



2016 Budget in Brief

Metropolitan Water Reclamation District of Greater Chicago

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Maggie Daley Park in downtown Chicago opened in 2015 and has already become a major attraction for tourists and locals alike. The park benefited from the use of 6,000 cubic yards of MWRD biosolids for landscaping.



2016 Budget in Brief

Metropolitan Water Reclamation District of Greater Chicago

This 2016 Budget in Brief serves as an addendum to the Metropolitan Water Reclamation District of Greater Chicago's (District's) 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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Managing Today's Water

January 4, 2016

To Stakeholders of the Metropolitan Water Reclamation District:

We are entering 2016 having reached several milestones. First, the Thornton Reservoir is in service, providing needed relief to the southern areas of Cook County. The Thornton Reservoir has a capacity of 7.9 billion gallons and is the second reservoir in the Tunnel and Reservoir Plan to come online. Our two disinfection facilities are in service and ready for the 2016 disinfection season. The Calumet Water Reclamation Plant (WRP) provides chlorination/de-chlorination and the O'Brien WRP is ready to operate an ultraviolet disinfection process. These major milestones will start a new chapter in the District's history.

The District is beginning the second year of our five-year Strategic Business Plan, "Recovering Resources, Transforming Water," which focuses on the following six major goals: Add Value; Excellence; Resource Recovery; Develop Employees; Leading Partnerships; and Technology. The District continues to operate a fiscally sound organization, maintaining a AAA bond rating from two major rating agencies. This accomplishment, in the midst of an uncertain Illinois financial environment, is an outstanding achievement and speaks to the careful, thoughtful management of the agency as directed by the Board.

Flooding is the number one issue the District will face in the next five years. Recently passed legislation provides the District with flexibility to utilize new tools to address stormwater and flooding issues. Over 72 projects are moving forward to address flooding concerns. Partnerships are growing between communities and government agencies; they are banding together to address the serious issues of flooding. Thousands of homes received protection in 2015 due to the completion of key stormwater projects, and thousands more will receive protection in 2016.

This Budget-in-Brief document is a summary of our budget and describes how the 2016 funding priorities align with our Strategic Business Plan. For the complete Budget and Strategic Business Plan, please visit mwrdd.org.

In 2016, our challenges are many, but our role is clear. We are committed as an agency to continue providing the excellent service expected of the District.

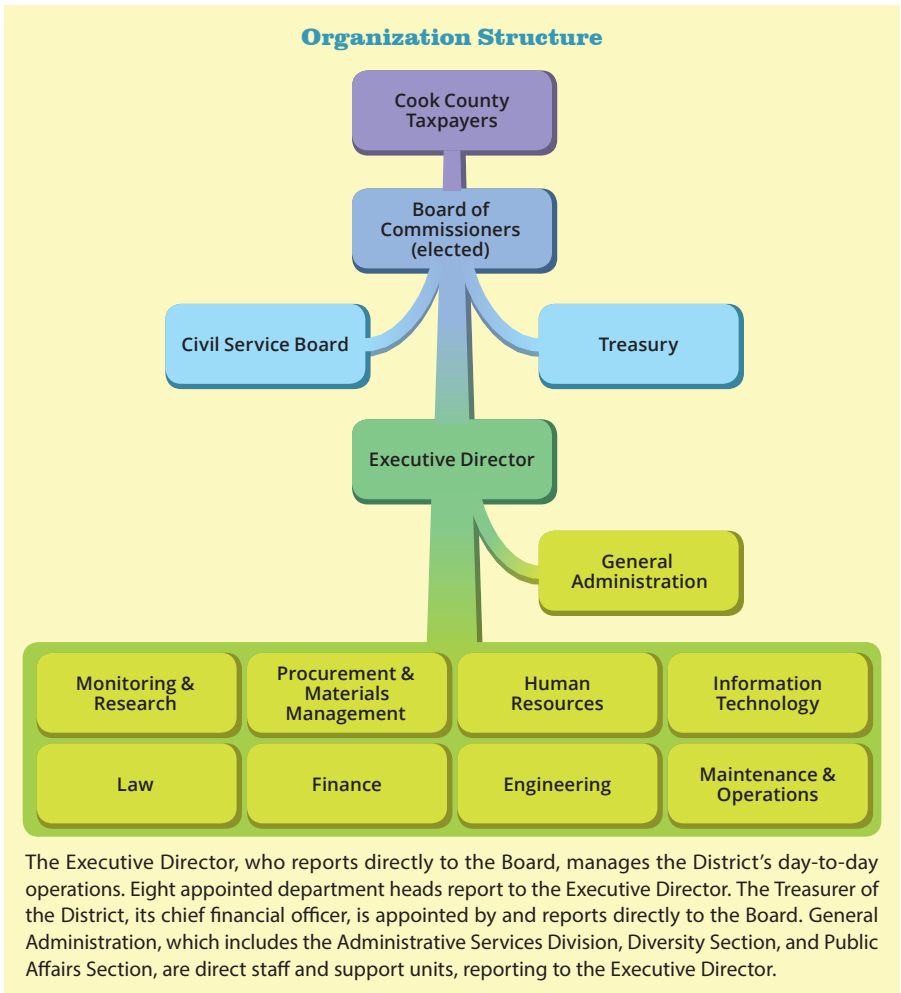
Respectfully submitted,



Mariyana T. Spyropoulos
President

Mission & Governance

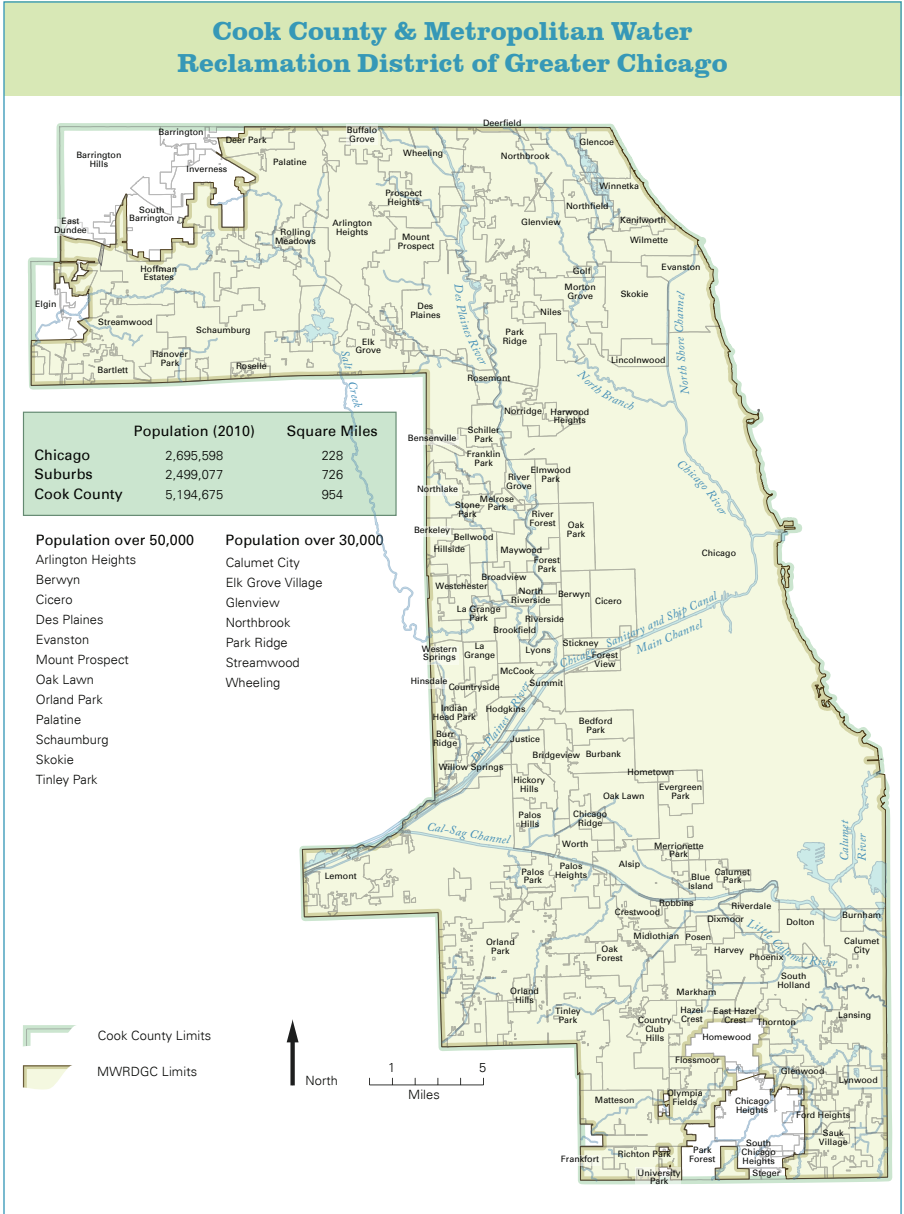
The District is governed by a nine-member Board of Commissioners (Board). Each commissioner is elected at large and paid a salary. Three commissioners are elected every two years for six-year terms. The Board biannually elects from its membership a President, Vice President, and Chairman of the Committee 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 883.4 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 reclamation plants for full treatment. Clean water is then discharged to the Chicago Area Waterway System. The District is also responsible for stormwater management for all of Cook County, including areas outside of its corporate boundaries. 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 preserving water as a vital resource.



The Executive Director, who reports directly to the Board, manages the District’s day-to-day operations. Eight appointed department heads report to the Executive Director. The Treasurer of the District, its chief financial officer, is appointed by and reports directly to the Board. General Administration, which includes the Administrative Services Division, Diversity Section, and Public Affairs Section, are direct staff and support units, reporting to the Executive Director.

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: 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.
- ✓ Owns and operates seven award-winning water reclamation plants, 560 miles of intercepting sewers and force mains, 22 pumping stations, and 35 stormwater detention reservoirs.
- ✓ Manages intercepting sewers and force mains ranging in size from 6 inches to 27 feet in diameter, which are fed by approximately 10,000 local sewer system connections.
- ✓ Controls 76.1 miles of navigable waterways, which are part of an inland waterways system connecting the Great Lakes with the Gulf of Mexico.
- ✓ Treats an average of 1.3 billion gallons of wastewater per day with a wastewater treatment capacity of over 2.0 billion gallons per day.
- ✓ Performs over 500,000 laboratory analyses per year to assure operations meet mandated standards of environmental quality, to enforce industrial standards, and to monitor water quality in waterways.
- ✓ Conducts numerous field investigations per year to resolve sewage and drainage questions and complaints.
- ✓ Captures and treats an annual average of 108.0 million pounds of various pollutants found in combined sewer overflows through the Tunnel and Reservoir Plan system.



Water first flowed into the MWRD's Thornton Composite Reservoir on November 26, 2015. In the following hours, the reservoir captured 400 million gallons of combined sewage and stormwater that otherwise would have overflowed untreated to rivers and streams.

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 \$577.8 million of the 2016 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 income 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. These revenues are received directly from the State of Illinois. Revenue from this source is estimated at \$41.9 million for 2016, no change from the 2015 Adjusted Budget. This revenue source typically trends with the state of the economy.

Funding Capital Projects: Bonds, Grants, and Loans

The District's Capital Improvement Program (CIP) is financed primarily with general obligation bond sales. Additionally, a series of Public Acts have provided further non-referendum authority to the District to issue "limited bonds." Bond sales are used to provide revenue for capital project cash flows.

The District's debt is authorized under the Illinois Compiled Statutes. Currently, the District's statutory debt limit is estimated at \$7.2 billion. Actual outstanding debt applicable to the debt limit totals \$2.9 billion, as recognized in the 2016 Budget. The debt margin, the difference between issued debt applicable to the debt limit and the statutory limit, is \$4.4 billion, or 60.5 percent of the limit.

The 2016 appropriation for bond redemption and interest payments totals \$216.0 million, an increase of \$1.5 million, or 0.7 percent, from the 2015 Adjusted Budget. Appropriations and tax levies are adjusted for new bond sales or State Revolving Fund (SRF) loans.

Debt service for outstanding bonds consists of six refunding bonds, eight capital improvements bonds, and 42 SRF bonds. Federal and state grants and state loans contribute funding to the District's CIP. For 2016, \$80.0 million in SRF loans is budgeted. The District anticipates receiving an annual allocation of approximately \$200.0 million in SRF loans based on the current capitalization level of state funds and repayment trends.

User Charges, Property, Services, and Miscellaneous

A major revenue source for the District is a user charge system which imposes a surcharge above property tax payments for commercial, industrial, and tax-exempt users of the sewerage system. Estimated user charge revenues in 2016 are \$49.0 million. Land rentals, investment income, sewer permit fees, connection impact fees, grants, and other revenues will provide an estimated \$44.1 million in 2016.

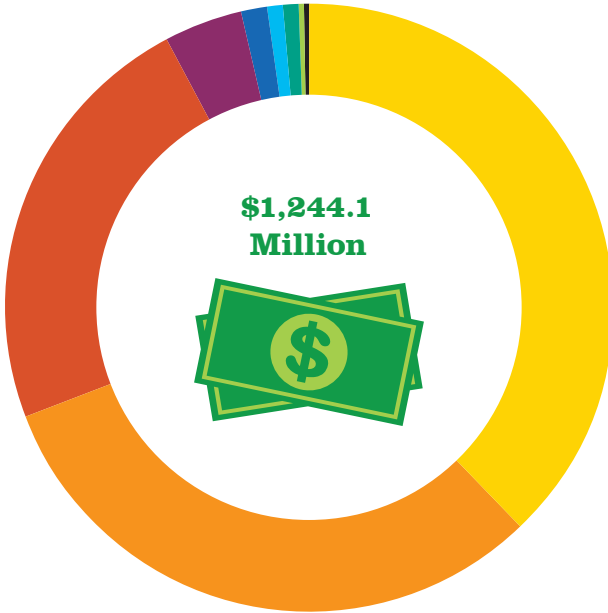
Tax Levy

The overall 2016 tax levy is estimated at \$577.8 million, an increase of \$18.5 million, or 3.3 percent, from the 2015 adjusted levy.

Tax Rate

The overall estimated tax rate for 2016, based on the most recent equalized assessed valuation, totals 42.67 cents per \$100 of assessed property value, a decrease of .30 cents from the 2015 adjusted rate.

Where District Money Comes From



\$471.0 M	37.9%	State Revolving Fund Loans & Future Bond Sales
\$392.5 M	31.5%	Net Assets Appropriated
\$287.5 M	23.1%	Net Tax Sources
\$49.0 M	3.9%	User Charge Income
\$17.5 M	1.4%	Land Rentals
\$11.1 M	0.9%	Grants
\$10.9 M	0.9%	Miscellaneous
\$3.8 M	0.3%	Investment Income
\$0.8 M	0.1%	Sewer Permit Fees
\$1,244.1 M	100.0%	TOTAL

**For a \$100,000 home,
the 2016 estimated
District tax is \$116.29.**



Description of Funds

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

CORPORATE FUND: Pays for the day-to-day operations and 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, grants, and other revenues used for improvements, replacements, and additions to designated environmental improvement projects.

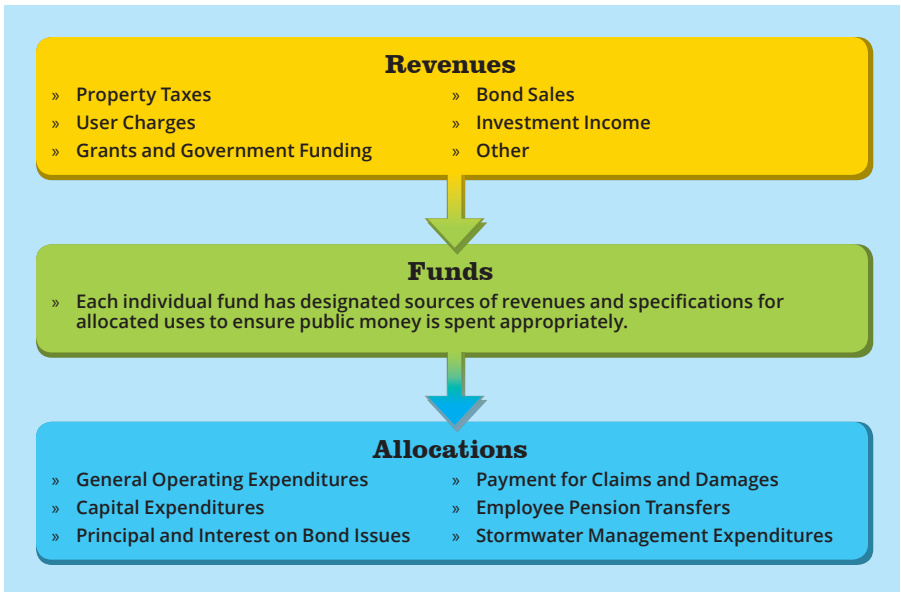
CONSTRUCTION FUND: Accounts for a specific property tax levy and other revenues used for the acquisition and modernization of long-term assets for principal District operations.

STORMWATER MANAGEMENT FUND: Accounts for property tax levies and other revenues, such as interest on investments and permit fees, for planning, management, and implementation activities related to stormwater, flood, and floodwater management in Cook County.

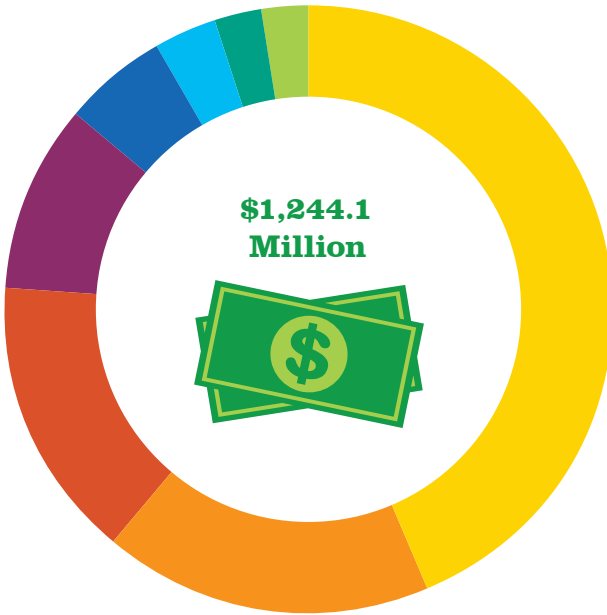
RETIREMENT FUND: Accounts for a specific property tax levy to fund pension costs in accordance with statutory provisions. The taxes are collected by the District and paid to the Retirement Fund, a pension trust fund.

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



\$545.1 M	43.8%		Construction & Design
\$216.0 M	17.4%		Bond Redemption & Interest Fund
\$187.7 M	15.1%		Plant Operation & Maintenance
\$123.3 M	9.9%		Staff Services
\$70.8 M	5.7%		MWRD Retirement Fund
\$40.5 M	3.3%		Stormwater Management
\$30.5 M	2.4%		Monitoring & Research
\$30.2 M	2.4%		Claims & Judgments
\$1,244.1 M	100.0%		TOTAL



On September 26, 2015 water professionals from around the globe converged at Pershing East Magnet School, 3200 S. Calumet Ave., Chicago, to construct a green infrastructure learning garden as part of the Water Environment Federation's (WEF's) 88th Annual Technical Exhibition and Conference.

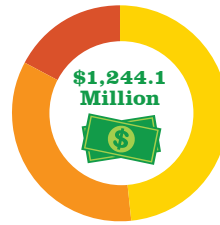
2016 Appropriations

Overall appropriations for 2016 total \$1,244.1 million, an increase of \$40.7 million, or 3.4 percent, from the 2015 Adjusted Budget. 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 2016, there are increases of \$7.3 million in the Corporate Fund, \$30.7 million in the Capital Improvements Bond Fund, \$9.1 million in the Retirement Fund, \$1.5 million in the Bond Redemption & Interest Fund, and offset by decreases of \$524,000 in the Reserve Claim Fund, \$1.3 million in the Construction Fund, and \$6.1 million in the Stormwater Management Fund.

2016 Character of Expenditure

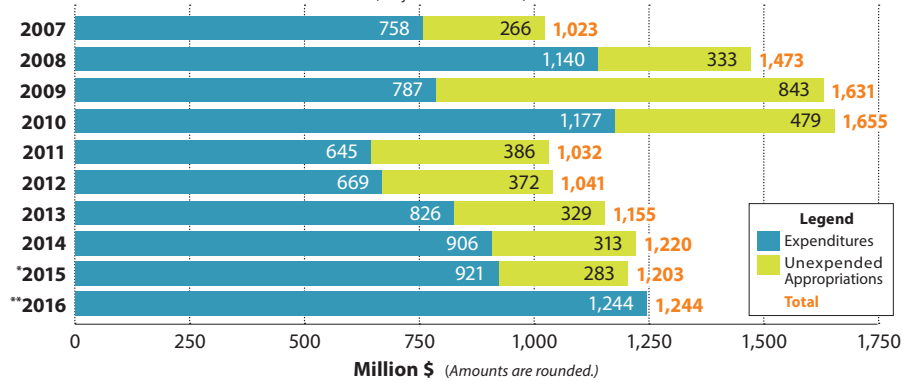
(Percentages are rounded.)



\$600.7 M	48%	● Current Expense
\$427.4 M	34%	● Capital Outlay
\$216.0 M	17%	● Debt Retirement
\$1,244.1 M	100%	TOTAL

Appropriations & Expenditures, 2007–2016

(*Adjusted **Estimated)



Summary by Fund	2016 Budget	2015 Adjusted Budget	Dollar Increase (Decrease)	Percent Change
Corporate Fund	\$366,260,700	\$358,995,400	\$7,265,300	2.00%
Construction Fund	36,614,400	37,910,700	(1,296,300)	(3.40%)
Capital Improvements Bond Fund	483,764,800	453,072,500	30,692,300	6.80%
Stormwater Management Fund	40,500,800	46,588,800	(6,088,000)	(13.10%)
Retirement Fund	70,772,000	61,654,000	9,118,000	14.80%
Reserve Claim Fund	30,175,900	30,700,000	(524,100)	(1.70%)
Bond Redemption & Interest Fund	216,047,130	214,525,839	1,521,291	0.70%
TOTAL	\$1,244,135,730	\$1,203,447,239	\$40,688,491	3.40%

Estimated Taxes for a \$100,000 Home

2016 Budgeted	2015 Adjusted	Decrease	Percent change
\$116.29	\$117.11	\$0.82	(0.70%)

Appropriations by Operational Objective

To comply with the Illinois Compiled Statutes, it is necessary to prepare budget estimates and appropriate funds according to programs, organizational units, performance principles, and unit cost data. The graph below displays the allocation of the 2016 appropriations and the personnel assigned to each operational objective across all funds. The District’s mission is achieved daily through six main operational functions:

Collection \$80,039,251 • 315 Personnel

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

Treatment \$171,310,957 • 466 Personnel

Treatment of influent at water reclamation plants.

Solids Processing \$69,593,901 • 254 Personnel

Processing of primary, secondary, and tertiary sludge.

Flood & Pollution Control \$450,785,249 • 417 Personnel

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

Solids Utilization \$23,286,462 • 48 Personnel

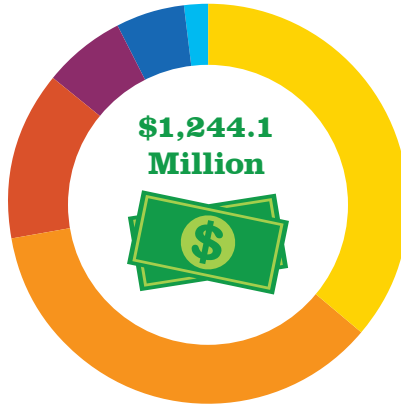
Drying and beneficial utilization of secondary and tertiary solids from the treatment process.

General Support (Debt Service, Retirement, & Reserve Funds, Support Departments) \$449,119,910 • 476 Personnel

Indirect costs essential for achieving operational goals.

In 2016, a total of 1,976 positions are budgeted across all operational objectives, 6 fewer than in 2015.

2016 Appropriations by Operational Objective



\$450,785,249	36.2%	● Flood & Pollution Control
\$449,119,910	36.1%	● General Support
\$171,310,957	13.8%	● Treatment
\$80,039,251	6.4%	● Collection
\$69,593,901	5.6%	● Solids Processing
\$23,286,462	1.9%	● Solids Utilization
\$1,244,135,730	100.0%	TOTAL

Operational Objective: Collection & Treatment

The District treats an average of 1.3 billion gallons of wastewater per day, with a total capacity of over 2.0 billion gallons per day. In 2016, the District expects to collect and treat approximately 486.3 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 outstanding 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 assure 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 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. The District's overall 2014 (latest year for which figures are available) compliance with the National Pollutant Discharge and Elimination System requirements is 99.98 percent.



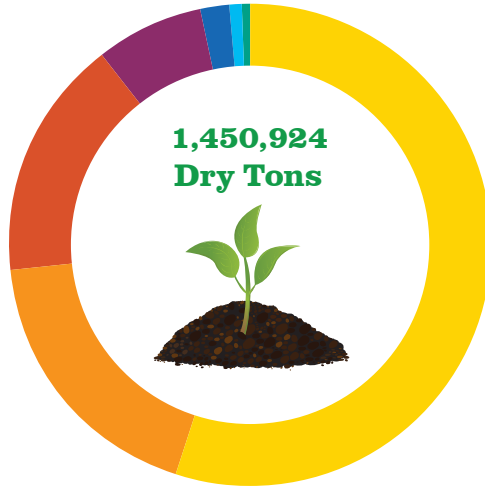
The disinfection facility at the Calumet Water Reclamation Plant was completed and put into operation in 2015.

Operational Objective: Biosolids Processing & Utilization

The District’s biosolids production is the largest of its kind in the country. The water reclamation processes produce approximately 220,000 dry tons of biosolids annually. In 2016, the District will remove and process approximately 190,500 dry tons of concentrated sewage through three biosolids handling facilities and produce an estimated 90,100 dry tons of biosolids for beneficial utilization: 60,000 at the Stickney WRP, 29,100 at the Calumet WRP and 1,000 at the O’Brien WRP.

Utilization of District Biosolids, 2005–2014

(in Dry Tons)



798,491	55.0%	Farmland Applications
268,892	18.5%	Landfill Applications
233,442	16.1%	MBM Pelletizing Facility
104,628	7.2%	Controlled Solids Distribution
27,594	1.9%	Unsuitables
14,160	1.0%	Farmland Application—Injection
3,717	0.3%	MWRD Land
1,450,924	100.00%	TOTAL

In 2016, the District will continue its innovative program for the beneficial utilization of biosolids. A key objective of the program is to make use of the biosolids’ superior nutrient qualities and soil-like characteristics in an environmentally safe manner. Land-applied biosolids can enhance crop production while reducing the need for topsoil and fertilizers. In addition to farmland applications, the program provides biosolids for park development, golf courses, recreational fields, turf rejuvenation, and final cover for municipal solid waste landfills.

Under the program, the District recycles all biosolids in land application programs in Northeastern Illinois and owns over 13,500 acres of land in Fulton County, Illinois, a location formerly used for biosolids application.

The District continues to make significant progress towards development of long-term stable markets for biosolids, resulting in a significant reduction of inventory. This aggressive management places the District’s biosolids utilization program among the most cost-effective in the world.

Operational Objective: Flood & Pollution Control

Tunnel and Reservoir Plan

The District's Tunnel and Reservoir Plan (TARP) is one of the country's largest public works projects for pollution and flood control. TARP consists of four systems totaling 109.4 miles of tunnels, 8 to 33 feet in diameter and 150 to 300 feet underground.

Phase I, completed in 2006, provides 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 additional storage of combined sewer overflows for flood damage reduction and additional pollution control. The Gloria Alitto Majewski



Officials toured the Thornton Connecting TARP tunnel at the Thornton Reservoir ribbon cutting ceremony on September 1, 2015.

Reservoir, located in Elk Grove Village, was built by the U.S. Army Corps of Engineers and finished in 1998. It provides 350 million gallons of storage. Constructed for \$45 million, it has, since its completion, yielded over \$315 million in flood damage reduction benefits to the three communities it serves.

Phase II continues with the construction and opening of the Thornton and McCook Reservoirs. The TARP reservoirs will greatly increase the volume available for capturing combined sewer overflows that previously would have been discharged to the rivers. The storage capacity of TARP, which includes tunnels and reservoirs, will be approximately 17.5 billion gallons when completed.

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 responds to over 234 emergency calls a year 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.

Stormwater Management

As the stormwater management authority for Cook County, the District addresses flooding on multiple fronts through the administration of the Small Streams Maintenance Program (SSMP), the management of regional watershed projects to address existing flooding damages, and the comprehensive stormwater management regulatory ordinance, known as the Watershed Management Ordinance (WMO). The WMO, with an effective date of May 1, 2014, was passed by the Board on October 3, 2013.

Through the efforts of the SSMP, approximately 35,000 cubic yards of debris and blockage are removed annually from the 532 miles of small streams within the District's service area to facilitate stream flow and reduce flooding. The District developed six watershed plans to identify potential projects to reduce the potential for damage to life, public health, safety, and property from overbank flooding. Overbank flooding damages are estimated at nearly \$1.0 billion over a 50-year return period. The WMO provides uniform minimum countywide stormwater management regulations. In addition, the District also owns and operates 35 stormwater detention reservoirs to provide regional stormwater control benefits.

The District performs stormwater management outreach through the Watershed Planning Councils, the media, and its website. The goal is to reach all stakeholders: municipal leaders, grassroots organizations, non-governmental organizations, taxpayers, and students. To deepen the public's understanding of the District's critical role, its stormwater management mission, and the public's responsibilities in achieving quality results, the District's Office of Public Affairs provides key messages using a variety of formats to keep the public apprised of the progress of the SSMP and other stormwater management programs.

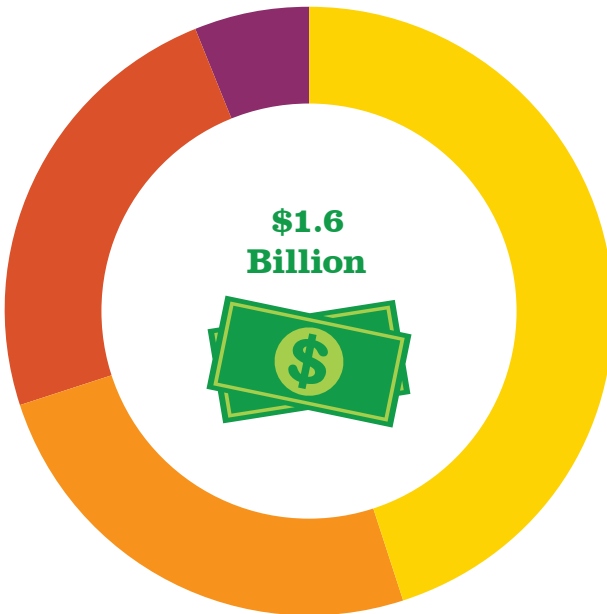
Building the Future: Capital Funds & Projects

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 (CIP) consists of the sale of capital improvements bonds, general property tax revenues, SRF loans, and federal and state grants. The appropriation for the 2016 CIP, which spans the Capital Improvements Bond and Construction Funds, is \$520.4 million. A total of 134 projects funded by the Capital Improvements Bond or Construction Funds will be in the planning, design, or construction phases in 2016. Through proper operation, maintenance, repair, and replacement, the District ensures continued efficient and reliable service and protection of its investment and infrastructure, while meeting necessary permit requirements.

Over the last century, District taxpayers have invested \$38.4 billion in present day dollars to construct interceptors, tunnels, treatment plants, and other necessary infrastructure. Since 1969, the District has sold \$5.7 billion in bonds to support its CIP, with the most recent issuance of \$295.8 million in general obligation bonds which closed in January of 2015.

The District's overall CIP includes 2016 project awards, land, support, future projects, and projects under construction, with a total cost of approximately \$1.6 billion, as displayed in the graph below.

Overall Capital Improvement Program



\$727.9 M	45%	●	Projects Under Construction
\$407.2 M	25%	●	Future Project Awards
\$387.4 M	24%	●	2016 Project Awards
\$92.8 M	6%	●	Support & Land Acquisition
\$1,615.3 M	100%		TOTAL

Recovering Resources, Transforming Water

Tunnel and Reservoir Plan: McCook and Thornton Reservoirs

When completed, McCook Reservoir will provide 10 billion gallons of storage to capture combined sewer overflows that discharge to waterways and cause sewer backups. Completed in two phases, the reservoir will also provide \$114 million per year in flood control benefits to 3.1 million people living in 37 communities. Mining work is expected to be completed in 2016, with the first phase of the reservoir to come online in 2017. But 2015 belonged to the Thornton Composite Reservoir, the second of TARP's three reservoirs which came online. After hosting more than 3,000 residents to tours of the Thornton Reservoir during the summer, the District held a ribbon cutting ceremony in September. The Thornton Reservoir is connected to 36.7 miles of deep tunnels and serves an area of 90 square miles that is home to 550,000 people.

Resource Recovery

The resource recovery bill gives the District the ability to sell resources recovered in the treatment process. This goal focuses on four resources: water, phosphorus, energy and biosolids. This provides the District with a potential revenue stream as well as a significant environmental impact. In addition to constructing the largest phosphorus recovery facility in the world in 2015, the District is also looking to construct a water reuse facility in order to reuse water in the Calumet region. More specifically, in late 2015, the new facility began to recover phosphorus from the plants liquid waste stream. This phosphorus will be turned into fertilizer pellets. By taking this approach, the District is recovering a non-renewable resource that is essential for life and placing it back into the food cycle rather than allowing it to be lost to the water environment.

Stormwater

Flooding is the number one issue the District will face in the next five years. Treated wastewater, along with runoff from rainfall, enters local canals, rivers, and streams that serve as headwaters of the Illinois River system. Stormwater in the separate sewered area is controlled to reduce flood damages by a number of stormwater detention reservoirs. Through the management of small streams, the District works to reduce flooding in urbanized areas. The streams that flow through the neighborhoods of Cook County serve the vital function of draining stormwater and preventing flooding. The implementation of the small streams maintenance program prioritizes the removal of blockages, log jams, and debris from the streambanks.

Energy Neutrality

The District is engaging in energy initiatives that will enable the District to beneficially reuse the byproducts of its operations and achieve its goal of energy neutrality by 2023. One example of a specific resource recovery effort for which the Law Department will provide legal oversight is the Biogas Renewable Energy Project at the Calumet Water Reclamation Plant, for the design and construction of facilities for the beneficial use of digester gas. This project seeks to maximize the production of clean biogas (methane) for eventual sale to a natural gas utility. Through this legally complex resource recovery initiative, naturally occurring byproducts of the District's anaerobic digestion process will be utilized in the creation of a renewable energy resource that is economically beneficial, energy efficient, and environmentally responsible.

Managing Today's Water

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) is managing today's water by eliminating flooding through dynamic strategies that preserve our environment and improve water quality. As the increase in impermeable ground in Cook County meets an increase in significant rain events, local sewer systems do not always have the capacity to retain stormwater runoff. Given this challenge, the MWRD has sought new partnerships that focus on individual communities and lead toward broader solutions for the entire region. These initiatives in stormwater management and flood control are providing local communities with instant benefits and creating new tools in the MWRD's pursuit of managing today's water needs.



Heritage Park Flood Control Facility, a partnership between the MWRD, Village of Wheeling and Wheeling Park District, will provide compensatory floodplain storage for the U.S. Army Corps of Engineers' Levee 37 Project on the Des Plaines River that protects more than 600 homes and businesses in Mount Prospect and Prospect Heights. It also provides Wheeling with increased stormwater detention at Heritage Park. The end product is six stormwater storage areas with a total capacity of more than 49 million gallons, as well as recreational improvements to Heritage Park, including new walkways, a pavilion, a band shell, soccer fields and a baseball complex.



Mayfair Reservoir Expansion Project in Westchester will provide direct flood reduction benefits to an estimated 60 residential structures and reduce storm-related impacts for approximately 120 homeowners. Initially it was placed into service in 1977 and designed to hold 84 acre-feet of stormwater. Due to the devastation caused by recent storms, the Westchester Park District agreed to relinquish their lease on MWRD property adjoining the reservoir and designate the property for a 34 acre-foot expansion to provide additional sewer improvements. Working with Westchester, the MWRD is minimizing future storm impacts and improving the quality of life.



The Greenest Street in America is a Sustainable Streetscape Project (SSP) created through a partnership between MWRD and the Chicago Department of Transportation (CDOT). This two-mile stretch of Blue Island Avenue and Cermak Road includes permeable pavers, infiltration basins, planters, and bioswales designed to absorb the flow of a two-year storm event. These best practices provide combined sewer overflow abatement, improved aesthetics of the environment, and reduction of flow and pollutant loading to treatment plants. The SSP improves the urban ecosystem, promotes economic development, and increases safety and usability.



Morton Civic Center Porous Pavement is a partnership between MWRD and the city of Evanston to rehabilitate the Morton Civic Center parking lot. Evanston's first city-owned sustainable public parking lot will use various permeable pavements, rain gardens, and native plantings to substantially reduce stormwater runoff. The MWRD is funding nearly half of the project cost. The civic center parking lot will feature three different porous pavement materials that will be evaluated for stormwater infiltration and durability and the impact of snow and ice removal. The permeable pavement will improve water quality, groundwater recharge, and delayed stormwater discharge.



Space to Grow is a joint venture operated through the financial support of the MWRD and managed by the Healthy Schools Campaign and Openlands organizations. Chicago schoolyards are transformed into community spaces for physical activity, outdoor learning, environmental literacy, and engagement with art while addressing neighborhood flooding issues. In addition to providing community members in low-income neighborhoods with safe outdoor spaces to play and stay active, these schoolyards help Chicago Public Schools meet daily recess and physical education requirements for elementary schools. (On the cover, a student helps plant native plants at one of Leland Elementary School's new rain gardens.)



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