



# Green Bonds

## Project Expenditure Report

AS OF JUNE 30, 2024



**Metropolitan Water  
Reclamation District  
of Greater Chicago**



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## 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	fully expended
December 2021	144	partially expended
<b>TOTAL:</b>	<b>\$ 473</b>	

*The phosphorus recovery facility at Stickney Water Reclamation Plant removes phosphorus from wastewater to produce a slow release fertilizer product.*





# FOUR CATEGORIES OF THE MWRD'S GREEN BONDS

## 1. Tunnel and Reservoir Plan (TARP)

*The MWRD's innovative TARP or "Deep Tunnel" system was adopted in 1972 as a comprehensive pollution and flood control program.*

It is a system of deep, large-diameter tunnels and vast reservoirs designed to reduce flooding, improve water quality in Chicago area waterways, and protect Lake Michigan from pollution caused by combined sewer overflows (CSOs). It is one of the country's largest public works projects for pollution and flood control and provides relief for approximately 3.7 million people living in a 360-square-mile area of combined sewer systems, collecting both sanitary sewage and stormwater.

TARP includes four tunnel systems totaling 110 miles of tunnels, 8 to 33 feet in diameter and 150 to 300 feet underground. Since the tunnels became operational, CSOs have been reduced from an average of 100 days per year to 50. The four TARP tunnel systems capture and carry combined sewage and stormwater to the Majewski Reservoir near Elk Grove Village, Thornton Composite Reservoir near South Holland, and McCook Reservoir in Bedford Park; when McCook is completed, the three reservoirs will provide a combined 15.15 billion gallons of combined sewage. Since the Thornton Reservoir came online in 2015, CSOs have been nearly eliminated in its service area.

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 2022, including 60 that have been found in the CAWS since 2000. Thanks in part to advancements of TARP and 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 CSO captured in the reservoirs during rain events, reduced frequency of diverting polluted river water to Lake Michigan, and the quantity and diversity of fish species in the waterways measured over time.**



*The MWRD Aquatic Ecology electrofishing boat is used to conduct fish surveys in Chicago area waterways.*



Phase 1 of the Tunnel and Reservoir Plan McCook Reservoir is in operation now as excavation is underway on Phase 2.







## 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.**

*The Robbins Heritage Park and Midlothian Creek Restoration project will address flooding in the Village of Robbins.*





### 3. Resource Recovery Projects

*By embracing sustainable and resilient practices, the MWRD is dedicated to fostering a healthy environment while also building a strong financial foundation.*

It successfully completed the construction of a phosphorus recovery facility to recover phosphorus to be sold as a valuable fertilizer. In addition to phosphorus recovery, the MWRD is actively engaged in enhancing the Lockport Powerhouse which produces green electricity that is sold to the grid. It is also currently exploring innovative projects on process efficiency to maximize effluent water reuse, biogas production, and biogas utilization from anaerobic digestion processes.

**The MWRD has established performance metrics, tracking progress toward energy neutrality and greenhouse gas reduction.**

*Lockport Powerhouse has been generating hydroelectricity since 1907.*





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

*The MWRD's seven water reclamation plants clean an average of 1.2 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.

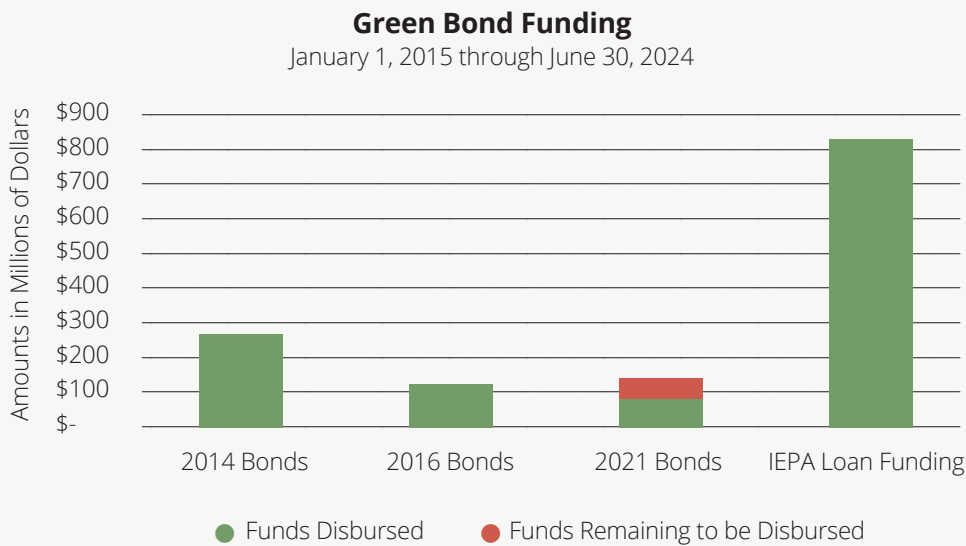
**Performance metrics include optimization of aeration processes to reduce energy consumption, water reuse by converting current use of potable water in plant processes, and reduction in greenhouse gas emissions.**

*Stickney Water Reclamation Plant cleans an average of 700 million gallons of wastewater per day.*



## USE OF PROCEEDS

The following is a summary of the programs and projects funded by the Green Bonds as of June 30, 2024. 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.





## 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.*

### **Addison Creek Reservoir and Channel Improvements**

Since the official groundbreaking in April 2019, the Addison Creek Reservoir was formally placed into service in August 2023, signifying the completion of the major flood control project's first phase. Located in Bellwood at 2795 Washington Blvd., the completed 600-acre-foot reservoir includes a constructed control structure, inlet structure, spillway and pumping station.

The \$81 million reservoir project is designed to capture approximately 195 million gallons of stormwater and overbank flooding from Addison Creek. The intergovernmental agreement (IGA) stipulates that the Metropolitan Water Reclamation District of Greater Chicago (MWRD) designs and constructs the reservoir and share maintenance responsibilities with the Village of Bellwood.

The reservoir will also serve as compensatory storage during the Addison Creek Channel Improvements Project, which began in the summer 2023 and is anticipated to be complete the summer 2026. The \$77 million improvements project will take place over a three-mile stretch of the creek, through Northlake, Stone Park, Melrose Park, Bellwood, Westchester, and Broadview. To protect these neighboring residents and businesses, the MWRD will lower, widen, and stabilize the existing Addison Creek Channel to allow for a higher flow of water to pass through in a flooding event. The improvements are also designed to include a mix of natural design, gabion baskets, soldier pile walls, concrete, riprap, articulated concrete blocks, vegetation clearing, and the removal of three bridges.

Once the channel improvements project is completed, the MWRD will submit a Letter of Map Revision (LOMR) to the Federal Emergency Management Agency. Upon approval of the LOMR, some property owners may be eligible to obtain lower cost premiums on their annual flood insurance policies. The Addison Creek Reservoir and the Addison Creek Channel Improvements Project will help provide \$116 million in flood benefits by reducing overbank flooding to approximately 2,200 structures and remove an estimated 1,700 structures from the floodplain.



*Addison Creek Reservoir and channel improvements will reduce flooding to over 2,200 structures in six communities along the creek.*



## Sludge Pumping Improvements

Solids removed from wastewater is known as sludge. Sludge is sent to temperature-controlled digesters where microorganisms break them down, converting nutrients into forms that plants can use, killing pathogens, and reducing odors. After digesting, the sludge passes through centrifuges which work like a washing machine, spinning at high speeds to dewater the sludge. The resulting drier sludge is aged and air-dried to refine moisture content and further reduce odors.

This project will furnish, deliver, and install non-clog centrifugal pumps to replace existing screw-centrifugal pumps at three MWRD WRPs. The new pumps installed in the waste-activated and primary sludge pumping streams at the Stickney WRP will restore reliable pumping capacity for the separated sludge streams now in place throughout the plant. The higher capacity sludge pumping systems at the O'Brien WRP and variable frequency drives for selected pumping systems at the Calumet WRP require the additional variable speed pumping capability provided by the new pumps.



*O'Brien Water Reclamation plant serves over 1.3 million people in a 143 square mile area in northeast Cook County, Illinois.*





## McCook Reservoir

Located within Lyons Township in western Cook County, the McCook Reservoir is part of the MWRD's Tunnel and Reservoir Plan (TARP). The reservoir is designed to receive and store combined sewer overflows (CSOs) during rain events until the CSOs can be conveyed to the Stickney WRP for treatment, thus preventing their entry into the waterways and reducing flooding in the Chicago area. The construction of the reservoir has been divided into two phases. Stage I of the reservoir is complete and has been operational since January 2018, providing 3.5 billion gallons of storage. Since then, this fully functioning system has captured over 102 billion gallons of combined sewage.

Construction of Stage II is still underway. The major project under Stage II is the mining out of the rough hole for the reservoir; this is expected to continue for the next several years. Another project, Expanded Stage 2 Slope Stabilization and Retaining Walls, includes the construction of approximately 2,000 linear feet of a soil nail retaining wall along the western and southern sides and slope stabilization around the entire perimeter, which will provide sufficient mining reserves to achieve the intended capacity of ten billion gallons. Stage II is anticipated to be placed in operation in 2029, bringing the reservoir's total capacity to 10 billion gallons of storage. Once completed, the McCook Reservoir will provide more than \$143 million per year in flood damage reduction benefits to 3.1 million people in 37 communities, and will help protect the Chicago River, North Shore Channel, Addison Creek, and Des Plaines River from CSOs.

**The next report will be prepared and posted to the MWRD's website detailing capital expenditures through June 30, 2025.**

*Excavation is underway on Phase 2 of McCook Reservoir. When complete, the reservoir will have a capacity of 10 billion gallons.*



**APPENDIX**  
Project Spending Report



**2016 Series E**  
**General Obligation Unlimited Tax Bonds (Alternate Revenue Source)**  
**July 1, 2016, through June 30, 2024**  
**\$50,000,000 Principal**

Project Name	Project Number	Estimated Total Project Cost	Spending 7/1/2016 - 6/30/2024	Estimated Useful Life of Project (years)
<b>Addison Creek Reservoir</b> 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.	111863F	\$ 109,542,000	\$ 20,749,370	50
<b>Melvina Ditch Reservoir Improvements</b> 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 and help alleviate flooding in Burbank and Oak Lawn.	142633F	\$ 21,452,000	\$ 10,544,385	50
<b>Buffalo Creek Reservoir Expansion</b> Expansion and modification of the existing Buffalo Creek Reservoir project identified in the Lower Des Plaines Detailed Watershed Plan, including relocating trails and bridges above the reservoir's inundation level, with approximately 107 structures to receive flood protection.	133703F	\$ 9,678,900	\$ 8,191,850	50
<b>Addison Creek Channel Improvements</b> 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.	111873F	\$ 48,133,000	\$ 7,659,732	50
<b>Albany Park Stormwater Diversion Tunnel</b> 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.	140663F	\$ 24,750,000	\$ 6,745,388	50
<b>Des Plaines Land Acquisition</b> 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.	16IGA11	\$ 3,625,000	\$ 2,422,183	100
<b>Flood Control Project on Midlothian Creek in Robbins (Design)</b> 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.	142533F	\$ 1,815,130	\$ 1,730,642	50
<b>Lyons Levee Flood Control Improvements</b> Restoration, improvement, and modernization of the Lyons Levee to provide flood protection and prevent overtopping by events up to a 100-year design flood, which will protect the ComEd substation located east of Forest View and lower the risk of power disruptions or failures at Midway Airport and the Stickney Water Reclamation Plant.	131993F	\$ 3,500,000	\$ 1,673,597	50
<b>Other Projects</b>			\$ 1,656,700	
<b>Project Expenditures 7/01/2016 - 6/30/2024</b>			<b>\$ 61,373,847</b>	<b>100%</b>
<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>2,960,314</b>	
<b>Available for Spending</b>			<b>61,373,847</b>	
<b>Remaining Available for Spending</b>			<b>\$ -</b>	<b>0%</b>



**2021 Series A  
General Obligation Limited Tax Capital Improvement Bonds  
September 1, 2020, through June 30, 2024  
\$113,935,000 Principal**

Project Name	Project Number	Estimated Total Project Cost	Spending 9/1/2020 - 6/30/2024	Estimated Useful Life of Project (years)
<b>Replacement of Tailrace Stop Logs Headrace LPPH</b> Design, fabrication, and installation of tailrace stop logs for Bays 1 and 2. Replacement of headrace gates, tailrace stop logs, and associated hoist systems.	158303D	\$ 13,171,928	\$ 11,566,483	20
<b>Chemical Addition Backup System, SWRP</b> Construction of a secondary phosphorus removal system to ensure uninterrupted compliance with NPDES permit limits.	191593P	\$ 7,940,000	\$ 7,418,632	20
<b>Roof Replacement Lue Hing Complex, SWRP</b> Replacement of roof areas 1, 2, 3, 5, and 6 of the Monitoring & Research (M&R) laboratory at the Stickney WRP. Project scope includes complete tear-off of the existing roof membrane, replacement of the roof top equipment that has exceeded its useful life, removal of obsolete roof top equipment, and additional work associated with the M&R's east addition at SWRP.	171353V	\$ 10,909,000	\$ 6,902,898	20
<b>Pavement Rehabilitation, Various Locations</b> Removal and replacement of approximately 275,000 square yards of pavement at the biosolids drying cells with 4" of asphalt.	2390231	\$ 7,417,412	\$ 6,664,390	20
<b>Sludge Pumping Improvements, Various Locations</b> Replacement of existing screw-centrifugal pumps with non-clog centrifugal pumps in the waste-activated and primary sludge pumping streams at the Stickney WRP; higher capacity sludge pumping systems and sludge piping replacement at the O'Brien WRP; and installation of variable frequency drives for selected pumping systems at the Calumet WRP.	2160331	\$ 8,291,115	\$ 6,630,850	20
<b>Phosphorus Removal, Liquid Facilities, Fox River Water Reclamation District</b> 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.)	181GA36	\$ 9,761,692	\$ 5,954,145	20
<b>Westside Circular Primary Tanks &amp; Aerated Grit Tanks, SWRP - Professional Services</b> 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.	041283P	\$ 8,335,118	\$ 4,379,929	20
<b>Activated Sludge Battery, OWRP</b> Consultant design services for the design of a new secondary treatment battery at O'Brien WRP which will include aeration tanks, final tanks, a fermenter for Return Activated Sludge (RAS) for biological phosphorous removal, operating gallery, substation, and ancillary facilities.	210923P	\$ 9,002,600	\$ 4,039,250	20
<b>Furnish, Deliver &amp; Install Disc Filters, HPWRP</b> 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 & containment for disinfection.	2070131	\$ 3,600,000	\$ 2,537,714	20
<b>Structural Repairs Roof Replacement 95th Street, PS</b> 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.	172763D	\$ 4,600,000	\$ 2,439,436	20

(SERIES A CONTINUED NEXT PAGE)



**2021 Series A  
General Obligation Limited Tax Capital Improvement Bonds  
September 1, 2020, through June 30, 2024  
\$113,935,000 Principal**

Project Name	Project Number	Estimated Total Project Cost	Spending 9/1/2020 - 6/30/2024	Estimated Useful Life of Project (years)
<b>Gravity Concentration Tank Rehabilitation, CWRP</b> Removal and replacement of four sludge concentration tank collector systems, miscellaneous piping, and related electrical work.	1880332	\$ 2,343,420	\$ 2,262,420	30
<b>Digester Rehabilitation, Gas Piping Replacement</b> Removal and replacement of piping within Digesters 1-10, painting of piping and digester covers, replacement of electrical gear and motors with explosion-proof equipment, separation of classified areas from unclassified per NFPA-820, rebuilding of control room, and other work.	181483P	\$ 52,360,000	\$ 1,904,694	20
<b>Furnish, Deliver &amp; Install Three Fine Screens, KWRP</b> Replacement of three fine screens with new screens that have narrower openings to remove more debris; rehabilitation of grit drag out tanks.	1870331	\$ 1,940,000	\$ 1,872,755	20
<b>Rehabilitation of Elevator Shafts, MSPS</b> Rehabilitation of the Mainstream Pumping Station's six north and south elevator main and ventilation shafts, dewatering shaft, and discharge shaft to address groundwater infiltration in the shafts.	181423H	\$ 2,379,331	\$ 1,861,451	20
<b>Calumet 18E Relief Connection Structure &amp; Sewer Work</b> Construction of a connection structure, flow diversion gate, and approximately 100-feet of 48-inch diameter sewer to provide relief to the Calumet Intercepting Sewer 18F Extension A, Calumet Intercepting Sewer 18F, Calumet Intercepting Sewer 18E, and the Palos Hills Pumping Station during wet weather events by diverting flow to the Calumet Intercepting Sewer 20R-2.	212623S	\$ 3,108,314	\$ 1,834,238	20
<b>Furnish, Deliver &amp; Install Replacement Gearboxes-SEPA's 2, 3, 5</b> Installation of replacement gearbox and associated upper and lower bearings for the Sidestream Elevated Pool Aeration (SEPA) Stations #2, #3, #4, and #5 in the Calumet Service Area to help maintain the reliability of these stations and ensure the District continues to meet IEPA waterway dissolved oxygen requirements.	2080131	\$ 1,898,000	\$ 1,813,403	20
<b>Phosphorus Removal, Struvite Facilities, Fox River Water Reclamation District</b> 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.	18IGA35	\$ 2,635,071	\$ 1,555,463	20
<b>Other Projects</b>			\$ 18,924,639	
<b>Project Expenditures 9/01/2020 - 6/30/2024</b>			\$ 90,562,790	62%
<b>Principal Amount of Bonds</b>			113,935,000	
<b>Original Issue Premium</b>			29,011,224	
<b>Costs of Issuance</b>			(235,206)	
<b>Investment Income</b>			3,618,913	
<b>Available for Spending</b>			146,329,931	
<b>Remaining Available for Spending</b>			\$ 55,767,141	38%



**2021 Series B  
General Obligation Unlimited Tax Capital Improvement Bonds  
December 1, 2021, through June 30, 2024  
\$30,000,000 Principal**

Project Name	Project Number	Estimated Total Project Cost	Spending 12/1/2021 - 6/30/2024	Estimated Useful Life of Project (years)
<b>Decommissioning Thornton Transitional Reservoir</b> 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.	152664H	\$ 25,314,000	\$ 17,957,226	50
<b>McCook Reservoir Expanded Stage 2 Slope Stabilization and Retaining Walls, SSA</b> 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.	161254F	\$ 8,210,092	\$ 6,589,371	50
<b>McCook Reservoir Vulcan Agreement Hard Costs, SSA</b> Mining out of a rough hole at the site of the McCook CUP Reservoir.	73161EH	\$ 94,717,000	\$ 6,012,923	50
<b>Thornton Rock Dam Treatment, CSA</b> Installation of key-block stabilization measures on the south side (HMS Main Lobe) of the Thornton Rock Dam to meet Army Corps of Engineers requirements; treatment measures including drilling of horizontal drain holes into select key block faces to help alleviate internal rock pressure and the installation of high-capacity, corrosion-protected rock anchors to anchor select key blocks into the surrounding rock mass; and installation of geotechnical instrumentation and monitoring devices and related equipment.	212604H	\$ 6,290,308	\$ 5,871,885	50
<b>Other Projects</b>			\$ 1,427,179	
<b>Project Expenditures 12/01/2021 - 6/30/2024</b>			<b>\$ 37,858,584</b>	<b>94%</b>
<b>Principal Amount of Bonds</b>			<b>30,000,000</b>	
<b>Original Issue Premium</b>			<b>9,836,177</b>	
<b>Costs of Issuance</b>			<b>(62,116)</b>	
<b>Investment Income</b>			<b>548,896</b>	
<b>Available for Spending</b>			<b>40,322,957</b>	
<b>Remaining Available for Spending</b>			<b>\$ 2,464,373</b>	<b>6%</b>



**Illinois Environmental Protection Agency Funding  
State Revolving Funds Series General Obligation Bonds  
July 1, 2023, through June 30, 2024**

Project Name	Project Number	Estimated Total Project Cost	Estimated Useful Life of Project (years)	Spending 7/1/2023 - 6/30/2024	Spending 7/1/2019 - 6/30/2023	Five Years Cumulative Spending 7/1/2019 - 6/30/2024
<b>A/B C/D Service Tunnel Rehabilitation-Phase III</b> Rehabilitation of approximately 1,000 feet of the A/B Service Tunnel north of column line 31 and approximately 1,000 feet of the C/D Service Tunnel north of column line 37. This project continues the scope of work from contracts 04-131-2D and 04-132-3D. Work will address significant structural deterioration that has occurred since the tunnels were constructed approximately 80 years ago, restore capacity, extend their service life, and prevent further damage to the utilities inside the tunnels.	161273D	\$ 28,872,125	50	\$ 11,645,971	\$ -	\$ 11,645,971
<b>Northside Sludge Pipeline Replacement - Section 1, NSA</b> Replacement of Section 1 of the existing North Side Sludge Pipeline with 19,000 feet of 20-inch diameter force main. Construction of air relief; blow-off and clean-out of structures; and rehabilitation of 43 existing structures located in the Villages of Skokie and Lincolnwood and the City of Chicago.	070273S	\$ 28,481,425	50	\$ 8,844,250	\$ 9,818,060	\$ 18,662,310
<b>Control Boiler Facility/Electrical Updates, HPWRP</b> Removal of two natural gas boilers and addition of five new boilers (two natural gas and three digester gas/natural gas) in the Pump and Blower Building. Removal of five digester gas/natural gas boilers from the Digester Complex. Completion of associated work including mechanical piping, electrical, control, civil and structural work needed to provide hot water for process and building heating demands. Replacement of digester gas piping. Removal and replacement of all electrical equipment, such as motor control center, motors, conduit, gas alarm system, fire alarm system, lighting, etc., with explosion-proof equipment in the classified areas to meet National Fire Protection Association 820 requirements.	195423M	\$ 5,591,919	25	\$ 5,591,919	\$ 2,780,239	\$ 8,372,158
<b>Phosphorus Removal Modifications Battery D, OWRP</b> Installation of pumps, new pump building to house return activated sludge pumps, piping, mixers, and baffles to support sidestream enhanced biological phosphorus removal in Battery D at the O'Brien WRP.	210913P	\$ 14,850,000	20	\$ 4,399,832	\$ -	\$ 4,399,832
<b>Rehab of Steel Spandrel Beams of Pump &amp; Blower House OWRP</b> Rehabilitation of O'Brien WRP Pump and Blower House building roof, steel frame beams, and columns embedded in the masonry wall, localized roof deck; roof slope remediation; full roofing membrane and insulation replacement; full masonry and flashing rehabilitation at roof parapet walls; localized windows and exterior doors rehabilitation; localized tuckpointing; and other rehabilitation work associated or incidental to a facade/roof to extend the building life span for another 50 to 90 years.	150693D	\$ 21,730,000	50	\$ 3,635,522	\$ 1,252,146	\$ 4,887,668
<b>Mainstream TARP Pumps Rehabilitation</b> Overhaul of 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 & 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.	181443M	\$ 23,380,000	20	\$ 3,404,119	\$ 4,294,422	\$ 7,698,541
<b>Boilers 3, 4, 5, and Motor Control Center Replacement, SWRP</b> Installation of new replacement boilers that will have co-firing of digester gas and natural gas to maximize the available digester gas. Existing boilers Numbers 3, 4, and 5, and motor control centers (MCCs) are at the end of their useful lives and require excessive maintenance. A de-aerator will also be installed to provide for complete redundancy. Upgrades also include the boiler chemical systems and controls, the boiler Motor Control Centers, and lighting.	191553M	\$ 21,882,000	30	\$ 1,838,139	\$ -	\$ 1,838,139
<b>Furnish, Deliver &amp; Install Six Disc Filters, EWRP</b> Replacement of gravity sand filter beds with higher-capacity disc filters to remove more suspended solids.	1870231	\$ 9,452,316	20	\$ 1,389,887	\$ 5,601,692	\$ 6,991,579

(STATE REVOLVING FUND CONTINUED NEXT PAGE)



**Illinois Environmental Protection Agency Funding  
State Revolving Funds Series General Obligation Bonds  
July 1, 2023, through June 30, 2024**

Project Name	Project Number	Estimated Total Project Cost	Estimated Useful Life of Project (years)	Spending 7/1/2023 - 6/30/2024	Spending 7/1/2019 - 6/30/2023	Five Years Cumulative Spending 7/1/2019 - 6/30/2024	
<b>McCook Reservoir Des Plaines Inflow Tunnel</b> Construction of an approximately 20-foot diameter tunnel connecting 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 highwall stability measures, and an energy dissipation apron with baffle blocks. Demolition of an existing concrete tunnel plug to create a live connection to the existing Des Plaines Tunnel System and future McCook Reservoir. Installation of reservoir level and tunnel inflow instrumentation, duct banks, conduits, wiring, lighting, electrical equipment, and permanent perimeter fencing.	131064F	\$ 112,565,349	100	\$ 748,801	\$ 23,732,633	\$ 24,481,434	
<b>Digester Sludge Heating System Upgrades</b> Replacement of digester hot water boilers with steam to hot water converters, replacement of heat exchangers, cleaning of digesters, and installation of new gas mixing systems within digesters. Project will result in increased efficiency, increased gas production, and remove equipment not in compliance with current codes.	182773M	\$ 25,499,000	50	\$ 524,975	\$ 25,332,420	\$ 25,857,395	
<b>Odor Control Facilities - WASSTRIP, SWRP</b> Construction of three biofilter facilities (sludge concentration and overhead weir, southwest coarse screen, and post-centrifuge building). The facilities will include new biofilters, heating, ventilation, and air conditioning equipment, ductwork, and other ancillary equipment.	171343M	\$ 16,485,000	20	\$ 513,627	\$ 15,629,218	\$ 16,142,845	
<b>Furnish, Deliver &amp; Install Coarse Screens, SWRP</b> Removal of existing climber-style southwest coarse screens at Stickney WRP and installing new chain and sprocket-style coarse screens. Replacement of existing coarse screens with more heavy-duty, reliable, chain and sprocket-style screens to significantly reduce maintenance costs and operational issues.	2090331	\$ 6,000,000	20	\$ 260,517	\$ 2,596,907	\$ 2,857,424	
<b>Other Projects</b>				\$ 84,208	\$ 76,918,323	\$ 77,002,531	
				<b>Project Expenditures by Period</b>	<b>7/01/2023 - 6/30/2024</b>	<b>7/01/2019 - 6/30/2023</b>	<b>Cumulative Expenditures</b>
					<b>\$ 42,881,767</b>	<b>\$ 167,956,060</b>	<b>\$ 210,837,827</b>



VISIT US AT [MWRD.ORG](http://MWRD.ORG).



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