



# Green Bonds

## **Project Expenditure Report**

as of June 30, 2022



**Metropolitan Water Reclamation District of Greater Chicago**

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*Front Cover: Addison Creek Reservoir, in Bellwood, Illinois, will be completed in 2023 and will be able to hold close to 200 million gallons of stormwater.*

# Overview

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) began to issue Green Bonds in 2014 to allow investors to invest directly in bonds which specifically or partially fund environmentally beneficial capital projects undertaken by the agency. Since then, the MWRD has issued nearly \$473 million in Green Bonds to fund a variety of sustainability-focused projects, including streambank stabilization efforts, construction of a phosphorus recovery facility, and a capital improvements project to improve energy efficiency and eliminate air pollution at various facilities. Green Bonds are secured by the full faith and credit of the MWRD, and therefore, holders of the bonds do not assume any specific project-related risk.

Green Bonds Issuance	Amount (millions)	Status
December 2014	\$ 225	fully expended
June 2016	104	partially expended
December 2021	144	partially expended
<b>TOTAL: \$473</b>		<b>million</b>

## Four Categories of the MWRD's Green Bonds

### 1. Tunnel and Reservoir Plan (TARP)

The MWRD's innovative TARP or "Deep Tunnel" system is designed to reduce flooding and pollution caused by combined sewer overflows (CSOs). TARP was adopted in 1972 as a comprehensive pollution and flood control program; today it provides relief for more than 3.5 million people living in a 352-square-mile area of combined sewer systems, collecting both sanitary sewage and stormwater. It is one of the country's largest public works projects for pollution and flood control. The primary goals of TARP are to protect Lake Michigan – the area's primary source of drinking water – from polluted backflows; clean area waterways; and provide an outlet for floodwaters in order to reduce basement flooding. Since it went online in 1985, the tunnel portion of TARP has reduced combined sewer overflow pollution in our rivers by about 85%. Since the Thornton Composite

Reservoir (TCR) went into service in late 2015 and Stage 1 of the McCook Reservoir went into service in late 2017, the percent of CSO captured has risen, and the amount of CSO volume has declined; this can be attributed to the addition of the reservoir. TARP captures the heavily polluted first flush of combined sewage from storms and continues to capture diluted sewage mixed with stormwater throughout each storm until capacity is reached. The water captured by the TCR is eventually pumped to the Calumet Water Reclamation Plant for treatment, and the water captured by McCook is eventually pumped to the Stickney Water Reclamation Plant. In 2021, the MWRD pumped back 38.1 billion gallons of water for treatment from the tunnels and reservoir, and even more water will be captured when McCook Reservoir Stage II comes into service.

As a result of these water quality improvements, aquatic life in waterways has flourished. The MWRD conducts fish monitoring periodically throughout its service area, which includes the Chicago, Calumet, and Des Plaines River Systems. The number of fish species found in the Chicago Area Waterway System (CAWS) has drastically increased since the 1970s when monitoring of the fish population first began. From 10 known species in 1974, that number has ballooned to 77 through 2021, including 60 that have been found in the CAWS since 2000.

Thanks in part to advancements of TARP and at MWRD water treatment operations, the waterways have experienced new life, a surge in recreational activity and economic development.

Performance metrics for TARP projects include tracking the reduction in CSOs discharged into the Chicagoland waterways, total detention and storage volume for the reservoirs during rain events, reduced frequency of diverting river water to Lake Michigan, and the quantity and diversity of fish species in the waterways measured over time.

## **2. Stormwater Management Program Projects**

As the stormwater management authority for Cook County since 2004, the MWRD has been working to address streambank erosion and flooding issues throughout the county. In 2014, Phase II of the MWRD's Stormwater Management Program was initiated to address local drainage problems, develop stormwater master plans across Cook County and establish a program for purchasing flood prone and flood damaged property on a voluntary basis. Through partnerships with local

communities and other government organizations, the MWRD has completed numerous stormwater projects to protect homes and businesses from erosion and flooding issues.

Performance metrics include linear feet of streambank stabilized, number of structures benefiting from flood control projects, and dollar value of flood damages prevented.

## **3. Resource Recovery Projects**

The MWRD is focusing on implementing sustainable and resilient practices in affecting a sustainable economy and financial base through the proper regulation and use of water, phosphorus, biosolids, and energy. The MWRD is pursuing innovative projects with respect to water and stormwater reuse; the MWRD completed the construction of a phosphorus recovery facility for reuse as

a fertilizer and is studying food to energy gas production from anaerobic digestion processes. Improved wastewater treatment and greater plant efficiency will allow the MWRD to increase production of biosolids.

Performance metrics include tons of phosphorus recovered and biosolids produced.

## **4. Water Reclamation Plant Expansions and System Improvements**

The MWRD's seven water reclamation plants clean an average of 1.3 billion gallons of wastewater each day. The total wastewater treatment capacity is over two billion gallons per day.

The MWRD's Capital Improvements Program includes replacing, remodeling, completing, altering, constructing, and enlarging water reclamation plants, water quality improvement

projects, or flood control facilities, and constructing pumping stations, tunnels, conduits, intercepting sewers and outlet sewers. It also includes purchasing air pollution equipment and property as well as covering engineering expenses for the design and construction of these various projects.

Performance metrics include optimization of aeration processes to reduce energy consumption, water reuse by converting current use of potable

water in plant processes, and reduction in greenhouse gas emissions.

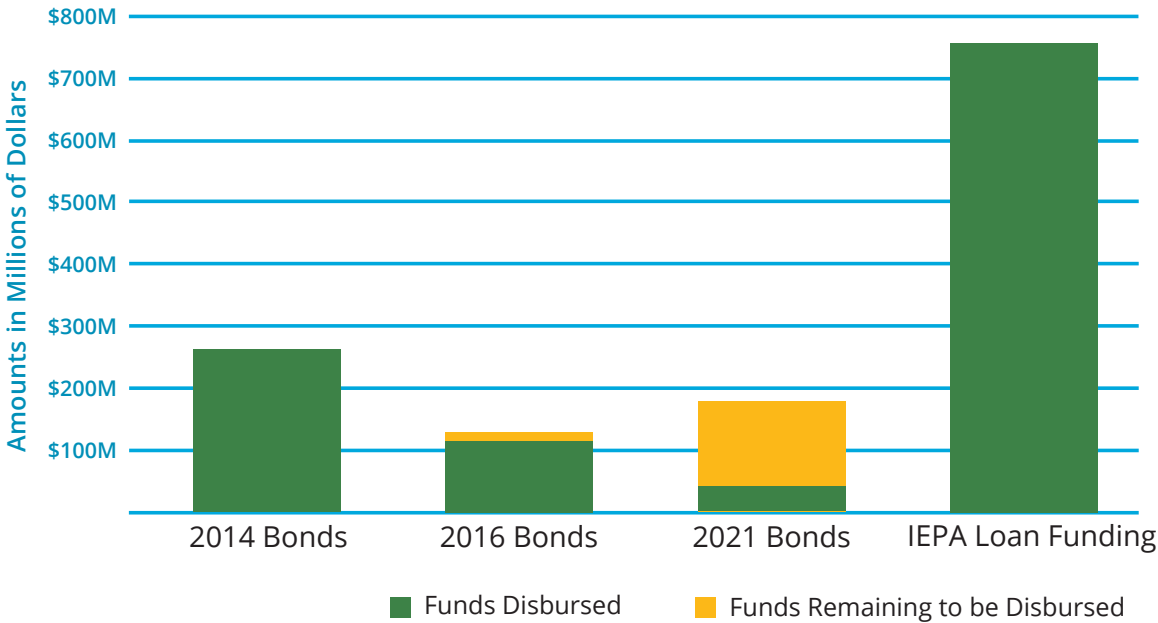
# Use of proceeds

The following is a summary of the programs and projects funded by the Green Bonds as of June 30, 2022. In some cases, the Green Bonds may only provide partial funding for the specific program and/or project, or proceeds from both bond sales may be utilized to complete the funding of larger scale projects. Additional State Revolving Loan funding may have been, or will be, provided for use in funding the projects. All Green Bond proceeds have been segregated for use for the purposes

identified in the overview section of this report. Until the proceeds are expended, specific projects may be added or deleted. Any projects added will comply with the eligible categories described in this report. See the Appendix to this report which details total project spending to date for the bonds that have not been fully expended. This report will be updated annually for each series of the bonds until all bond proceeds have been disbursed.

## Green Bond Funding

January 1, 2015 through June 30, 2022



# Highlighted Projects

*The status and description of some of the green bonds projects are provided below. Please see the Appendix for Complete Project Spending by Bond Sale for the bonds that have not been fully expended.*

## **Thornton Transitional and Composite Reservoirs**

On September 18, 2003, the USACE and MWRD signed a Project Cooperation Agreement (PCA) for construction of the Thornton Composite Reservoir where the Corps would construct the reservoir and the MWRD would take it over for operation. However, due to inadequate funding levels by the USACE and the need to have the Composite Reservoir operational, the MWRD assumed responsibility for the design and construction of the reservoir in June 2004 and is currently pursuing reimbursement of funds through the Water Resources Development Act.

The Thornton Reservoir was constructed in two stages. The first stage, a temporary flood control reservoir called the Thornton Transitional Reservoir, was completed in March 2003 in the West Lobe of the Thornton Quarry and taken out of service in September 2022 upon connection of the Thorn Creek overflow tunnel to the permanent Thornton Composite Reservoir. While in service, the Thornton Transitional Reservoir captured over 58.0 billion gallons of flood water during 83 fill events.

The second stage is the permanent combined reservoir, called the Thornton Composite

Reservoir, constructed in the North Lobe of the Thornton Quarry. The Thornton Composite Reservoir provides 7.9 billion gallons of storage. In accordance with an agreement executed in 1998, a local mining company completed the Thornton Composite Reservoir excavation in 2013. Construction continued and the composite reservoir became operational at the end of 2015. The Thornton Composite Reservoir benefits 556,000 people in 14 communities. Since becoming operational, the Thornton Composite Reservoir has prevented more than 54.1 billion gallons of combined sewage from entering the waterways.



*The Thornton Composite Reservoir provides 7.9 billion gallons of storage. Since becoming operational in 2015, this reservoir has prevented more than 53.4 billion gallons of combined sewage from entering the area waterways.*

# Addison Creek Reservoir and Channel Improvements



Ground was broken on the Addison Creek Reservoir, in Bellwood, Illinois, in 2019. When completed in 2023, it will be able to hold close to 200 million gallons of stormwater.

The Addison Creek Reservoir and the Addison Creek Channel Improvements are two associated flood control projects that will work together to provide significant benefits to communities along Addison Creek, including Bellwood, Northlake, Stone Park, Melrose Park, Westchester, and Broadview. The 600-acre-foot Addison Creek Reservoir will hold close to 200 million gallons of storage capacity and connect with the Addison Creek Channel.

Ground was officially broken on the Reservoir in April 2019 with anticipated completion in early 2023. The reservoir's construction calls for a control structure, inlet structure, spillway, and pumping station. In addition to providing flood control benefits, the reservoir will serve as compensatory storage for the channel improvement project.

Construction on the channel improvements will start in 2023, with anticipated completion in early 2026. The project will include a mix of natural design, gabion baskets, soldier pile walls, concrete, riprap, articulated concrete blocks, vegetation clearing, and removal of three bridges. The total construction cost is estimated to be \$60-million. The MWRD has applied for a

\$10 million FEMA Hazard Mitigation Grant for the project and is awaiting selection.

The Addison Creek Reservoir and Channel Improvement projects will help alleviate public health and safety concerns by reducing over-bank flooding to approximately 2,200 structures along the creek from Northlake to Broadview, including 1,700 structures that will be removed from the floodplain. According to the Illinois Department of Natural Resources, the project will allow many of the flood-prone residents of these six communities to qualify for flood insurance premiums which are up to 80 percent less expensive. The reservoir will provide approximately \$116 million in flood benefits. Flood reduction benefits will be *(continued)*



## Addison Creek Reservoir, *cont.*

fully achieved when both of these projects are completed. In addition to mitigating flooding, the two projects will also improve quality of life by enhancing green space, including new walking paths and other recreation improvements being coordinated with the local communities. The MWRD will operate and main-

tain the control and inlet structures, spillway, piping, and pump station, while Bellwood will maintain the grounds including landscaping, fencing, and access roadways at the reservoir. All channel improvements will be maintained by each of the six benefiting municipalities.

## Replacement of Tailrace Stop Logs Headrace



*Turbines used at the Lockport Powerhouse generate between 30 to 40 million kW of electricity annually.*

The Lockport Powerhouse utilizes turbines to generate electricity. Annually, the turbines produce between 30 and 40 million kWh of electricity that is then put back onto the grid, resulting in revenue to the MWRD. This project will design, fabricate, and install tailrace stop logs for Bays 1 and 2, and replace the headrace gates, tailrace stop logs, and associated hoist systems. The current headrace gates are not properly functioning, the tailrace stop logs are rusted, and the associated hoist system is not operational; consequently, the chambers of Bays 1 and 2 cannot be drained to allow inspection, and maintenance of the turbines has been delayed. Once completed, this project will allow for the isolation of these bays along with annual inspection and maintenance which will prolong the life of the turbines and allow the Powerhouse to continue to generate renewable electricity.

**The next report will be prepared and posted to the MWRD's website detailing capital expenditures through June 30, 2023.**

# Appendix

## Project Spending Report

**2016 Series C  
General Obligation Unlimited Tax Capital Improvement Bonds  
July 1, 2016, through June 30, 2022  
\$30,000,000 Principal**

Project Name	Project Number	Estimated Total Project Cost	Spending 7/1/2016 - 6/30/2022	Estimated Useful Life of Project (years)
<b>McCook Reservoir Vulcan Agreement Hard Costs, SSA</b> <i>Agreement with Vulcan to mine out a rough hole at the site of the McCook CUP Reservoir.</i>	73161EH	\$ 94,717,000	\$ 14,300,883	50
<b>Thornton Composite Reservoir - Mining, Land, and Corp Costs, CSA</b> <i>Acquisition of the north lobe of the Thornton Quarry, and mining and use of the west lobe for the transitional reservoir. This allows for the use of the Thornton Composite Reservoir to capture combined sewer overflows and for the Thornton Transitional Reservoir to capture flood waters from Thorn Creek.</i>	772352F	\$ 52,806,000	\$ 4,739,688	50
<b>Thornton Composite Reservoir - Connecting Tunnels &amp; Gates, CSA</b> <i>Professional post-award services for the Connecting Tunnels &amp; Gates, Thornton Composite Reservoir and TARP Mainstream Dropshaft at Armitage Avenue, SSA. Design of TARP Mainstream Dropshaft at Armitage Avenue, SSA.</i>	042024F	\$ 9,315,000	\$ 4,021,638	50
<b>McCook Reservoir Expanded Stage 2 Slope Stabilization and Retaining Walls, SSA</b> <i>Construction of a soil nail retaining wall and slope stabilization work on the McCook Reservoir. This will provide sufficient mining reserves to achieve the intended capacity of 10 billion gallons as part of the District's Tunnel and Reservoir Plan to prevent flooding and pollution from combined sewer overflows.</i>	161254F	\$ 8,210,092	\$ 3,032,375	50
<b>Decommissioning Thornton Transitional Reservoir</b> <i>Excavation of existing rock plug in Thornton Creek Connection Tunnel, installation of East and West tunnel plugs in Thornton Creek Diversion Tunnel, placement of mass concrete fill between East tunnel plug and connection tunnel, installation of lining and contact grouting in portions of the connection tunnel and diversion tunnel, and related work to reroute Thornton Creek Overflow to the Thornton Composite Reservoir.</i>	152664H	\$ 25,314,000	\$ 2,463,465	50
<b>McCook Reservoir Des Plaines Inflow Tunnel</b> <i>Construction of a tunnel that will connect the Des Plaines tunnel directly to the McCook Reservoir including a gate shaft, primary gate, backup gate, gate control building, temporary construction access shaft, tunnel portal and highway stability measures, and an energy dissipation apron with baffle blocks. The McCook Reservoir project will help prevent flooding and pollution from combined sewer overflows (CSO).</i>	131064F	\$ 109,841,000	\$ 2,153,900	50
<b>Other Projects</b>			\$ 4,458,340	

**Project Expenditures 7/1/2016 - 6/30/2022**      **\$ 35,170,289**      **97%**

<b>Principal Amount of Bonds</b>	<b>\$ 30,000,000</b>
<b>Original Issue Premium</b>	<b>\$ 5,739,300</b>
<b>Costs of Issuance</b>	<b>\$ (79,534)</b>
<b>Fund Transfer of Investment Earnings</b>	<b>\$ (1,000,000)</b>
<b>Investment Income</b>	<b>\$ 1,495,318</b>
<b>Available for Spending</b>	<b>\$ 36,155,084</b>

**Remaining Available for Spending**      **\$ 984,795**      **3%**

**2016 Series E**  
**General Obligation Unlimited Tax Bonds (Alternate Revenue Source)**  
**July 1, 2016, through June 30, 2022**  
**\$50,000,000 Principal**

Project Name	Project Number	Estimated Total Project Cost	Spending 7/1/2016 - 6/30/2022	Estimated Useful Life of Project (years)
<b>Addison Creek Reservoir</b> <i>Excavation and installation of flood control reservoir in Bellwood; includes control structure, inlet structure, spillway, piping and a pump station. This will reduce overbank flooding to approximately 2,200 structures along Addison Creek and serve as compensatory storage for a channel improvement project.</i>	111863F	\$ 109,542,000	\$ 16,172,581	50
<b>Melvina Ditch Reservoir Improvements</b> <i>Expansion of the existing Melvina Ditch Reservoir; modification of the pump station to accommodate the reservoir expansion, and installation of a new emergency overflow weir to reduce the likelihood of reservoir overtopping. This will help alleviate flooding in Burbank and Oak Lawn.</i>	142633F	\$ 21,452,000	\$ 9,883,556	50
<b>Buffalo Creek Reservoir Expansion</b> <i>Expansion of the existing Buffalo Creek Reservoir. This project is a modification of the original BUCR-3 project identified in the Lower Des Plaines Detailed Watershed Plan, including relocating trails and bridges above the reservoir's inundation level. Approximately 107 structures will receive flood protection from the expansion.</i>	133703F	\$ 9,678,900	\$ 8,115,226	50
<b>Albany Park Stormwater Diversion Tunnel</b> <i>Installation of a stormwater diversion tunnel to alleviate overland flooding in the Albany Park neighborhood in Chicago to reduce overbank flooding affecting 336 structures in the area.</i>	140663F	\$ 24,750,000	\$ 6,745,388	50
<b>Addison Creek Channel Improvements</b> <i>Improvements to channel conveyance and stabilization such as open channel, gabions, sheet piles, riprap, and stream clearing in Northlake, Melrose Park, Stone Park, Bellwood, Westchester, and Broadview.</i>	111873F	\$ 48,133,000	\$ 3,038,824	50
<b>Des Plaines Land Acquisition</b> <i>Purchase of 49 flood-prone homes along the Des Plaines River as part of a cost sharing agreement with the City of Des Plaines to reduce flood hazard risk.</i>	161GA11	\$ 3,625,000	\$ 2,422,183	100
<b>Flood Control Project on Midlothian Creek in Robbins (Design)</b> <i>Design of a wetland lake/park and outfall channel to the Cal-Sag Channel to provide a 100-year storm level of protection for the 137th St. and Kedzie Ave. Project Area in Robbins, Illinois.</i>	142533F	\$ 1,815,130	\$ 1,496,045	50
<b>Lyons Levee Flood Control Improvements</b> <i>Restoration and improvement of the Lyons Levee to elevate it to modern design standards, provide flood protection, and prevent overtopping by events up to a 100-year design flood. Overtopping has resulted in major flooding in the recent past (2013), and could jeopardize the ComEd substation that is located east of Forest View and create the potential for power disruptions or failures at Midway Airport and the Stickney Water Reclamation Plant.</i>	131993F	\$ 3,500,000	\$ 1,493,950	50
<b>Other Projects</b>			\$ 1,656,701	

**Project Expenditures 7/1/2016 - 6/30/2022** **\$ 51,024,454** **83%**

<b>Principal Amount of Bonds</b>	<b>\$ 50,000,000</b>
<b>Original Issue Premium</b>	<b>\$ 10,545,322</b>
<b>Costs of Issuance</b>	<b>\$ (131,789)</b>
<b>Fund Transfer of Investment Earnings</b>	<b>\$ (2,000,000)</b>
<b>Investment Income</b>	<b>\$ 2,906,149</b>
<b>Available for Spending</b>	<b>\$ 61,319,682</b>

**Remaining Available for Spending** **\$ 10,295,228** **17%**

**2021 Series A  
General Obligation Limited Tax Capital Improvement Bonds  
September 1, 2020, through June 30, 2022  
\$113,935,000 Principal**

<b>Project Name</b>	<b>Project Number</b>	<b>Estimated Total Project Cost</b>	<b>Spending 9/1/2020 - 6/30/2022</b>	<b>Estimated Useful Life of Project (years)</b>
<b>Replacement of Tailrace Stop Logs Headrace LPPH</b> <i>Design, fabrication, and installation of tailrace stop logs for Bays 1 and 2. Replacement of headrace gates, tailrace stop logs, and associated hoist systems.</i>	158303D	\$ 13,171,928	\$ 5,969,298	20
<b>Phosphorus Removal, Liquid Facilities, Fox River Water Reclamation District</b> <i>Improvements at the FRWRD Pagorski WRF to the existing activated sludge process to incorporate biological phosphorus (Bio-P) removal processes. Construction of two primary sludge fermenters; a Fermenter Control Building; six mixing basins; a primary effluent/return activated sludge pump station; an odor control system; a splitter box; a flowmeter/valve vault; and other associated equipment and modifications. In 1974, as required by the USEPA for grant funding, the District entered into a master agreement with the FRWRD for treatment of wastewater flow from the District's Poplar Creek Basin, which required the District pay an annual cost for treatment of that wastewater based on measured flow to the facility, and to contribute capital funding for FRWRD projects that are necessary to increase or improve FRWRD's ability to treat wastewater flow to its facility. Based upon the percentage of the total treated waste attributable to the Poplar Creek Basin, the District is responsible for 36.20% of the Phosphorus Removal Liquid Facilities project. (Liquid stream projects have a larger percentage cost share, since solids projects also treat solids from other FRWRD facilities.)</i>	181GA36	\$ 9,761,692	\$ 5,886,772	20
<b>Westside Circular Primary Tanks &amp; Aerated Grit Tanks, SWRP - Professional Services</b> <i>Consultant design services for the design of nine 160-foot diameter primary settling tanks and six 132-foot aerated grit tanks, associated support facilities, service tunnels, and conduits.</i>	041283P	\$ 8,335,118	\$ 2,598,133	20
<b>Structural Repairs Roof Replacement 95th Street, PS</b> <i>Removal of all roofing and insulation at the upper and lower roof levels followed by installation of a steel roof deck. Repair or replacement of corroded steel roof beams at the lower roof level to restore lost structural capacity. Removal and replacement of corroded roof purlins at the upper roof level.</i>	172763D	\$ 4,600,000	\$ 2,439,436	20
<b>Furnish, Deliver &amp; Install Disc Filters, HPWRP</b> <i>Replacement of two traveling filter beds with a design capacity of 2.5 MGD each, with two new disc filters having an increased capacity of 12 MGD each. Installation of two service water pumps along with three chemical tanks &amp; containment for disinfection.</i>	2070131	\$ 3,600,000	\$ 2,226,471	20
<b>Gravity Concentration Tank Rehabilitation, CWRP</b> <i>Removal and replacement of four sludge concentration tank collector systems, miscellaneous piping, and related electrical work.</i>	1880332	\$ 2,343,420	\$ 2,148,415	30
<b>Phosphorus Removal, Struvite Facilities, Fox River Water Reclamation District</b> <i>Improvements at the FRWRD Pagorski WRF to reduce the phosphorus recycled within the liquid stream by precipitating it in the form of struvite within the digested biosolids. Construction of a new Struvite Building with a below-grade mixing pump station; fluidized-bed struvite reactor; and odor control system. In 1974, as required by the USEPA for grant funding, the District entered into a master agreement with the FRWRD for treatment of wastewater flow from the District's Poplar Creek Basin, which required the District pay an annual cost for treatment of that wastewater based on measured flow to the facility, and to contribute capital funding for FRWRD projects that are necessary to increase or improve FRWRD's ability to treat wastewater flow to its facility. Based upon the percentage of the total treated waste attributable to the Poplar Creek Basin, the District is responsible for 23.97% of the Phosphorus Removal Struvite Facilities project.</i>	181GA35	\$ 2,635,071	\$ 1,555,463	20
<b>S2 Enhanced Biological Phosphorus Removal Pilot Study, CWRP</b> <i>Pilot study of Sidestream Enhanced Biological Phosphorus Removal (S2EBPR) using Return Activated Sludge (RAS) fermentation to assist with EBPR at a pilot scale level; installation of related pumps and mixers.</i>	182483P	\$ 1,904,726	\$ 1,444,065	5
<b>Rehabilitation of Elevator Shafts, Mainstream Pumping Station</b> <i>Rehabilitation of six shafts at the Mainstream Pumping Station (the north elevator main and ventilation shafts, south elevator main and ventilation shafts, dewatering shaft, and discharge shaft) to address groundwater infiltration in the shafts.</i>	181423H	\$ 2,123,100	\$ 1,251,600	20
<b>Energy Performance Projects, SSA</b> <i>Under an agreement with the Public Building Commission of Chicago, implement various energy efficiency projects at the Stickney WRP and the Mainstream Pump Station. The scope of work of the completed project includes HVAC control upgrades and lighting upgrades at both locations.</i>	1990131	\$ 5,368,487	\$ 1,233,474	20

**2021 Series A  
General Obligation Limited Tax Capital Improvement Bonds  
September 1, 2020, through June 30, 2022  
\$113,935,000 Principal**

Project Name	Project Number	Estimated Total Project Cost	Spending 9/1/2020 - 6/30/2022	Estimated Useful Life of Project (years)
<b>Furnish, Deliver &amp; Install Three Fine Screens, KWRP</b> <i>Replacement of existing screens to allow additional capture and avoid clogging of equipment downstream; rehabilitation of the grit dragout system.</i>	1870331	\$ 1,800,000	\$ 1,206,535	20
<b>Other Projects</b>			\$ 6,375,471	
<b>Project Expenditures 9/1/2020 - 6/30/2022</b>			<b>\$ 34,335,133</b>	<b>24%</b>

<b>Principal Amount of Bonds</b>	<b>\$ 113,935,000</b>
<b>Original Issue Premium</b>	<b>\$ 29,011,224</b>
<b>Costs of Issuance</b>	<b>\$ (235,206)</b>
<b>Investment Income</b>	<b>\$ 319,010</b>
<b>Available for Spending</b>	<b>\$ 143,030,028</b>
<b>Remaining Available for Spending</b>	<b>\$ 108,694,895 76%</b>

**Illinois Environmental Protection Agency Funding  
State Revolving Funds Series General Obligation Bonds  
July 1, 2021, through June 30, 2022**

Project Name	Project Number	Estimated Total Project Cost	Estimated Useful Life of Project (years)	Spending 7/1/2021 - 6/30/2022	Spending 7/1/2017 - 6/30/2021	Five Years Cumulative Spending 7/1/2017 - 6/30/2022
<b>Digester Sludge Heating System Upgrades</b> <i>Replace digester hot water boilers with steam to hot water converters, replace heat exchangers, clean digesters and provide new gas mixing systems within digesters. Project will result in increased efficiency, increased gas production and remove equipment not in compliance with current codes.</i>	182773M	\$ 25,499,000	50	\$ 7,749,776	\$ 15,315,273	\$ 23,065,049
<b>Odor Control Facilities @WASSTRIP...SWRP</b> <i>Installation of three biofilters at Stickney WRP for controlling odorous emissions from the SW Coarse Screens, the WASSTRIP Process and Overhead Weir structure, and the Post-Digestion Centrifuge Facility. Local residents will benefit from reduced odors from the plant.</i>	171343M	\$ 16,485,000	50	\$ 4,378,554	\$ 10,825,616	\$ 15,204,170
<b>Addison Creek Reservoir</b> <i>Excavation and installation of flood control reservoir in Bellwood; includes control structure, inlet structure, spillway, piping and a pump station. This will reduce overbank flooding to approximately 2,200 structures along Addison Creek and serve as compensatory storage for a channel improvement project.</i>	111863F	\$ 109,542,000	50	\$ 3,466,386	\$ 38,736,450	\$ 42,202,836
<b>Installation of Mechanical Mixers, SWRP</b> <i>Installation of mechanical mixers in the first pass of each aeration tank in Aeration Batteries A, C, and D, including all electrical equipment and infrastructure upgrades. This project will properly mix the anaerobic zones in the biological phosphorus removal process to ensure better performance of this treatment process.</i>	191573P	\$ 8,722,028	20	\$ 3,294,517	\$ 5,312,340	\$ 8,606,857
<b>Digester Rehab &amp; Gas Piping Replacement</b> <i>Installation of two 20" digester gas mains to replace a single pipe which has become partially clogged and cannot be taken out of service, to allow transfer of additional gas created by improvements to other processes at the Stickney WRP. Replacement of sludge pumps, installation of macerators, and upgrades to city and effluent water piping.</i>	171403P	\$ 13,725,000	50	\$ 1,881,336	\$ 11,036,486	\$ 12,917,822
<b>Mainstream TARP Pumps Rehabilitation</b> <i>Overhaul TARP Pumps 1 and 3 in the South Pump House and Pump 5 in the North Pump House of the Mainstream Pumping Station, including the associated motors and discharge cone valves &amp; actuators, to restore capacity and reliability; project requires furnishing and installing new parts, refurbishing existing salvageable parts, replacing motor exciter panels, and upgrading pump control components.</i>	181443M	\$ 23,380,000	20	\$ 1,809,346	\$ -	\$ 1,809,346
<b>Other Projects</b>				\$ 1,331,075	\$ 215,580,651	\$ 216,911,726

<b>Project Expenditures by Period</b>	<b>7/01/2021 - 6/30/2022</b>	<b>7/01/2017 - 6/30/2021</b>	<b>Cumulative Expenditures</b>
	<b>\$ 23,910,990</b>	<b>\$ 296,806,816</b>	<b>\$ 320,717,806</b>



*This white-tailed deer was spotted in the Miami Woods and Prairie in the Forest Preserves Cook County near Morton Grove along the North Branch of the Chicago River, as an MWRD Small Streams Maintenance Program crew worked nearby removing a blockage of debris to reduce flooding and keep the river flowing.*

*Back Cover: In 2020, the MWRD partnered with the Illinois Monarch Project to help protect monarch butterflies from becoming extinct. Studies suggest that monarch butterfly populations have rapidly declined due to habitat loss and climate change. Milkweed is the sole source of food for monarch caterpillars. As the regional authority for stormwater management, the MWRD has invested in native prairie landscaping across its land because native plants, like milkweed, play an important role in absorbing more water. With extensive root systems, native plants can help reduce flooding and also help improve local water quality.*



## Contact Us

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## Board of Commissioners

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