



# 2021 Budget in Brief

Metropolitan Water Reclamation District  
of Greater Chicago

# Table of Contents

Introduction .....	1
Letter to Stakeholders .....	2
Mission & Governance .....	3
Service Area - District Map .....	4
District Fast Facts .....	5
Sources of Revenue .....	6
Description of Funds .....	8
2021 Appropriations .....	10
Appropriations by Operational Objective .....	11
<b>OPERATIONAL OBJECTIVES</b>	
Collection & Treatment .....	12
Biosolids Processing & Utilization .....	13
Flood & Pollution Control .....	14
Stormwater Management .....	16
Capital Improvement Program .....	17



The MWRD introduced sidestream elevated pool aeration stations and other instream aeration stations to help inject needed oxygen into the waterways. The sidestream elevated pool aeration stations serve as an attraction for scenic views, photo opportunities, park activities and picnics, but these waterfalls also work to enhance the water quality and foster aquatic life in the Chicago Area Waterway System.



# 2021 Budget in Brief

## Metropolitan Water Reclamation District of Greater Chicago

This 2021 Budget in Brief provides an overview of the Metropolitan Water Reclamation District of Greater Chicago's (District) formal budget book and provides an overview of the organization's core mission, operations, and budget appropriations. The annual budget is the principal planning device for carrying out the mission of the District and accomplishing our operational goals. As a key communication tool, the budget shows how resources are acquired and allocated for current operations, long-range planning, and financing.

### BOARD OF COMMISSIONERS

KARI K. STEELE  
*President*

CAMERON DAVIS

KIMBERLY Du BUCLET

BARBARA J. MCGOWAN  
*Vice President*

MARCELINO GARCIA

JOSINA MORITA

MARIYANA T. SPYROPOULOS  
*Acting Chairman of Finance*

EIRA L. CORRAL SEPÚLVEDA

DEBRA SHORE

### OFFICERS

BRIAN A. PERKOVICH  
*Executive Director*

MARY ANN BOYLE  
*Treasurer*

CATHERINE A. O'CONNOR  
*Director of Engineering*

ALLISON FORE  
*Public & Intergovernmental  
Affairs Officer*

EDWARD W. PODCZERWINSKI  
*Director of Monitoring & Research*

DARLENE A. LOCASCIO  
*Director of Procurement &  
Materials Management*

BEVERLY K. SANDERS  
*Director of Human Resources*

SUSAN T. MORAKALIS  
*General Counsel*

WILLIAM S. SHERIFF  
*Acting Administrative Services Officer*

JOHN P. MURRAY  
*Director of Maintenance & Operations*

JOHN H. SUDDUTH  
*Director of Information Technology*

JACQUELINE TORRES  
*Clerk/Director of Finance*



January 4, 2021

To Residents of the Metropolitan Water Reclamation District,

I am pleased to present the Metropolitan Water Reclamation District of Greater Chicago's 2021 Budget. This budget was prepared during an unprecedented year of challenges. The COVID-19 global pandemic necessitated adapting processes to continue to meet our mission of protecting the health and safety of the residents of Cook County while prioritizing the health and safety of our employees. The 2021 Budget, a \$1.2 billion spending plan, is the result of a collaborative and inclusive budgeting process and provides flexibility to meet operational needs with controlled expenditure growth and targeted investment in programs that will prepare the District for the future.

The District serves 129 communities covering nearly all of Cook County, treating an average of 1.4 billion gallons of water each day, with a total treatment capacity of 2.0 billion gallons per day at seven water reclamation plants. The District controls 76.1 miles of navigable waterways and owns and operates 34 stormwater detention reservoirs to provide regional flood protection. Throughout the pandemic, the District continues to staff seven water reclamation plants 24 hours per day, seven days per week, while permitting staff to work remotely if their jobs allow them to do so. The District has continued normal operation by utilizing virtual meetings and teleconferencing to maintain a commensurate level of productivity.

As our offices remain closed, District staff turned the challenges presented by the pandemic into opportunities to modernize processes. The Watershed Management Ordinance Electronic Permit Application Intake Process was implemented to accept plans, engineering documents, and applications electronically, eliminating the need for large design documents to be mailed. The District also launched a new online payment system to expedite processing for permit and other programs, streamlining operations for staff and those doing business with the District.

The 2021 Budget anticipates slow economic recovery in 2021 and 2022 that will limit revenue growth. The District has a long history of proactive and responsible financial management and a strong reserve balance that will stabilize operations through volatile economic conditions and changing weather patterns. The 2021 Corporate Fund Budget is \$399.3 million, an increase of \$1.1 million from the 2020 Budget, holding the line on expenditures even as the District faces inflationary cost increases. Consistent, proactive water reclamation plant maintenance is critical to meeting operational goals and fulfilling the District's mission to protect the health and safety of the public and to protect Lake Michigan.

The 2021 Budget continues our conservative fiscal management and includes the policies, objectives, and resources to allow the District to remain true to our mission of protecting our water environment and the health of the residents of Cook County. For the complete budget document, please visit [www.mwrdd.org/finances](http://www.mwrdd.org/finances).

Respectfully submitted,

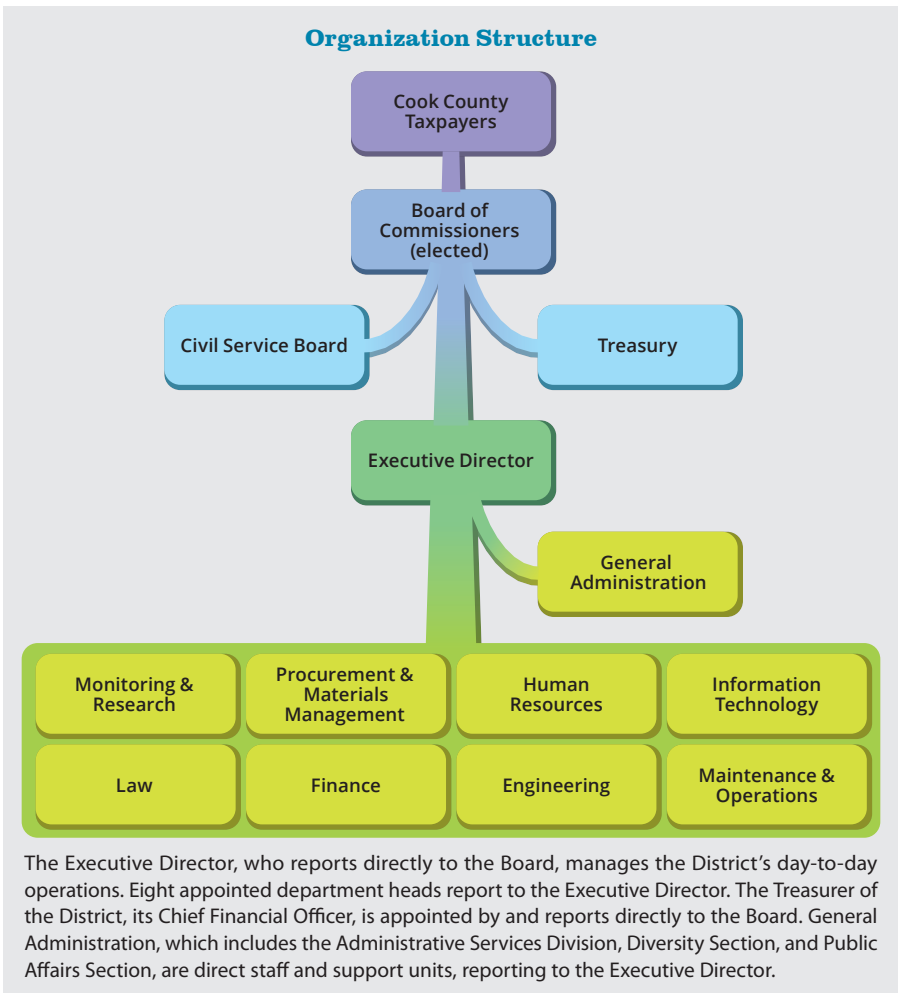
A handwritten signature in black ink that reads "Kari K. Steele". The signature is written in a cursive, flowing style.

Kari K. Steele

*President of the Board of Commissioners*

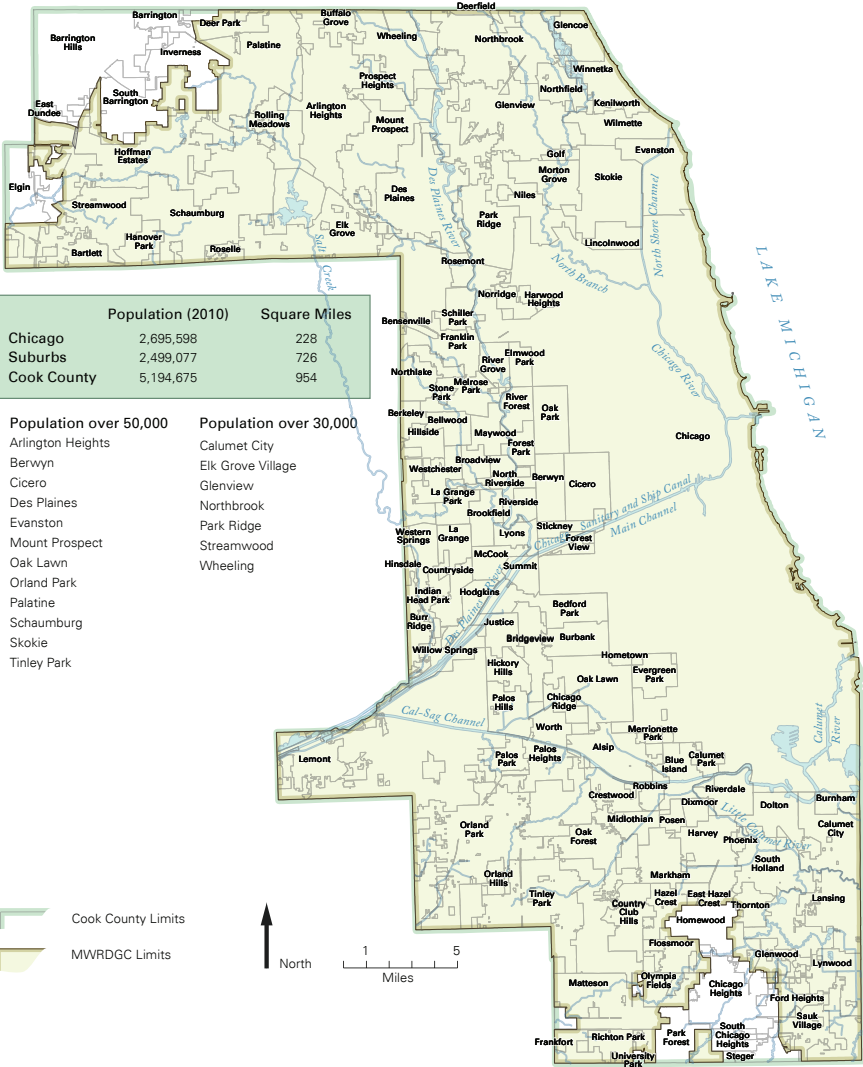
# Mission & Governance

The District is governed by a nine-member Board of Commissioners (Board). Each commissioner is elected at large and serves on a salaried basis. Three Commissioners are elected every two years for six-year terms. The Board biannually elects from its membership a President, Vice President, and Chairman of the Committee on Finance. The District is an independent government and taxing body operating primarily within the boundaries of Cook County, Illinois. The agency serves an area of 882.1 square miles, including the City of Chicago and 128 surrounding communities. Wastewater is collected from municipalities by the District and conveyed to one of seven water reclamation plants for full treatment. Clean water is then discharged to local waterways. The District is also responsible for Stormwater Management, which includes administering its Watershed Management Ordinance and implementing capital improvement projects with communities to address regional and local flooding issues. The District's commitment to the environmental quality of the region involves protecting Lake Michigan from pollution, maintaining public health and safety, protecting homes and businesses from flooding, and managing water as a vital resource.



# Service Area - District Map

## Cook County and Metropolitan Water Reclamation District of Greater Chicago



## District Fast Facts

### The District:

- ✓ Serves an equivalent population of 10.35 million people in 129 communities: 5.25 million individuals, a commercial and industrial equivalent of 4.5 million people, and a combined sewer overflow equivalent of 0.6 million people.
- ✓ Treats an average of 1.4 billion gallons of wastewater per day with a wastewater treatment capacity of over 2.0 billion gallons per day.
- ✓ Performs nearly 560,000 laboratory analyses per year to assure operations meet mandated standards of environmental quality, to enforce industrial standards, and to monitor water quality in waterways.
- ✓ Owns and operates seven modern and effective water reclamation plants, 560.0 miles of intercepting sewers and force mains, 23 pumping stations, 34 stormwater detention reservoirs, and three Tunnel and Reservoir Plan reservoirs. Controls 76.1 miles of navigable waterways, which connect the Great Lakes with the Gulf of Mexico.
- ✓ Protects and improves area waterways and reduces flooding throughout Cook County through the Tunnel and Reservoir Plan, unmatched in size throughout the world.
- ✓ Is recognized as a “Utility of the Future Today” from the Water Environment Federation, a distinction for water agencies that have increased efficiency in operations, enhanced productivity, and achieved long-term sustainability.
- ✓ Collaborates with academic and research institutions to improve water quality and address operational challenges. In 2020, the District was awarded the Innovation Collaboration of the Year Award from the Algae Biomass Organization and the Ralph Fuhrman Medal for Outstanding Water Quality Academic-Practice Collaboration from the Water Environment Federation.



In response to the COVID-19 pandemic, the District began offering virtual tours, allowing participants to view areas that are not available on in-person tours.

# Sources of Revenue

---

## Tax Sources

All District funds, with the exception of the Capital Improvements Bond Fund, derive their revenues primarily from property taxes. Approximately 70.5 percent of the 2021 appropriation is supported by property taxes. Taxes levied in one year are collected in the next year, and Working Cash Funds for the Corporate, Construction, and Stormwater Management Funds provide temporary financing while awaiting property tax receipts.

A personal property replacement tax provides tax revenue from corporations, partnerships, and the invested capital of public utilities to replace the personal property taxes that were once received from these sources. Revenue from this source is estimated at \$34.6 million for 2021, a decrease of \$2.9 million from the 2020 Budget. These revenues, received directly from the State of Illinois, typically trend with the economy.

## Funding Capital Projects: Bonds, Grants, & Loans

The District's Capital Improvement Program is financed primarily with State Revolving Fund (SRF) loans, grants, and general obligation or alternative revenue bond sale proceeds. State law provides authority to issue debt, but also limits the amount that the District can borrow.

Currently, the District's statutory debt limit is estimated at \$9.4 billion. Actual net outstanding debt applicable to the debt limit totals \$2.7 billion. The debt margin, the difference between issued debt applicable to the debt limit and the statutory limit, is \$6.8 billion, or 71.7 percent of the limit. The District is planning a \$120.0 million bond sale in 2021 and anticipates receiving \$70.0 million in low-interest SRF loans in 2021 based on the current capital project schedule. The District is also exploring the Water Infrastructure Finance and Innovation Act for low-cost funding options for future projects. In 2021, federal and state grants totaling \$14.5 million will be available for capital projects and \$4.5 million for stormwater projects.

The 2021 appropriation for bond redemption and interest payments totals \$232.1 million, a decrease of \$0.9 million, or 0.4 percent, from the 2020 Adjusted Budget.

## User Charges, Property, Services, & Miscellaneous

A major revenue source for the District is the user charge system, which imposes a surcharge above property tax payments for commercial, industrial, and tax-exempt users of the sewerage systems. Estimated user charge revenues in 2021 are \$37.0 million. Land rentals, investment income, sewer permit fees, connection impact fees, and other revenues will provide an estimated \$56.3 million in 2021. The 2021 TIF surplus distribution is budgeted at \$19.0 million, driven by the City of Chicago's 2021 TIF declaration. The 2021 budget reserves \$10.0 million of excess 2020 TIF surplus distribution for transfer to the Retirement Fund, pending legislative change allowing the transfer.

### Tax Levy

The overall 2021 tax levy is \$658.5 million, an increase of \$7.1 million, or 1.1 percent, from the 2020 Adjusted Levy.

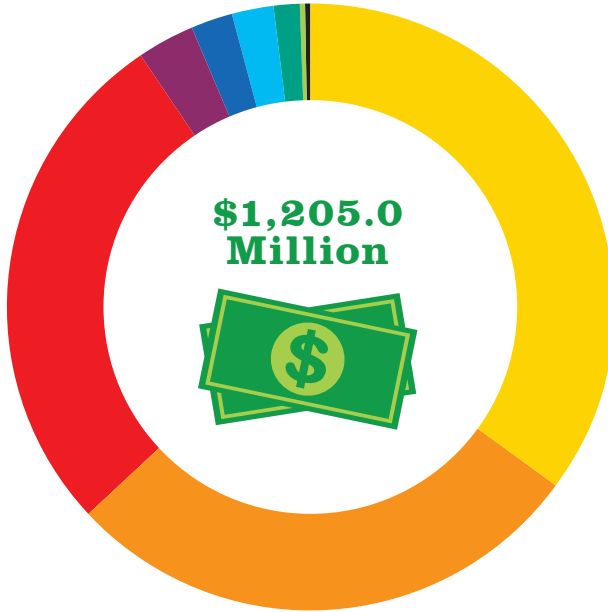
### Tax Rate\*

The overall tax rate for 2021, based on the most recent Equalized Assessed Valuation (EAV), totals 37.84 cents per \$100 of assessed property value, a 0.69 cent decrease from the 2020 Adjusted Tax Rate.

*\*EAV is estimated to increase three percent annually.*



## Where District Money Comes From



\$424.1 M	35.2%		State Revolving Fund Loans & Future Bond Sales
\$339.1 M	28.1%		Net Assets Appropriated
\$329.5 M	27.3%		Net Tax Sources
\$37.0 M	3.1%		User Charge Income
\$27.2 M	2.3%		Miscellaneous
\$25.0 M	2.1%		Land Rentals
\$19.0 M	1.6%		Grants
\$2.6 M	0.2%		Investment Income
\$1.5 M	0.1%		Sewer Permit Fees
\$1,205.0 M	100.0%		TOTAL

**For a \$100,000 home, the 2021 estimated District tax is \$110.15.**



## Description of Funds

The District uses the following funds to control its financial activities:

**CORPORATE FUND:** Accounts for property tax levies and other revenues used for the operations and payments of general expenditures of the District not specifically chargeable to other funds.

**CAPITAL IMPROVEMENTS BOND FUND:** Accounts for bond sale proceeds authorized by the Illinois General Assembly, government grants, and other revenues used for improvements, replacements, and additions to designated environmental improvement projects.

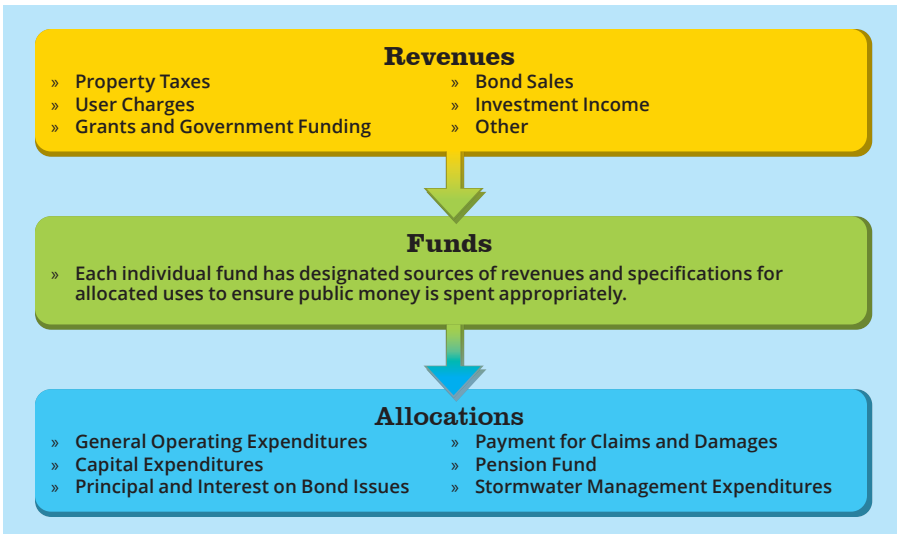
**CONSTRUCTION FUND:** Accounts for a specific property tax levy and other revenues used as a pay-as-you-go capital fund for construction or replacement of long-term assets used in the principal functions of the District.

**STORMWATER MANAGEMENT FUND:** Accounts for property tax levies and other revenues, such as interest on investments and permit fees, for planning, implementing, and financing stormwater management activities throughout all of Cook County, including stream maintenance in areas that currently lie outside the District's boundaries.

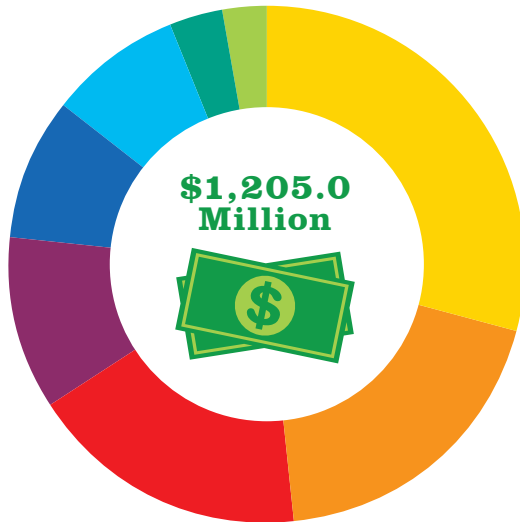
**RETIREMENT FUND:** Accounts for a specific property tax levy to fund pension costs in accordance with statutory provisions. The taxes are collected by the District and paid to the MWRD Retirement Fund, a pension trust fund.

**BOND REDEMPTION & INTEREST FUND:** Accounts for property tax levies and interest on investments for the payment of principal and interest of general obligation bond issues. A subfund is created for each bond issue.

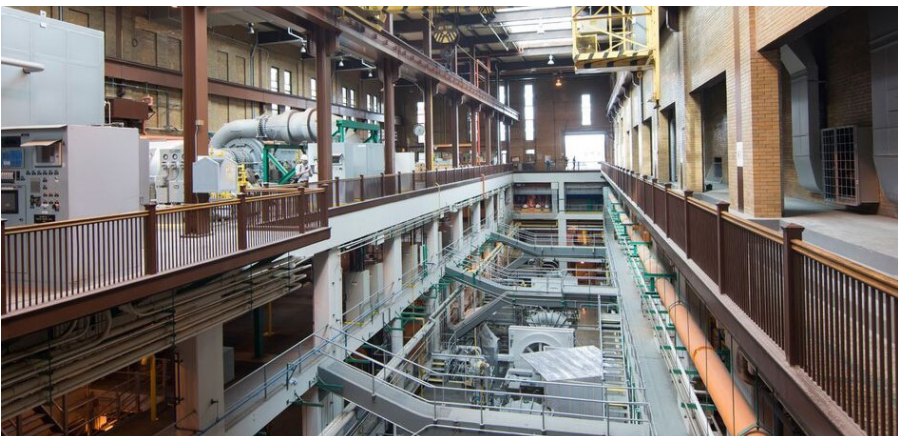
**RESERVE CLAIM FUND:** Accounts for a specific property tax levy and other revenues and pays for claims, awards, losses, judgements or liabilities that might be imposed against the District and for the emergency replacement or repair of damaged property. The accounts of the Reserve Claim Fund are included in the General Corporate Fund for financial reporting purposes.



## Where District Money Goes



\$351.7 M	29.2%	Construction & Design
\$232.1 M	19.3%	Bond Redemption & Interest Fund
\$211.1 M	17.5%	Plant Operation & Maintenance
\$129.4 M	10.7%	Staff Services
\$110.0 M	9.1%	Stormwater Management
\$98.1 M	8.2%	MWRD Retirement Fund
\$39.6 M	3.3%	Claims & Judgments
\$33.0 M	2.7%	Monitoring & Research
\$1,205.0 M	100.0%	TOTAL



Operations have continued at the seven water reclamation plants throughout the pandemic. The inside of the pump & blower building of the Stickney plant is pictured.

## 2021 Appropriations

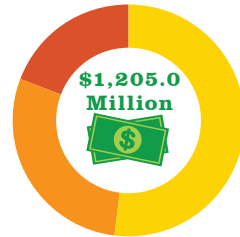
The District's \$1.2 billion 2021 Budget has been influenced by the global pandemic, economic volatility, and shifting weather patterns. The uncertain economic outlook and low inflation impacts the District's revenue sources while operational needs continue to grow. The District faced difficult choices to address declining Corporate Fund revenues. The 2021 Corporate Fund Budget is \$399.3 million, an increase of \$1.1 million, or 0.3 percent, from the 2020 Adjusted Budget. The District will actively manage costs, even as plant maintenance and operational costs continue to grow. The Maintenance & Operations budget will increase by \$6.6 million, or 3.2 percent, from the 2020 Adjusted Budget to ensure that the water reclamation plants remain in compliance. Additionally, the 2021 Budget invests in technology that will help modernize our processes including \$700,000 to further upgrade infrastructure and purchase equipment to support telecommuting, implement an online reporting for industrial users, and implement an interactive vendor portal.

Appropriations are allocated to seven separate funds. Each fund maintains a self-balancing set of accounts that is reported separately in their own financial statements. The funds are created to account for the different types of activities and legal restrictions associated with a particular function.

The District's strong reserves and commitment to fiscally responsible management of resources will aid in overcoming this period of economic uncertainty. The 2021 Budget reserves \$10.0 million from excess 2020 TIF Surplus revenue in the Corporate Fund that will be transferred to the Retirement Fund, provided statutory authority is granted to provide advance funding to maintain growth in the Retirement Fund's funded ratio.

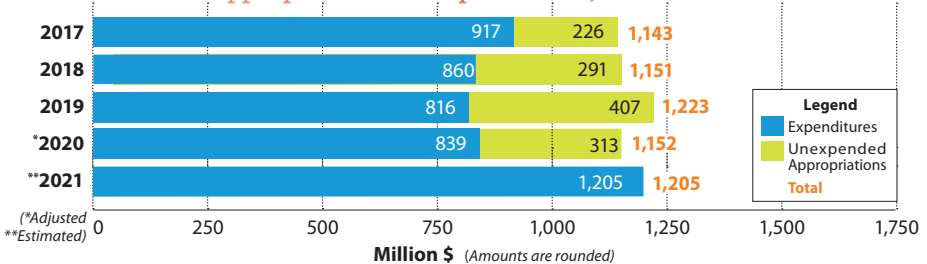
### 2021 Character of Expenditure

(Figures are rounded)



\$624.1 M	52%	● Current Expense
\$348.8 M	29%	● Capital Outlay
\$232.1 M	19%	● Debt Retirement
\$1,205.0 M	100%	TOTAL

### Appropriations & Expenditures, 2017–2021



Summary by Fund	2021 Budget	2020 Adjusted Budget	Dollar Increase (Decrease)	Percent Change
Corporate Fund	\$399,326,700	\$398,200,800	\$1,125,900	0.3%
Construction Fund	15,471,200	18,044,400	(2,573,200)	(14.3%)
Capital Improvements Bond Fund	310,382,600	244,547,400	65,835,200	26.9%
Stormwater Management Fund	109,965,900	116,258,000	(6,292,100)	(5.4%)
Retirement Fund	98,127,000	107,319,000	(9,192,000)	(8.6%)
Reserve Claim Fund	39,624,900	34,395,000	5,229,900	15.2%
Bond Redemption & Interest Fund	232,125,850	233,021,867	(896,017)	(0.4%)
<b>Total</b>	<b>\$1,205,024,150</b>	<b>\$1,151,786,467</b>	<b>\$53,237,683</b>	<b>4.6%</b>

# Appropriations by Operational Objective

To comply with the Illinois Compiled Statutes, the District prepares budget estimates and appropriates funds according to programs, organizational units, performance principles, and unit cost data. The graph below displays the allocation of the 2021 appropriation and the personnel assigned to each operational objective across all funds. In 2021, a total of 1,940 positions are budgeted across all operational objectives. The District’s mission is achieved daily through six main operational functions:

**Collection** \$110,430,795 • 277 Personnel

Operation and maintenance of pumping stations, force mains, and intercepting sewers.

**Treatment** \$209,209,258 • 451 Personnel

Treatment of influent at water reclamation plants.

**Solids Processing** \$70,127,097 • 251 Personnel

Processing of primary, secondary, and tertiary sludge.

**Flood & Pollution Control** \$278,795,434 • 442 Personnel

Programs for the design and construction of flood and pollution control projects and waterways control.

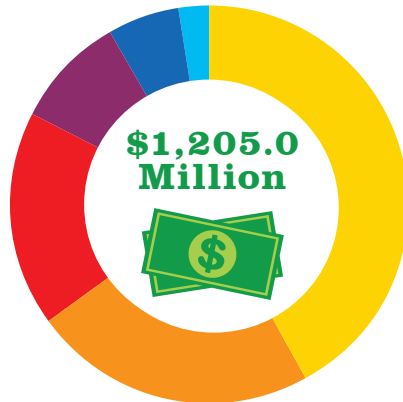
**Solids Utilization** \$28,606,732 • 41 Personnel

Drying and beneficial utilization of secondary and tertiary solids from the treatment process.

**General Support (Debt Service, Retirement, Reserve Funds, & Support Departments)** \$507,854,834 • 478 Personnel

Indirect costs essential for achieving operational goals.

## 2021 Appropriations by Operational Objective



\$507.9 M	42.1%	● General Support
\$278.8 M	23.1%	● Flood & Pollution Control
\$209.2 M	17.4%	● Treatment
\$110.4 M	9.2%	● Collection
\$70.1 M	5.8%	● Solids Processing
\$28.6 M	2.4%	● Solids Utilization
\$1,205.0 M	100.0%	TOTAL

## Collection & Treatment

The District treats an average of 1.4 billion gallons of wastewater per day, with a total capacity of over 2.0 billion gallons per day. In 2021, the District expects to collect and treat approximately 512.8 billion gallons of wastewater at its seven water reclamation plants. The District's reclaimed wastewater, along with runoff from rainfall, is returned to the Chicago Area Waterway System, which includes local canals, rivers, and streams that serve as headwaters of the Illinois River system.

The District provides reclamation for residential and industrial wastewater, meeting permitted discharge limits virtually at all times. The water reclamation process is protected by a pre-treatment program to guard against hazardous substances and toxic chemicals. These are strictly regulated by federal and state requirements. The District routinely monitors all industry and non-residential sources to ensure that those wastes are disposed of in an environmentally responsible and lawful manner.

The collection and treatment processes are performed in compliance with discharge permits issued by the United States Environmental Protection Agency, which regulates the quality of the effluent as it leaves the treatment plants. The District's high level of compliance produces consistently excellent results. This is reflected in a 99.89 percent overall compliance with the National Pollutant Discharge Elimination System requirements in 2019 (latest year for which figures are available). In addition, this compliance has resulted in six Platinum Peak Performance Awards from the National Association of Clean Water Agencies.

A commitment to excellence has been displayed throughout the COVID-19 pandemic as uninterrupted operations have been provided to ensure that wastewater is cleaned and treated and the public health and environment are protected. In its continual pursuit of excellence, the District has adhered to a rigorous asset management plan to maintain its facilities at levels in accordance with operational and permit requirements. As with any strong asset management program, project selection is guided by the asset's or system's criticality, condition, and failure risk.



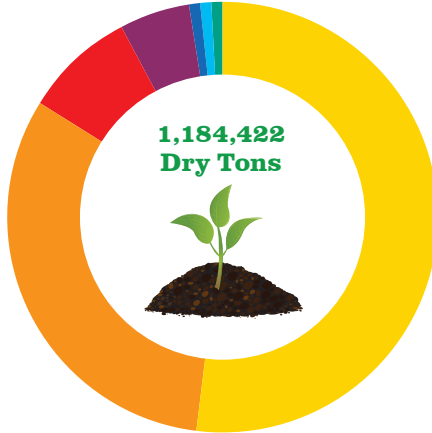
Visitors touring the Stickney Water Reclamation Plant in Cicero, IL prior to the COVID-19 pandemic.

## Biosolids Processing & Utilization

The District’s biosolids production operation is one of the largest of its kind in the country. In 2021, the District will remove and process approximately 191,500 dry tons of concentrated sewage through three biosolids handling facilities and produce an estimated 100,000 dry tons of biosolids. The ten-year period of the utilization of District biosolids is displayed in the graph below.

**Utilization of District Biosolids, 2010–2019**

(in Dry Tons)



619,024	52.2%	● Farmland Application
375,263	31.7%	● MBM Pelletizing Facility
102,013	8.6%	● Class A Exceptional Quality (EQ) Distribution
61,321	5.2%	● Landfill Applications
10,281	0.9%	● Unsuitables
8,355	0.7%	● Farmland Application - Injection
8,165	0.7%	● MWRD Land
1,184,422	100.0%	TOTAL

Although 2020 was a challenging year due to the COVID-19 pandemic, the Biosolids Management Program thrived. All categories used to measure the success of the program improved: centrifuge cake-to-farm shipments increased by 37 percent, EQ compost distribution increased by 176 percent, EQ air-dried biosolids distribution increased by 155 percent, and lagoon storage capacity at the Calumet and Lawndale Avenue Solids Management Areas increased by 48 percent and 19 percent, respectively.

In 2021, a Request for Proposal will be issued for marketing biosolids and developing both short- and long-term outlets for all EQ biosolids produced by the District. All of these programs, actions, and initiatives are designed to cultivate a local customer base, improve product performance, and advance the goal to Recover Resources.

## Flood & Pollution Control

### Tunnel and Reservoir Plan

The District's Tunnel and Reservoir Plan is one of the country's largest public works projects for pollution and flood control. The Tunnel and Reservoir Plan has been successful in preventing flooding and pollution caused by combined sewer overflows, by capturing and storing combined stormwater and sewage that would otherwise overflow into waterways in rainy weather.

Phase I, completed in 2006, consists of four tunnel systems totaling 109.4 miles of deep rock tunnels, eight to 33 feet in diameter and 150 to 300 feet underground. The tunnels provide crucial protection and can capture up to 2.3 billion gallons of the first flush of sewage contaminated stormwater from combined sewers that previously flowed into area waterways.

Phase II, the reservoir component, provides an additional 15.0 billion gallons of storage of combined sewer overflows for flood damage reduction and additional pollution control. This phase is composed of three separate reservoirs:

The Gloria A. Majewski Reservoir, located in Elk Grove Village, was built by the Army Corps of Engineers and finished in 1998. It provides 350.0 million gallons of storage. The reservoir was constructed for \$45.0 million, and since its completion has yielded over \$560.0 million in flood damage reduction benefits to three communities.

The Thornton Composite Reservoir was completed in 2015. It provides 7.9 billion gallons of storage and through July 2020, has captured approximately 39.0 billion gallons of polluted water. It is projected to provide more than \$40.0 million annually in benefits to the residents of 14 communities.

The McCook Reservoir is comprised of two stages. The first stage was unveiled on December 4, 2017 and provides an estimated 3.5 billion gallons of storage. The second stage, expected to be completed in 2029, will provide an estimated 6.5 billion gallons of storage. The McCook Reservoir is projected to bring more than \$140.0 million per year in flood control benefits to the 3.1 million residents of 37 communities. Through July 2020, approximately 62.0 billion gallons of polluted water have been captured.



The McCook Reservoir, the last component of the Tunnel and Reservoir Plan system, serves 3.1 million people in 37 communities.



A new 20-foot diameter inflow tunnel and gate shaft, scheduled to be completed in 2021, is being constructed to connect the existing Des Plaines Tunnel system directly to the McCook Reservoir. The new tunnel will provide a greater benefit to the communities served by the Des Plaines Tunnel than using the inflow/outflow tunnels.

### **Industrial Waste Monitoring & Pollution Control**

The District effectively eliminates offensive or dangerous discharges into the public sewer system through the administration of the Sewage and Waste Control Ordinance. It specifies limits on the quantity and quality of wastes discharged by industrial users as required by the United States Environmental Protection Agency. The discharges, unless properly controlled and treated, could interfere with the District's treatment processes and adversely impact waterways. Industries and non-residential sources are routinely monitored by the District to ensure wastes are disposed of in an environmentally responsible and lawful manner. The District also operates a user charge system, which imposes a surcharge above property tax payments for commercial, industrial, and tax-exempt users of the sewerage systems.

The District is designated by the Illinois Environmental Protection Agency as an official response unit for chemical and hazardous waste spills in Cook County and in that capacity is expected to respond to approximately 140 emergency calls in 2021 from fire and police officials, citizens, and other federal and state agencies. In addition, boat patrols are routinely conducted to locate pollution sources and monitor lakefront recreational events to prevent pollution from entering Lake Michigan. The Citizen Incident Reporting Application, found on the District's website or via a mobile application, allows citizens to report incidents of odors, stream blockages, and other environmental-related issues. Dispatchers monitor both the online reporting system and a telephone hotline 24 hours per day.

The District also conducts chemical and biological monitoring of District service area waterways and has developed, through collaborators in academia, water quality models of portions of the Chicago Area Waterway System (CAWS) to assess the operation of the waterway to continually improve water quality and protect aquatic life. Since 2016, the District has implemented disinfection technologies and microbiological monitoring of effluents at the O'Brien and Calumet water reclamation plants to protect water quality in the CAWS and ensure safety for public recreation. In 2020, the District began a four-year CAWS phosphorus assessment and reduction study to guide future phosphorus reduction planning at the District's three largest water reclamation plants.



The Chicago River is active with recreational paddlers, tour boats, and commercial traffic.

## Stormwater Management

The Stormwater Management Program is aggressively working to minimize flooding damage caused by historic rain patterns consisting of intense, short bursts that overwhelm community systems. Construction on the Addison Creek Reservoir began in 2019 and the project to stabilize Addison Creek stream banks was completed in 2020. The \$42.7 million Addison Creek Channel Improvements will begin in 2021. Together these large-scale projects will reduce overbank flooding for approximately 2,200 structures.

Through flood-prone property acquisition, community partnerships, and cost-sharing agreements for local stormwater projects, the District is leveraging tax dollars and investing in both Green Infrastructure projects and large capital projects. Together with the City of Des Plaines, the District is purchasing and removing 50 structures in near proximity to the Des Plaines River. The combined \$10.8 million projects are part of an ongoing effort by the District to remove properties from flood-prone regions in Cook County. The \$11.0 million flood control project on Midlothian Creek will provide flood relief for an estimated 92 structures in the Village of Robbins and includes the construction of a diversion channel to the Calumet-Sag Channel, channel improvements on Midlothian Creek, and the construction of a naturalized detention area.

Providing stormwater management includes not only building traditional flood control measures, but also incorporating Green Infrastructure into regional planning. The 2021 Budget includes \$35.5 million in the Stormwater Management Fund for Intergovernmental Agreements for stormwater improvements.

Green Infrastructure can reduce wet-weather flows to combined sewer systems, reducing combined sewer overflows to local waterways and protecting water quality in these vital waterways. Green Infrastructure reduces runoff volumes, improves water quality in separate sewer service areas, and provides social benefits that enhance the livability of communities. Since 2017, the District initiated over 100 Green Infrastructure partnerships throughout Cook County for projects that provide flood reduction and other community benefits.

The District continues to partner with Chicago Public Schools, the Chicago Department of Water Management, Healthy Schools Campaign, and Openlands on the Space to Grow Program implementing Green Infrastructure into schoolyards and creating vibrant places to play and learn. In 2020, five new green schoolyards opened and an additional five are planned to open in 2021.



Buffalo Creek was improved by the District under the Heritage Park Flood Control Facility project. Other improvements featured on the project included widening of the creek banks, new stormwater storage areas within Heritage Park, and recreation amenities planned in coordination with the Wheeling Park District.

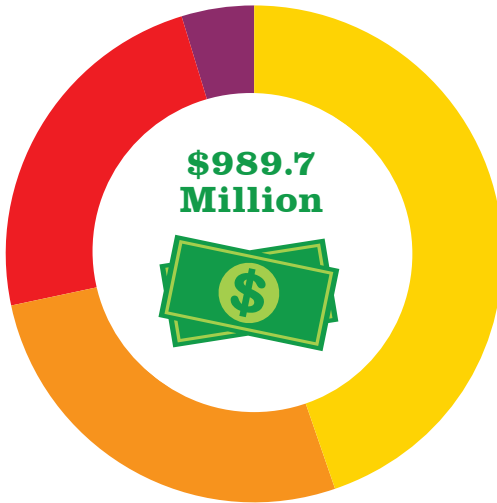
# Capital Improvement Program

Capital improvements preserve the useful life or increase the capacity or efficiency of District facilities. Capital projects involve the acquisition, improvement, replacement, remodeling, completion, alteration, construction, and enlargement of District facilities.

Funding for the Capital Improvement Program consists of the sale of capital improvements bonds, general property tax revenues, SRF loans, and federal and state grants. The 2021 Capital Improvement Program appropriation, which includes the Capital Improvements Bond and Construction Funds, is \$325.9 million. A total of 112 projects funded by the Capital Improvements Bond or Construction Funds will be in the planning, design, or construction phases in 2021. The Capital Improvement Program identifies and prioritizes projects to modernize obsolete equipment and facilities to ensure continued efficient and reliable service, protect infrastructure, and meet National Pollutant Discharge Elimination System permit requirements.

The District’s overall Capital Improvement Program includes 2021 construction project awards, land, support, future projects, and projects under construction, with a total cost of approximately \$989.7 million, as displayed in the graph below.

## Overall Capital Improvement Program



\$443.5 M	44.8%	● Future Project Awards
\$268.6 M	27.1%	● 2021 Project Awards
\$232.1 M	23.5%	● Projects Under Construction
\$45.5 M	4.6%	● Support & Land Acquisition
\$989.7 M	100.0%	TOTAL



Photo: A view of the Chicago skyline looking north from Ping Tom Memorial Park.

**Metropolitan Water Reclamation District  
of Greater Chicago**

100 East Erie Street • Chicago, Illinois 60611-3154



[mwrld.org](http://mwrld.org)