

2020 BUDGET

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

2020 Appropriations 10

Appropriations by Operational Objective 11

OPERATIONAL OBJECTIVES

Collection & Treatment 12

Biosolids Processing & Utilization 13

Flood & Pollution Control 14

Stormwater Management 16

Capital Improvement Program 17



The MWRD restored strip-mined land in Cuba, IL for the Prairie Site Plan, converting several former coal mines to fertile farmland and healthy fresh-water lakes that are now home to thriving aquatic life and an ideal location to test best management practices to study nutrient reduction strategies.



2020 Budget in Brief

Metropolitan Water Reclamation District of Greater Chicago

This 2020 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.

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January 2, 2020

To Residents of the Metropolitan Water Reclamation District,

I am pleased to present the Metropolitan Water Reclamation District of Greater Chicago's 2020 Budget. The budget is a fiscally responsible plan that supports the District's mission of protecting our water environment and the health and safety of the public in our service area.

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 also controls 76.1 miles of navigable waterways, and owns and operates 34 stormwater detention reservoirs to provide regional flood protection.

The Corporate Fund includes an increase of 5.5 percent and emphasizes consistent, effective maintenance of our facilities, while the Stormwater Management Fund recommendations include an increase of \$24.8 million over the 2019 appropriation to fund construction costs for both Green Infrastructure and major flood control projects. The 2020 Capital Improvement Program utilizes grants, State Revolving Fund loans, and general obligation and alternate revenue bonds, along with pay-as-you-go funding to maximize value to taxpayers.

The 2020 Budget highlights the District's commitment to reduce flooding throughout our service area. During 2019, construction began on the \$63.3 million Addison Creek Reservoir, partially funded by a \$5 million Community Development Block Grant - Disaster Recovery Program. The Addison Creek Channel improvements will begin in 2020. Together these large-scale projects will reduce overbank flooding for approximately 2,200 structures.

The District continues to operate as a fiscally sound organization by maintaining a AAA bond rating with Fitch Ratings and a AA+ bond rating from Standard & Poor's. The District's funding policies for both the Retirement Fund and Other Postemployment Benefits Trust Fund demonstrate the District's commitment to long-term fiscal management and contribute to strong credit ratings. The 2020 Budget includes a planned equity transfer of \$20.0 million to the Retirement Fund to provide advance funding to maintain growth in the Retirement Fund's funded ratio, which is 56.5 percent funded as of December 31, 2018. In May 2019, the District took an important step in promoting transparency and efficiency by entering into an Intergovernmental Agreement with Cook County to allow the Office of the Independent Inspector General to provide services to the District. These accomplishments speak to the effective leadership of the agency.

This Budget in Brief is a summary of our budget and describes how the 2020 funding priorities align with our Strategic Business Plan, *Recovering Resources, Transforming Water*. For the complete budget document and Strategic Business Plan, please visit mwr.d.org. We are committed as an agency to providing the excellent service expected of the District.

Respectfully submitted,

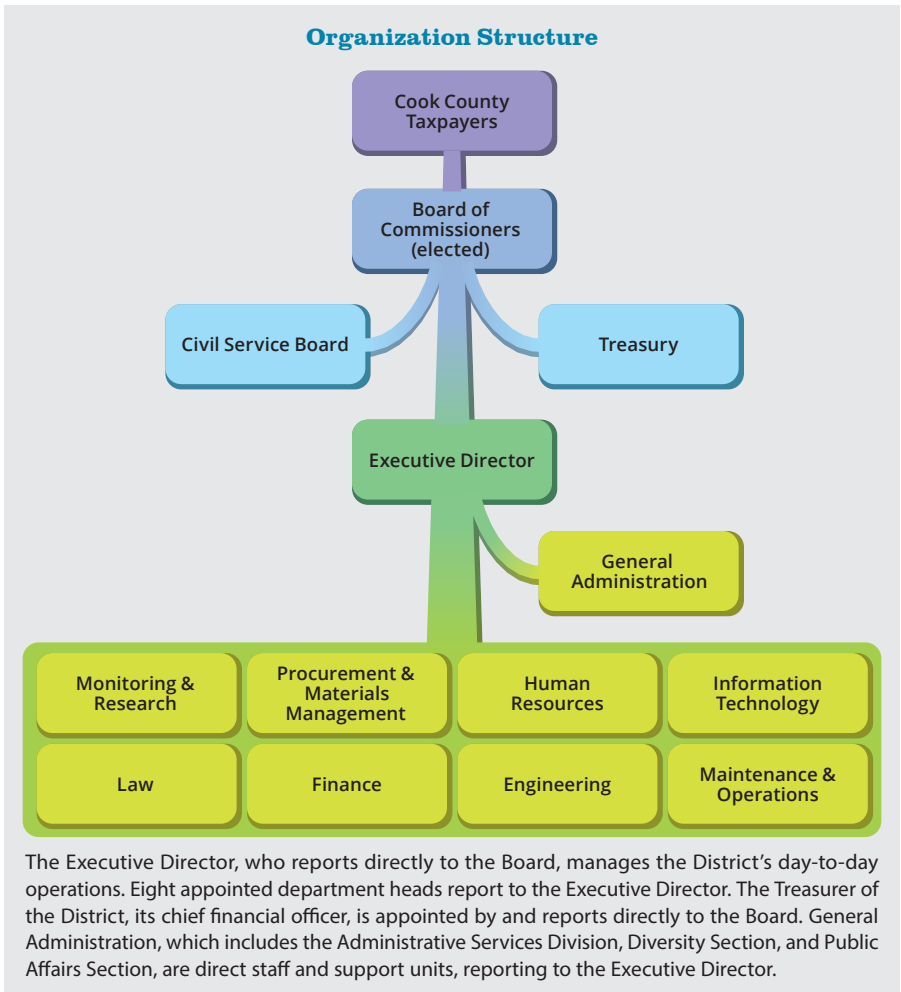
A handwritten signature in black ink that reads "Kari K. Steele". The signature is written in a cursive, flowing style.

Kari K. Steele

President of the Board of Commissioners

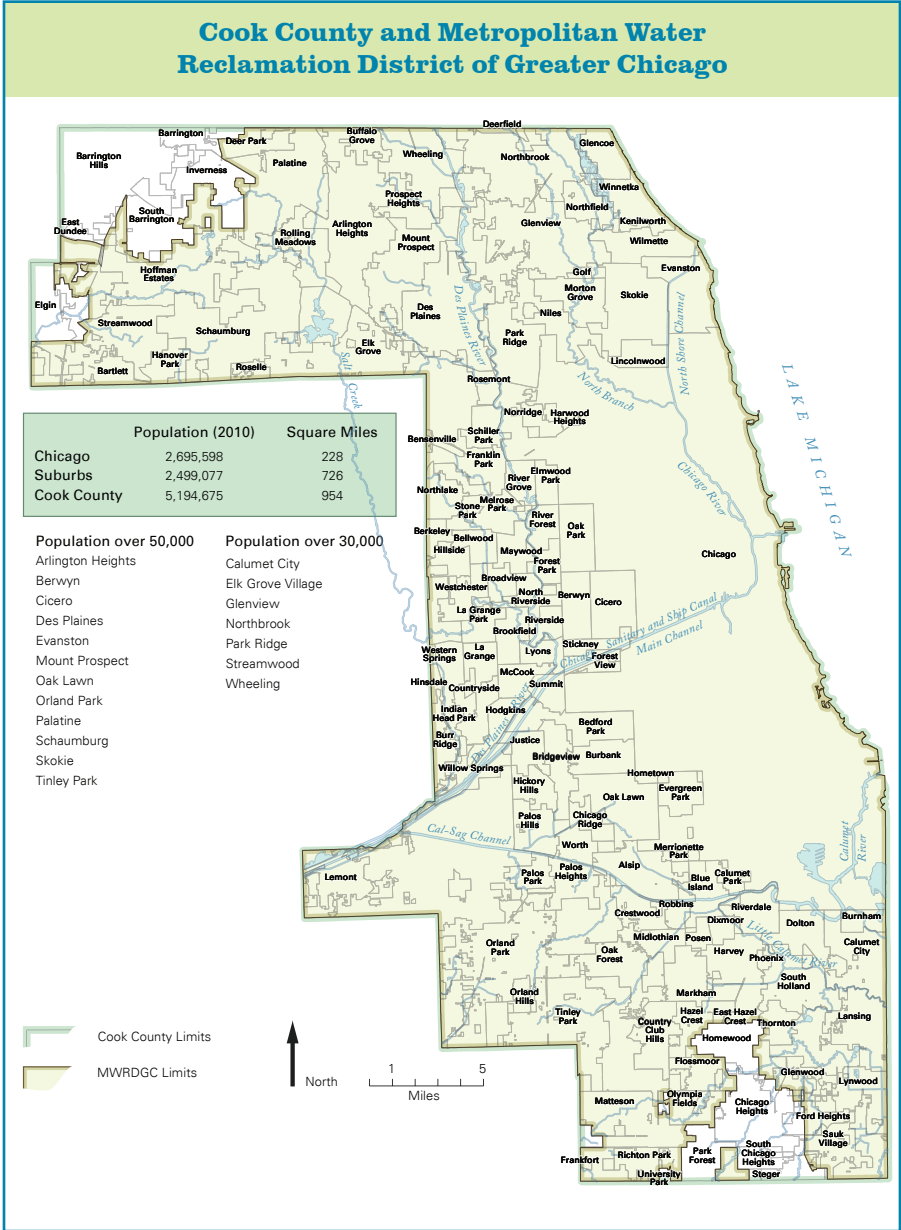
Mission & Governance

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 throughout Cook County, which includes administering its Watershed Management Ordinance for the entire county, and implementing capital improvement projects with communities to address regional and local flooding issues within the District's service area comprising approximately 95% of Cook County. 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

The District is responsible for Stormwater Management for all of Cook County, including areas that currently lie outside the District’s boundaries.



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 520,000 laboratory analyses per year to assure operations meet mandated standards of environmental quality, to enforce industrial standards, and to monitor water quality in waterways.
- ✓ Collects more than 750 pounds of medications at our Water Reclamation Plants and downtown headquarters, and our boats remove 2,700 yards of debris from our waterways throughout the year.
- ✓ 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.
- ✓ Offers Exceptional Quality compost for no charge to residents, non-profit organizations, and governmental agencies within Cook County.



Primary Tanks at the Calumet Water Reclamation Plant.

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 68.7 percent of the 2020 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 \$37.4 million for 2020, an increase of \$4.2 million from the 2019 Adjusted 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 \$9.0 billion. Actual net outstanding debt applicable to the debt limit totals \$2.8 billion. The debt margin, the difference between issued debt applicable to the debt limit and the statutory limit, is \$6.2 billion, or 68.8 percent of the limit. The District is planning a \$125.0 million bond sale in 2020 and anticipates receiving \$70.0 million in low-interest SRF loans in 2020 based on the current capital project schedule. Also in 2020, federal and state grants totaling \$14.5 million will be available for capital projects and \$1.4 million for stormwater projects.

The 2020 appropriation for bond redemption and interest payments totals \$233.0 million, a decrease of \$5.3 million, or 2.2 percent, from the 2019 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 2020 are \$43.0 million. Land rentals, investment income, sewer permit fees, connection impact fees, and other revenues will provide an estimated \$64.6 million in 2020. The 2020 TIF surplus distribution is budgeted at \$19.0 million, driven by the City of Chicago's 2020 TIF declaration, that provides \$11.0 million more than typically received.

Tax Levy

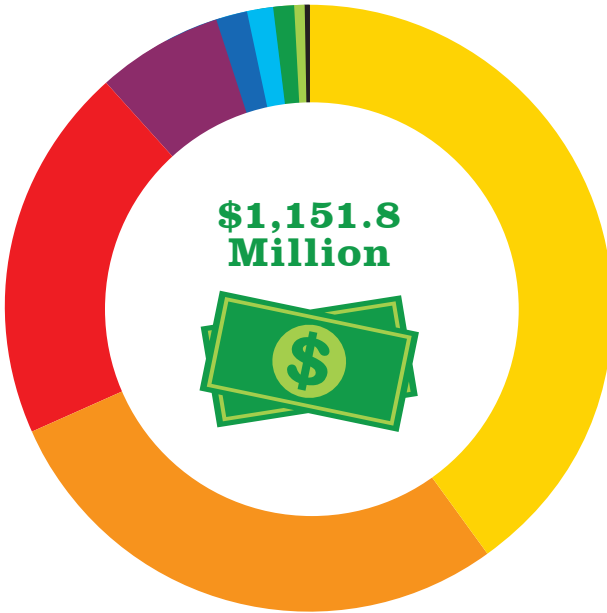
The overall 2020 tax levy is \$652.6 million, an increase of \$9.3 million, or 1.4 percent, from the 2019 Adjusted Levy.

Tax Rate*

The overall tax rate for 2020, based on the most recent Equalized Assessed Valuation, totals 39.48 cents per \$100 of assessed property value, a 0.62 cent decrease from the 2019 Adjusted Tax Rate.

*EAV estimated to increase three percent annually

Where District Money Comes From



\$462.0 M	40.1%		Net Assets Appropriated
\$328.2 M	28.5%		Net Tax Sources
\$230.2 M	20.0%		State Revolving Fund Loans & Future Bond Sales
\$43.0 M	3.7%		User Charge Income
\$35.9 M	3.1%		Miscellaneous
\$23.0 M	2.0%		Land Rentals
\$15.8 M	1.4%		Grants
\$12.7 M	1.1%		Investment Income
\$1.0 M	0.1%		Sewer Permit Fees
\$1,151.8 M	100.0%		TOTAL

**For a \$100,000 home,
the 2020 estimated
District tax is \$114.84.**



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.

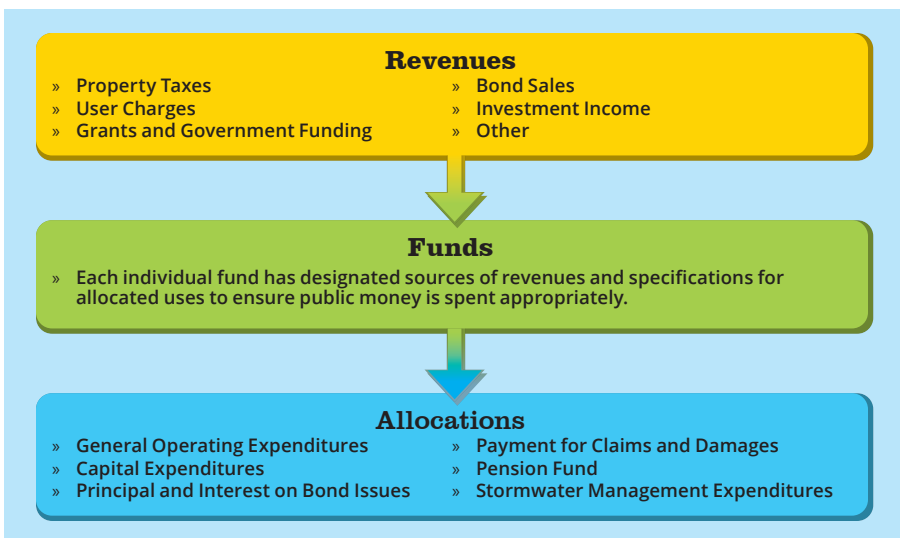
CONSTRUCTION FUND: Accounts for a specific property tax levy and other revenues used as a pay-as-you-go capital fund for the construction or replacement of long-term assets used in the principal functions of the District.

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.

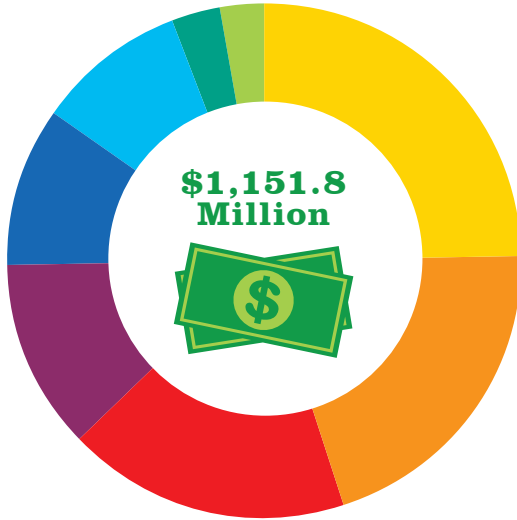
RETIREMENT FUND: Accounts for a specific property tax levy to fund pension costs in accordance with statutory provisions. The taxes are collected by the District and paid to the MWRD Retirement Fund, a pension trust fund.

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, or liabilities that might be imposed against the District and for the 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



\$287.8 M	25.0%	● Construction & Design
\$233.0 M	20.2%	● Bond Redemption & Interest Fund
\$204.4 M	17.7%	● Plant Operation & Maintenance
\$136.8 M	11.9%	● Staff Services
\$116.3 M	10.1%	● Stormwater Management
\$107.3 M	9.3%	● MWRD Retirement Fund
\$34.4 M	3.0%	● Claims & Judgments
\$31.8 M	2.8%	● Monitoring & Research
\$1,151.8 M	100.0%	TOTAL



In 2020, the District will begin a \$10 million rehabilitation of the steel spandrel beams in the pump and blower house at the O'Brien WRP.

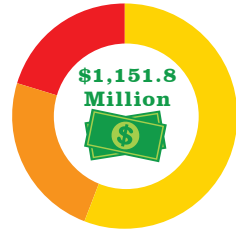
2020 Appropriations

Appropriations for 2020 total \$1,151.8 million, a decrease of \$71.2 million, or 5.8 percent, from the 2019 Adjusted Budget, driven by project timing within the Capital Improvement Program. Appropriations are allocated to seven separate funds. Each fund maintains a self-balancing set of accounts that are 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. In 2020, the decrease is primarily attributed to a decrease of \$133.6 million in the Capital Improvements Bond Fund, which is appropriated on an obligation basis and based on project schedules. There are also decreases in the Bond Redemption & Interest Fund of \$5.3 million and the Construction Fund of \$0.3 million. These reductions are offset by a \$20.0 million increase in the Retirement Fund, an increase of \$24.8 million in the Stormwater Management Fund, a \$20.6 million increase in the Corporate Fund that includes a planned non-recurring expenditure that will be used to support the modernization of the District’s Enterprise Resource Planning System, and a \$2.6 million increase in the Reserve Claim Fund.

The 2020 Budget includes a planned equity transfer of \$20.0 million to the Retirement Fund to provide advance funding to maintain growth in the Retirement Fund’s funded ratio. The District will transfer an additional \$5.0 million from TIF surplus funds, provided statutory authority is granted.

2020 Character of Expenditure

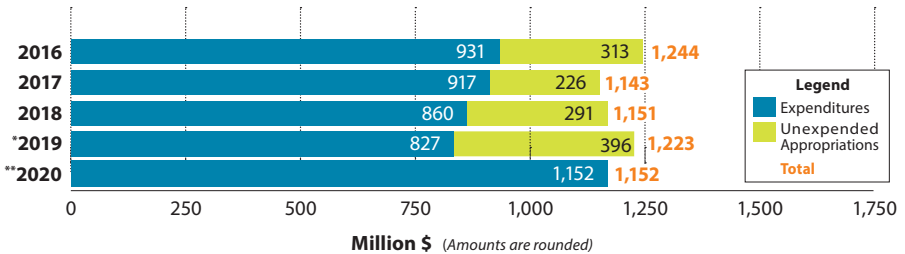
(Figures are rounded)



\$644.4 M	56%	● Current Expense
\$274.4 M	24%	● Capital Outlay
\$233.0 M	20%	● Debt Retirement
\$1,151.8 M	100%	TOTAL

Appropriations & Expenditures, 2016–2020

(*Adjusted **Estimated)



Summary by Fund	2020 Budget	2019 Adjusted Budget	Dollar Increase (Decrease)	Percent Change
Corporate Fund	\$398,200,800	\$377,612,500	\$20,588,300	5.5%
Construction Fund	18,044,400	18,340,300	(295,900)	(1.6%)
Capital Improvements Bond Fund	244,547,400	378,173,800	(133,626,400)	(35.3%)
Stormwater Management Fund	116,258,000	91,410,100	24,847,900	27.2%
Retirement Fund	107,319,000	87,281,000	20,038,000	23.0%
Reserve Claim Fund	34,395,000	31,767,800	2,627,200	8.3%
Bond Redemption & Interest Fund	233,021,867	238,357,541	(5,335,674)	(2.2%)
Total	\$1,151,786,467	\$1,222,943,041	\$(71,156,574)	(5.8%)

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 2020 appropriation and the personnel assigned to each operational objective across all funds. In 2020, a total of 1,953 positions are budgeted across all operational objectives. The District’s mission is achieved daily through six main operational functions:

Collection \$88,616,244 • 282 Personnel

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

Treatment \$199,757,908 • 456 Personnel

Treatment of influent at water reclamation plants.

Solids Processing \$64,579,901 • 254 Personnel

Processing of primary, secondary, and tertiary sludge.

Flood & Pollution Control \$252,999,608 • 441 Personnel

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

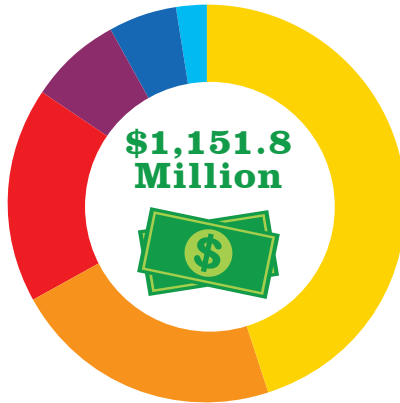
Solids Utilization \$25,569,973 • 41 Personnel

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

General Support (Debt Service, Retirement, Reserve Funds, & Support Departments) \$520,262,833 • 479 Personnel

Indirect costs essential for achieving operational goals.

2020 Appropriations by Operational Objective



\$520.3 M	45.2%	● General Support
\$253.0 M	22.0%	● Flood & Pollution Control
\$199.8 M	17.3%	● Treatment
\$88.6 M	7.7%	● Collection
\$64.6 M	5.6%	● Solids Processing
\$25.6 M	2.2%	● Solids Utilization
\$1,151.8 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 2020, the District expects to collect and treat approximately 496.2 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 99.98 percent overall compliance with the National Pollutant Discharge Elimination System requirements in 2018 (latest year for which figures are available). In addition, this compliance has resulted in one Silver and six Platinum Peak Performance Awards from the National Association of Clean Water Agencies.

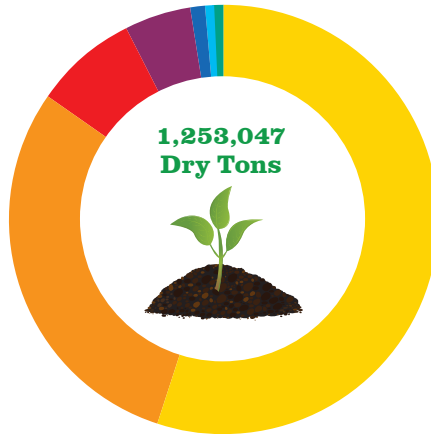


James C. Kirie Water Reclamation Plant in Des Plaines, IL.

Biosolids Processing & Utilization

The District’s biosolids production operation is one of the largest of its kind in the country. In 2020, the District will remove and process approximately 188,300 dry tons of concentrated sewage through three biosolids handling facilities and produce an estimated 100,000 dry tons of biosolids for beneficial utilization.

Utilization of District Biosolids, 2009–2018
(in Dry Tons)



690,611	55.1%	● Farmland Application
371,189	29.6%	● MBM Pelletizing Facility
100,595	8.1%	● Controlled Solids Distribution
61,321	4.9%	● Landfill Applications
13,922	1.1%	● Unsuitables
7,793	0.6%	● MWRD Land
7,616	0.6%	● Farmland Application—Injection
1,253,047	100.0%	TOTAL

In 2020, the District will continue its program for the beneficial utilization of biosolids. Biosolids are produced as a safe and environmentally friendly alternative to synthetic fertilizer. Illinois law recognizes Exceptional Quality (EQ) biosolids and EQ biosolids blends as soil amendments.

The District has made progress in developing a biosolids market through several initiatives including the distribution of bags of compost at different venues, attendance at trade and landscaping events to showcase the EQ product, and an agreement with the Illinois Tollway to provide compost for their landscaping.

Free bulk distribution is offered to area residents, non-profit organizations, golf courses, and public entities at the District’s seven water reclamation plants. In 2020, the District will begin 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 & Reservoir Plan is one of the country's largest public works projects for pollution and flood control. The Tunnel & 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 million, and since its completion has yielded over \$510 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 since its completion has captured more than 33.0 billion gallons of polluted water. It is projected to provide more than \$40 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 \$143 million per year in flood control benefits to the 3.1 million residents of 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.



First fill at McCook Reservoir Stage 1.

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 145 emergency calls in 2020 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 WRPs to protect water quality in the CAWS to ensure safety for public recreation. In 2020, the District will begin 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 District's Operations Challenge Team competed at the Water Environment Federation's WEFTEC in September 2019.

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. During 2019, construction began on the \$63.3 million Addison Creek Reservoir, partially funded by a \$5 million Community Development Block Grant - Disaster Recovery Program, a federally funded program through the U.S. Department of Housing and Urban Development. The Addison Creek Channel improvements will begin in 2020. 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. The District completed construction on two reservoir projects in 2019. Together with the Forest Preserve District of Cook County, the District is increasing flood storage at Arrowhead Lake and removing 70 structures from the flood plain in Palos Heights. The \$1.6 million project will bring needed relief for area residents and improve forest preserve amenities. The \$9.7 million Buffalo Creek Reservoir expansion increases the storage capacity by 58.6 million gallons and will protect 107 structures from flooding impacts, with additional benefits along Buffalo Creek and the main stem of the Des Plaines River.

Providing stormwater management includes not only building traditional flood control measures, but also incorporating Green Infrastructure into regional planning. The 2020 Budget includes \$43.1 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 65 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 2019, five new green schoolyards opened and an additional six are planned to open in 2020.



Westcott Elementary School students will benefit from a new schoolyard provided by Space to Grow partners to improve amenities and provide stormwater retention for more than 150,000 gallons of water per storm event.

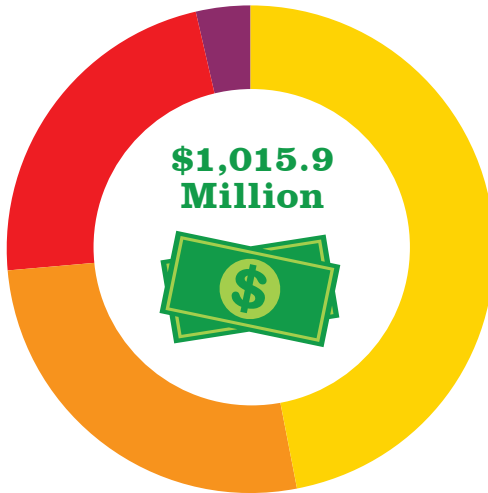
Capital Improvement Program

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 2020 Capital Improvement Program appropriation, which includes the Capital Improvements Bond and Construction Funds, is \$262.6 million. A total of 117 projects funded by the Capital Improvements Bond or Construction Funds will be in the planning, design, or construction phases in 2020. 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 2020 construction project awards, land, support, future projects, and projects under construction, with a total cost of approximately \$1,015.9 million, as displayed in the graph below.

Overall Capital Improvement Program



\$478.1M	47.1%	● Future Project Awards
\$271.7M	26.7%	● Projects Under Construction
\$230.2M	22.7%	● 2020 Project Awards
\$35.9M	3.5%	● Support & Land Acquisition
\$1,015.9M	100%	TOTAL

MWRD Water Reclamation Plants



Calumet Water Reclamation Plant is the longest performing of the MWRD's seven WRPs. In operation since 1922, it serves residents and businesses in the southern portion of Cook County to clean more than 350 million gallons of wastewater per day on average. The plant's service population is more than one million people in an area of about 300 square miles.



John E. Egan Water Reclamation Plant serves more than 160,000 residents in a 44 square mile area. In operation since 1975, the Egan WRP cleans an average of 30 million gallons of wastewater per day.



Hanover Park Water Reclamation Plant has been serving residents in northwestern Cook and DuPage County communities since 1963. The Hanover Park WRP serves more than 56,000 people within an 11.2 square mile area and cleans an average of 12 million gallons per day.



James C. Kirie Water Reclamation Plant opened in 1980, making it the newest of the MWRD's seven wastewater treatment plants. The 108-acre Kirie plant serves a population of about 264,000 residents in a 65.2 square mile area to clean more than 50 million gallons of wastewater per day.



Lemont Water Reclamation Plant is a small but industrious MWRD facility that provides wastewater treatment for a service area of more than 20 square miles that includes nearly 23,000 people in the village of Lemont.



Terrence J. O'Brien Water Reclamation Plant was built to serve residents in communities north of downtown Chicago. In operation since 1928, the O'Brien WRP serves over 1.3 million people in an area of 143 square miles and cleans

Stickney Water Reclamation Plant (front cover) is one of the largest wastewater treatment facilities in the world. It serves residents in the central part of Chicago as well as 46 other communities within a 260 square mile area. Opened in two phases in 1930 and 1939, the Stickney plant currently serves more than 2.3 million people and cleans an average of 700 million gallons of wastewater per day.

Metropolitan Water Reclamation District of Greater Chicago

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