year ended December 31, 2017. This was the 40th consecutive year that the District has received this prestigious award.

MMSD will add a "Green Bonds" section to its Comprehensive Annual Financial Statement beginning in 2020. The Green Bonds section will include information on allocation of bond proceeds and major accomplishments achieved with the investments.

2.4 Reporting

Allocation Reporting and Impact Reporting

MMSD will provide continuing disclosures as to the status of the bonds and funds expended. Such information will be posted to the Electronic Municipal Market Access (EMMA) website of the Municipal Securities Rulemaking Board, accessible at www.emma.msrb.org.

MMSD will also voluntarily produce an annual report detailing how the green bond proceeds were used to finance the selected projects, a description of the selected projects, details of the environmental benefits resulting from the projects, and how the projects conform to the United Nations Sustainable Development Goals. This report will be included as a section in the MMSD Comprehensive Annual Financial Statement, which will be posted on the EMMA website.

Appendix A. Selected Projects

Based on the project criteria and project planning and development articulated above, MMSD proposes the following projects to be financed with the proceeds of its inaugural green bonds in March 2020.

Project ID	Project Name	Expected Cost	Project Benefit
Jones Island Water Reclamation Facility			
J01019**	Jl Force Main Assessment	\$490,765.92	Installing higher efficiency wastewater processing equipment and improving overall energy efficiency help reduce MMSD's energy use and total power costs. This allows the District to reduce its carbon footprint while reducing operating costs.
J01024	Harbor Siphon Structures & Adjacent Asset Modifications	\$2,736,709.53	
J01026	Primary Clarifier 2 & 8 Withdrawal Piping Replacement	\$177,640.25	
J01027	Primary Clarification, Sludge and Scum Pumping	\$280,600.69	
J01028	Primary Clarifier Drive Improvements	\$213,532.06	
J04035**	Greens Grade Train Replacement and Redundant Train Evaluation	\$3,481,205.75	
J04037**	Thickened Sludge Improvements	\$1,121,635.17	
J04046**	D&D ID Fan Energy Conservation	\$596,800.42	
J04060**	Sludge Cake Transport & Feed Conveyors Replacement	\$6,618,131.67	
J04061*	D&D PLC 5 Upgrades	\$550,000.00	
J04066	Milorganite Dust Suppressant System Upgrades	\$476,403.00	
J04067	D&D South Cake Loadout System	\$716,923.50	
J04068	E/B Tank Odor Removal	\$179,979.67	
J04070	Milorganite Facilities Improvements Phase V	\$639,902.28	
J06066**	Power System Improvements	\$869,482.17	
South Shore Water Reclamation Facility			
S02008*	SS Capacity Improvements	\$1,147,080.92	Higher efficiency wastewater processing equipment, upgraded HVAC systems, and new Variable Frequency Drive pumps help reduce MMSD's energy use and operating costs. This allows the District to reduce its carbon footprint while reducing costs.
S02014**	Secondary Clarifier Idling Control	\$19,502.08	
S02015	Aeration Basin Diffuser Replacement	\$5,710.75	
S03002**	SS Chloramination	\$111,202.67	
S03003	Post-Secondary Capacity Improvements	\$565,002.33	
S03004	Effluent Pump MCC and VFD Upgrade	\$197,039.50	
S04010**	Thickening Process Capacity Enhancements	\$186,612.25	
S04034	High Strength Waste Mixing Improvements	\$52,627.08	
S04036	Bldg. 383 HVAC Replacement	\$486,782.40	
S06036**	Gas Compressor 5 DG Enhancements	\$86,566.33	
S06038	2018 SS Capital Equipment Rehabilitation/Replacement	\$3,297,405.92	
S06043	SS Buffer Zone	\$22,662.17	
Interplant Pipeline			
P01005*	Interplant Pipeline Improvements - Phase II	\$200,000.00	Ensure treatment system reliability and improve safety.
Conveyance			
C02009	Hydrogen Sulfide & Odor Mitigation Study	\$386,089.75	

Project ID	Project Name	Expected Cost	Project Benefit
C02010**	Force Main Franklin Muskego Rehabilitation Project	\$319,975.33	Improvements to Hatch Covers improve public safety and worker safety. Upgrades to infrastructure improve sewer system reliability.
C02012	10th Avenue MIS Lateral Reconstruction	\$86,956.08	
C05055	BS0503 Facility Upgrades	\$29,322.00	
C06022	Rehabilitate Structures - 4th & Scott/7th & Scott	\$292,892.15	
C98044**	MIS Abandonment	\$440,628.83	
C98047	Access Hatch Covers	\$1,153,843.75	
C98052	Miscellaneous Sewer Rehab	\$55,633.75	
C98055	Conveyance Equipment Replacement	\$208,333.33	
Inline Storage System			
I03008	CSO102 Rehabilitation - Humbolt	\$1,008,446.42	These improvements ensure public safety and health.
I03011	Outfall Backflow Prevention	\$900,904.59	
Control System			
K01012**	Conveyance SCADA Upgrade	\$752,046.17	SCADA systems help improve operational efficiency. SCADA upgrades keep operations running at optimum efficiency.
Watercourse and Flood Management			
W10001	Milwaukee River Flood Mgt	\$768,477.75	Demonstrating commitment to the greater watershed, MMSD incorporates many watershed restoration and improvement projects to improve community health and the natural environment.
W10002	Estabrook Dam Removal	\$99,281.08	
W11030**	E - North 30th Street Corridor Wet Weather Relief - East	\$106,622.08	
W11031	W - North 30th Street Corridor Wet Weather Relief - West	\$1,734,509.75	
W13002	Indian Creek Improvements	\$77,064.17	
W15001	Beaver Creek Flood Management	\$63,847.72	
W20018	Concordia Avenue	\$2,918.92	
W20023	Phase II Menomonee River Stream Mgt	\$45,722.92	
W20027**	Western Milwaukee Phase 2A	\$21,084.25	
W20028**	Western Milwaukee Phase 2B	\$7,501,773.58	
W20029	Western Milwaukee Real Estate & Environmental Assessment	\$161,584.42	
W21006**	Phase II - Underwood Creek Reach 1, Phase II - CR	\$31,126.33	
W21007	Underwood Creek Reach 2 - CR	\$3,337,492.75	
W24005	Honey Creek Watercourse Mgmt. Plan & BMPs	\$33,599.50	
W24007	Honey Creek Reach 2 - CR	\$464,542.75	
W24010	State Fair Culvert Preliminary Engineering	\$227,050.44	
W28001	Schoonmaker Creek	\$15,567.75	
W28002	Daylighting Schoonmaker Creek	\$64,424.83	
W29002	Burnham Canal	\$3,219,092.50	
W34002**	Phase 2 Root River W. Branch Flood Management Study	\$10,725.00	

Project ID	Project Name	Expected Cost	Project Benefit
W40002**	KK River Real Estate Decon./Demo. & Pulaski Park	\$1,031,979.96	
W40007	KK River Reach 3 - CR	\$508,584.67	
W40009**	Jackson Park	\$3,926,318.92	
W40010**	KK River Watershed	\$533,899.67	
W40012	KK River - 6th to 16th St.	\$2,996,435.92	
W40013**	KK River - Railroad to 27th St.	\$810,557.00	
W40016**	KK River Sewer Modifications	\$3,231,953.08	
W41001	KK River Flood Management - Lyons Creek (W026)	\$160,391.08	
W41003	Lyons Park Creek Streambank Stabilization	\$492,245.58	
W42003	43rd Street Ditch Reach 1 - CR	\$1,165,764.92	
W45002	Wilson Park Creek Reach 3 - CR	\$1,881,470.67	
W50006	Oak Creek Watershed Restoration Plan	\$59,989.42	
W61002	Fish Creek Flood Acquisitions	\$97,449.08	
W97003**	GMRCPP - Greater Milwaukee Regional Conservation Partnership Program	\$1,726,323.50	
W97004**	Greenseams Phase 2	\$2,200,000.00	
	Green Infrastructure		
G98011	Community Based Green Infrastructure Implementation	\$2,003,995.08	By investing in community based green infrastructure, MMSD is addressing sustainability, public and environmental health, and climate change adaptation.
	Facilities Planning		
M01029	HQ Wharf Wall System Restoration	\$1,526,633.08	Upgrades to facilities improve energy and operational efficiency. By adding electric vehicle charging infrastructure, MMSD is showing leadership in low carbon transportation and reducing emissions.
M01032**	N. 44th Street Property Restoration (Miller Park Area)	\$1,049,745.58	
M01033	4044 N. 31st Street Demolition/Deconstruction	\$90,096.92	
M01034	HQ Parking Lot Solar Powered Electric Vehicle Charging Stations	\$609,758.92	
M01037	HQ and Lab Facility Improvements	\$1,612,425.83	
M01038	Water Quality Equipment Procurement	\$294,000.00	
M01040	13th Street Upgrades	\$102,932.42	
M06011	Information Technology Software Systems	\$33,333.33	
M06013	Capital Program Management System Implementation	\$36,799.67	
M06016	Enterprise Resource Management System Implementation	\$4,375,000.00	
	Total	\$81,707,571	

Appendix B. U.N. Sustainable Development Goals and MMSD

Supporting the United Nations Sustainable Development Goals

In 2015, the international community adopted a set of 17 Sustainable Development Goals (SDGs) as part of the United Nations 2030 Agenda for Sustainable Development. The Agenda’s 17 SDGs and the associated 169 targets aim at stimulating action through 2030 in areas of critical importance for people and the planet. In order for the goals to be reached, the United Nations asks everyone to do their part, including governments, non-governmental agencies, business, and private citizens.

The District’s vision of a healthier, cleaner, resilient region ties to the Sustainable Development Goals and in 2020, the District will emphasize work on the following goals:

- **Goal 6: Clean Water and Sanitation** - Ensure access to water and sanitation for all
- **Goal 7: Affordable and Clean Energy** - Ensure access to affordable, reliable, sustainable and modern energy
- **Goal 13: Climate Action** - Take urgent action to combat climate change and its impacts
- **Goal 14: Life below Water** - Conserve and sustainably use the oceans, seas and marine resources
- **Goal 15: Life on Land** - Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

The table on the following page discusses the District’s connection to each of the 17 goals, with a green circle indicating a strong tie, yellow a weaker tie, and red no tie. Throughout the 2020 budget book, projects that include work to help achieve the above goals are noted with a Sustainable Development Goals logo.



Sustainable Development Goal	Level of Alignment with MMSD Vision and Goals
1. No Poverty	● No explicit goals, policies, or actions related to this SDG.
2. Zero Hunger	● No explicit goals, policies, or actions related to this SDG.
3. Good Health and Well-Being	● No explicit goals, however, the District promotes open space and the health benefits of green infrastructure in the region. Since healthcare is not a direct responsibility of the District, most of the goals focus on the relationship between public health and land use.
4. Education	● Similar to SDG #3, education is not a direct responsibility of the District. The District's Educational Outreach group works with K-12 students to promote environmental literacy.
5. Gender Equality	● No explicit goals, policies, or actions related to this SDG.
6. Clean Water and Sanitation	● The District's mission and vision are directly related to protecting clean water and sanitation. An extensive set of goals, permit requirements, and measures align with this SDG.
7. Affordable and Clean Energy	● An extensive set of goals, policy objectives, and measurable targets align with this SDG.
8. Decent Work and Economic Growth	● Several broad goals related to economic development are included in the District's policies.
9. Industry, Innovation, and Infrastructure	● The District's Regional Resilience Plan emphasizes the need for building resilient infrastructure.
10. Reduced Inequalities	● No explicit goals, policies, or actions related to this SDG.
11. Sustainable Cities and Communities	● An extensive set of goals, policy objectives, and measurable targets align with this SDG.
12. Responsible Consumption and Production	● The District promotes public procurement practices that are sustainable.
13. Climate Action	● The District's 2035 Vision is directly related to climate change mitigation with an emphasis on energy efficiency. An extensive set of goals, permit requirements, and measures align with this SDG.
14. Life Below Water	● The District's Water Quality Protection division routinely collects data on stormwater and urban runoff as it affects water quality and ecological health. The Sustainability group emphasizes protecting and enhancing biodiversity in its urban projects.
15. Life on Land	● A small set of goals align with this SDG. Increasing biodiversity in urban environments is a goal of new green infrastructure projects. The Greenseams® program emphasizes the conservation, restoration and sustainable use of land.
16. Peace, Justice, and Strong Institutions	● No explicit goals, policies, or actions related to this SDG.
17. Partnerships for the Goals	● No explicit goals, policies, or actions related to this SDG.

Source: MMSD 2020 Operations and Maintenance and Capital Budgets Document

Appendix C. MMSD Awards and Goals

Awards

1979-2019 GFOA Certificate of Achievement for Excellence in Financial Reporting

2018 Rivers, Trails, and Conservation Assistance Program Partner Excellence Award

2017 Leading Utilities of the World Award

2016 NACWA Water Resources Utility of the Future Award

Gathering Waters – Policymaker of the Year Award

2015 NACWA Water Resources Utility of the Future Award

Goals

Integrated Watershed Management

- Zero sanitary sewer overflows
- Zero combined sewer overflows
- Zero homes in the 100-year floodplain
- Acquire an additional 10,000 acres of river buffers
- Use green infrastructure to capture the first 0.5 inch of rainfall (Goal = 740 million gallons)
- Harvest the first 0.25 gallon per square foot of area of rainfall (Goal = 630 million gallons)

Energy Efficiency and Climate Mitigation & Adaptation

- Meet 100% of MMSD's energy needs with renewable energy sources
- Meet 80% of MMSD's energy needs with internal, renewable sources

Source: MMSD 2020 Operations and Maintenance and Capital Budgets Document

Appendix D. Milorganite Fertilizer

MMSD has been recycling biosolids since 1926, to make a nutrient-rich byproduct that is transformed into a highly effective fertilizer. The District produces Milorganite®, a premier organic fertilizer which is all-natural, pesticide-free, and free of mined resources and synthetics. Milorganite production is currently the most environmentally friendly, cost-effective beneficial reuse solution for disposal of biosolids from the Jones Island and South Shore Water Reclamation Facilities.

Fertilizers derived from organic sources provide benefits to both plants and soil, and when used properly generally won't burn or damage plants. Soil microbes play a key role in converting organic fertilizers into soluble nutrients that can be absorbed by plants at a rate they can use. Organically derived fertilizers stimulate microorganisms in the soil, improve the soil structure, and can provide the secondary nutrients that plants require.

Organically derived fertilizers also typically have a lower NPK analysis (nitrogen, phosphorus, potassium) than synthetic fertilizers, but they feed plants for a much longer period of time. As a result, the impact of organic fertilizers on lawns and crops, is usually more subtle. It may take a little longer to see results, but the reward is a lawn that stays greener longer.

Appendix E. Future Projects

MMSD proposes the following improvements as part of its Capital Improvements Program for future issuances.

Jones Island Water Reclamation Facility Improvements

At the Jones Island facility, major rehabilitation projects currently underway or planned from 2020 through 2025 include the following:

Primary Treatment

- Preliminary Facility Electrical Upgrade - \$4.3 million
- Harbor Siphon Structures and Adjacent Asset Modifications - \$3.8 million
 - Secondary Treatment
- Aeration System Diffuser Replacement - \$3.6 million
- Aeration Basin Concrete Rehabilitation - \$4.5 million
 - Solids Processing
- Greens Grade Train Replacement and Redundant Train Evaluation - \$4.6 million
- Dewatering and Drying Dryers Guillotine Gate Replacement - \$3.4 million
- Sludge Cake Transport and Feed Conveyors Replacement - \$7.2 million
- Dewatering & Drying Programmable Logic Controller 5 Upgrades \$7.3 million
- Chaff System Improvements - \$13.7 million
- Dewatering & Drying First Stage Classification Equipment Replacement - \$9.4 million
- Milorganite Packaging Facility - \$8.7 million

General Plant

- Gas Turbine Replacement – Phase II - \$3.6 million
- Dryer Conversion for Additional Landfill Gas - \$4.9 million
- Rolling Stock & Other Equipment - \$6.9 million

South Shore Water Reclamation Facility Improvements

At the South Shore facility, major rehabilitation projects currently underway or planned from 2020 through 2025 include the following:

Primary Treatment

- Primary Clarifier Rehabilitation - \$12.1 million
- Grit Equipment Replacement - \$3.5 million
 - Secondary Treatment
- Capacity Improvements - \$3.7 million

Solids Processing

- Digester Mixing Improvements Phase II - \$4.7 million
- Aeration Basin Concrete Rehabilitation Phase III & IV - \$4.9 million
- Digester 6 and 8 Mixer Replacement - \$2.6 million

General Plant

- Rolling Stock & Other Equipment - \$6.3 million

Interplant Pipeline Facility Improvements

Work on the Interplant Solids Pipeline includes \$15.4 million for planned Interplant Solids Pipeline improvements.

Conveyance Systems

The District operates and maintains an extensive system of intercepting sewers that collect and temporarily store wastewater from local sanitary and combined sewer systems. The 2020 CIP includes \$163.5 million for planned improvements to the conveyance system. The conveyance system is separated into three areas: The Metropolitan Interceptor Sewer (MIS) system, the Inline Storage System, and the Central Control System.

Metropolitan Interceptor Sewer Improvements

The purpose of the MIS system is to intercept wastewater from local sanitary and combined sewer systems within the service area. Wastewater within the MIS system is subsequently conveyed to either the Jones Island or the South Shore water reclamation facilities. \$96.2 million are included in the 2020 CIP for planned improvements to the MIS system.

Projects planned from 2020 through 2025 for MIS include the following structural and hydraulic upgrades to the central MIS portion of the service area:

- Force Main Greenfield Park Rehabilitation - \$2.5 million
- Mill/Green Bay/Green Tree MIS Relief - \$49.8 million
- Basin H PCB Remediation and Rehabilitation - \$4.4 million
- Edgewood MIS Extension - \$11.1 million
- River Road MIS & Glendale Sewer - \$17.6 million

Inline Storage System

The 2020 CIP includes \$19.7 million for rehabilitation of combined sewer overflow structures.

Central Control System

The goal of the Central Control System is to ensure that water reclamation and conveyance capacity is utilized in the most efficient manner. Through this system, flow can be diverted from one subsystem to another, or from one facility to another or to the Deep Tunnel. Approximately \$0.8 million is included in the 2020 CIP for planned improvements to the Central Control System.

Watercourse/Flood Management Projects

In addition to the collection and treatment of sanitary waste, the District works to provide environmentally responsible flood protection and has discretionary authority to make improvements to the watercourses contained in the six watersheds within the District's service area. In 1998, the District and local communities began the planning process for the development of an updated watercourse system management plan. Flood abatement alternatives are being developed and implemented for each of the six watersheds. The 2020 CIP includes \$187.2 million for planned watercourse improvement projects.

These improvements include both structural and non-structural flood control measures that are intended to remove structures from the 100-year floodplain. Key elements of this plan include:

- North 30th Street Corridor Wet Weather Relief - West - \$24.2 million
- Western Milwaukee Phase 2B - \$27.0 million
- Underwood Creek Reach 2-CR - \$7.2 million
- Kinnickinnic River Flood Management - \$37.5 million

- Jackson Park - \$17.9 million
- Wilson Park Creek Reach 3-CR - \$18.9 million

Other Projects

The 2020 CIP includes \$189.6 million for projects related to District facilities and facilities planning, including work related to the Private Property Infiltration and Inflow (“PPII”) Reduction Program, green infrastructure implementation, regional stormwater integration planning, and planning for the adaption to wet weather. It also includes the District’s Workforce & Business Development Resource Program, financial planning, risk management, and an allowance for cost and schedule changes.