



2021 Budget

Executive Director's Recommendations
October 13, 2020

Metropolitan Water Reclamation District of Greater Chicago



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

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**Metropolitan Water Reclamation District of Chicago
Illinois**

For the Fiscal Year Beginning

January 1, 2019

Christopher P. Morrill

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to Metropolitan Water Reclamation District of Greater Chicago, Illinois for its Annual Budget for the fiscal year beginning January 1, 2019. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as a financial plan, as an operations guide, and as a communications device.

The award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.



Metropolitan Water Reclamation District of Greater Chicago

2021 Budget

Executive Director's Recommendations

October 13, 2020

Officers

Brian A. Perkovich

Executive Director

Mary Ann Boyle

Treasurer

Allison Fore

Public & Intergovernmental Affairs Officer

Darlene A. LoCascio

Director of Procurement & Materials Management

Eileen M. McElligott

Administrative Services Officer

Susan T. Morakalis

General Counsel

John P. Murray

Director of Maintenance & Operations

Catherine A. O'Connor

Director of Engineering

Edward W. Podczerwinski

Director of Monitoring & Research

Beverly K. Sanders

Director of Human Resources

John H. Sudduth

Director of Information Technology

Jacqueline Torres

Clerk/Director of Finance

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Board of Commissioners



Seated, from left to right:

Barbara J. McGowan

Vice President

Kari K. Steele

President

Frank Avila

Chairman of Finance

Standing, from left to right:

Mariyana T. Spyropoulos

Commissioner

Marcelino Garcia

Commissioner

Debra Shore

Commissioner

Josina Morita

Commissioner

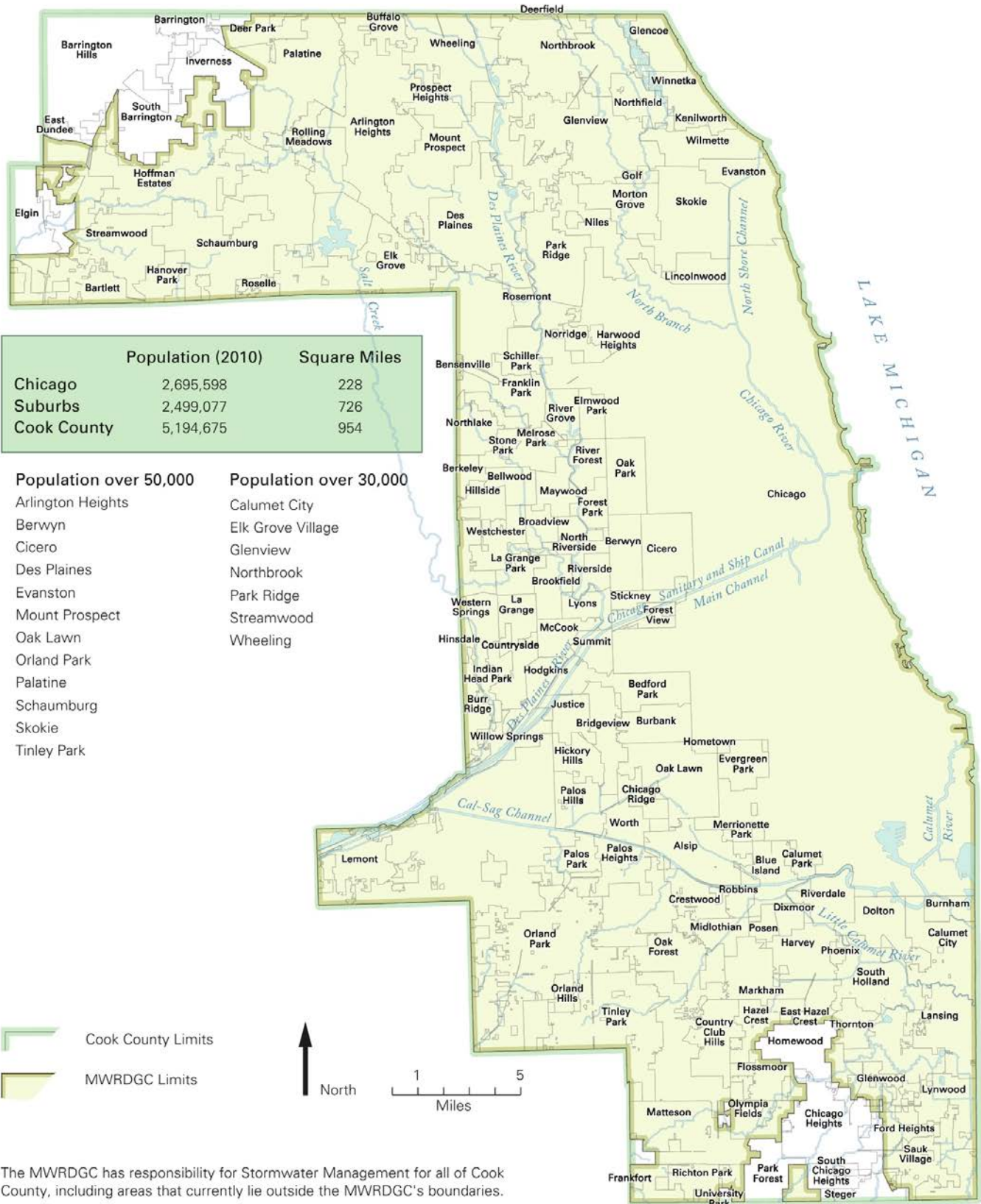
Kimberly Du Buclet

Commissioner

Cameron Davis

Commissioner

Cook County and Metropolitan Water Reclamation District of Greater Chicago



The MWRDGC has responsibility for Stormwater Management for all of Cook County, including areas that currently lie outside the MWRDGC's boundaries.

DESCRIPTION OF THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO: ITS HISTORY, LOCATION, SIZE, POPULATION, AND TYPE OF GOVERNMENT

Origin and History

The Metropolitan Water Reclamation District of Greater Chicago (District) is an independent government and taxing body encompassing approximately 92 percent of the land area and 98 percent of the assessed valuation of Cook County, Illinois.

The District is a separate legal entity sharing an overlapping tax base with the City of Chicago, the Chicago Board of Education, the County of Cook, the Cook County Forest Preserve District, the Chicago Park District, the Chicago Public Building Commission, the Cook County Community College District, and various municipalities and school districts outside the City of Chicago but within the District's boundaries.

The District was originally organized as the Sanitary District of Chicago in 1889 under an act of the Illinois General Assembly, which has been modified from time to time to increase the District's authority and jurisdiction. The enabling act in 1889 was in direct response to a long standing problem with contamination of the water supply and nuisance conditions of the rivers. The District reversed the flow of the Chicago and Calumet River Systems to stop the discharge of sewage to Lake Michigan and instead, discharge it to the Des Plaines River, where it could be diluted as it flowed into the Illinois River and eventually the Mississippi River. Prior to the District's construction of a 61.3 mile system of canals and waterway improvements, the Chicago and Calumet River Systems were tributaries to Lake Michigan. These river systems are now tributaries to the Illinois River system.

From 1955 through 1988, the District was called The Metropolitan Sanitary District of Greater Chicago. In order to provide a more accurate perception of the District's current functions and responsibilities, the name was changed effective, January 1, 1989, to the Metropolitan Water Reclamation District of Greater Chicago.

Mission and Responsibilities

The mission of the District is to protect the health and safety of the public in its service area, protect the quality of the water supply source (Lake Michigan), improve the quality of water in watercourses in its service area, protect businesses and homes from flood damages, and manage water as a vital resource for its service area.

The District collects wastewater from municipalities in its service area, conveys it to wastewater reclamation plants, provides full secondary treatment, and discharges clean water to local waterways. The District is also responsible for stormwater management for all of Cook County, including areas outside of the District's corporate boundaries for wastewater services.

Services

The District's seven modern water reclamation plants provide excellent treatment for residential and industrial wastewater, meeting permitted discharge limits virtually at all times. The treatment process is protected by a pretreatment program to guard against hazardous substances and toxic chemicals. These are strictly regulated pursuant to federal and state requirements. The District routinely monitors industries and non-residential sources to assure that wastes are disposed of in an environmentally responsible and lawful manner.

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 sewer area is controlled to reduce flood damages by a number of stormwater detention reservoirs. In the combined sewer area, the District's Tunnel and Reservoir Plan (TARP) has significantly reduced basement backup and overflows to local waterways.

Flow within the District's waterway system and the Lake Michigan discretionary diversion flow are controlled by three inlet structures on Lake Michigan: the Wilmette Pumping Station, the Chicago River Controlling Works, and the O'Brien Lock and Dam. The single outlet control structure is the Lockport Lock and Powerhouse.

While exercising no direct control over wastewater collection systems owned and maintained by cities, villages, sewer districts, and utilities, the District does control municipal sewer construction by permits outside the City of Chicago. It also owns a network of intercepting sewers to convey wastewater from the local collection systems to the water reclamation plants.

Facilities

The District is located primarily within the boundaries of Cook County, Illinois. The District serves an area of 882.1 square miles, which includes the City of Chicago and 128 surrounding suburban communities. The District serves an equivalent population of 10.35 million people; 5.25 million real people, a commercial and industrial equivalent of 4.5 million people, and a combined sewer overflow equivalent of 0.6 million people. The District's 560 miles of intercepting sewers and force mains range in size from 6 inches to 27 feet in diameter, and are fed by approximately 10,000 local sewer system connections.

The TARP is one of the country's largest public works projects for pollution and flood control. Four tunnel systems total 109.4 miles of tunnels, eight to 33 feet in diameter and 150 to 300 feet underground. The tunnels are planned to empty into three large reservoirs to provide storage for the polluted water captured by TARP.

DESCRIPTION OF THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO: ITS HISTORY, LOCATION, SIZE, POPULATION, AND TYPE OF GOVERNMENT

The District owns and operates one of the world’s largest water reclamation plants, in addition to six other plants and 23 pumping stations. The District treats an average of 1.4 billion gallons of wastewater each day. The District’s total wastewater treatment capacity is over 2.0 billion gallons per day.

The District controls 76.1 miles of navigable waterways, which are part of the inland waterway system connecting the Great Lakes with the Gulf of Mexico. It also owns and operates 34 stormwater detention reservoirs to provide regional stormwater flood damage reduction.

The District recycles all of its biosolids through a farm land application program in nearby counties and local use of Exceptional Quality biosolids and composted biosolids in the Chicago metropolitan area.

Governance

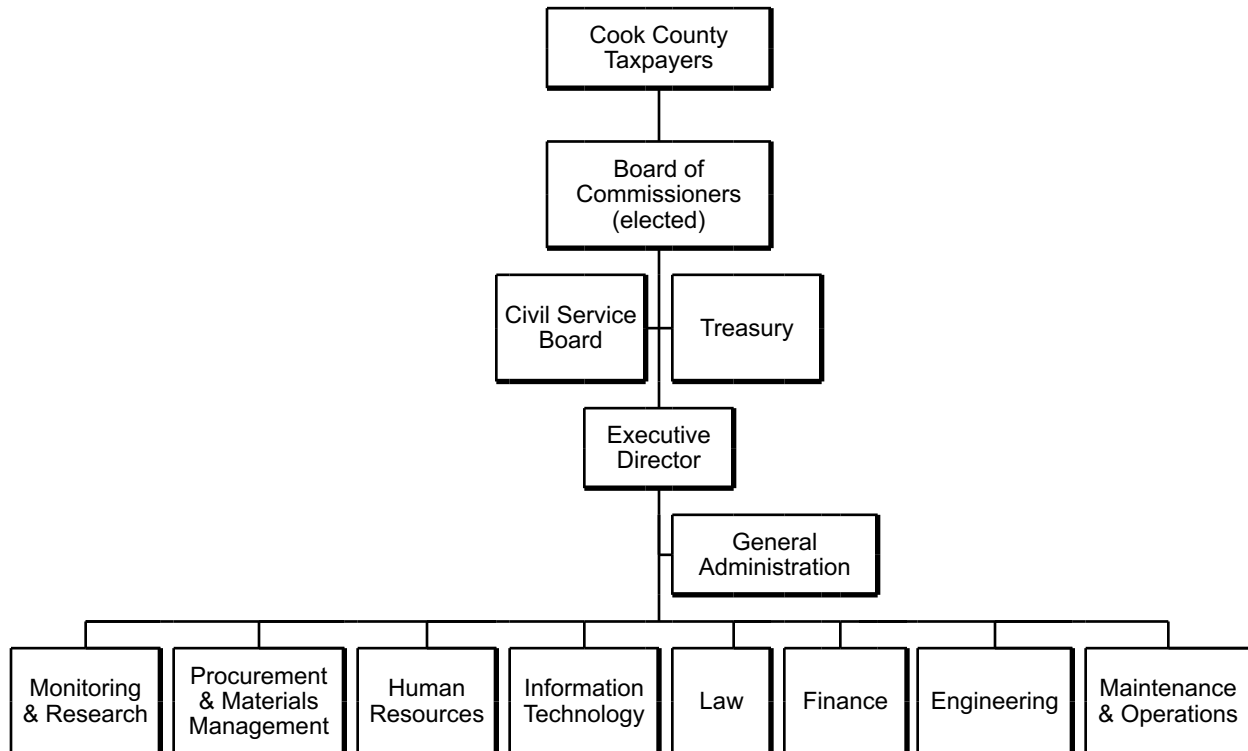
The District is governed by a nine-member Board of Commissioners (Board). Commissioners are elected at large and serve on a salaried basis. Three Commissioners are elected every two years for six-year terms. Biannually, the Board elects from its membership a President, Vice President, and Chairman of the Committee on Finance.

Organization Structure

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.



HOW TO USE THE DISTRICT’S BUDGET

The organization and presentation of the District’s Budget is designed to satisfy the needs of citizens, public officials, and District employees. It is organized in compliance with the Illinois Compiled Statutes and structured to meet external and internal managerial needs. As a comprehensive management and balanced financial plan, this document describes the programs, services, and resources the District provides, as well as policies and long-run financial plans.

The District’s Budget is organized as follows:

- 1) By Appropriation and Tax Levy Ordinances. Enacted by the Board of Commissioners under the authority of the Illinois Compiled Statutes, these are the legal authority allowing the District to carry out its legally mandated mission.
- 2) By Funds. These are the accounting entities segregating sums of money or other resources for the purpose of carrying on specific activities or government functions in accordance with certain legal restrictions or limitations.
- 3) By Department. These are the primary organizational units of the District.

The District’s Budget is presented in various sections, each providing the reader with specific information related to the District’s financial plans and services.

The sections are presented as follows:

- I. **BUDGET FOREWORD**. An introductory section that contains: the Executive Director's Budget Message; Strategic Business Plan; narratives on operational goals and accomplishments, major issues, policy and program changes; Budget Highlights; Financial Policies, Objectives, and Accomplishments; Policy Development and the Budget Process; and the beginning of the Annual Appropriation Ordinance, which gives the Budget legal authority. The full Appropriation Ordinance begins on page 34 and sections II through VII.
- II. **BUDGET AND FINANCIAL SUMMARIES, SCHEDULES, AND EXHIBITS**. These provide an overview of the District’s Budget and financial plans of the past, present, and future, including proposed tax levies, revenues, and appropriations.
- III. **FINANCIAL STATEMENTS BY FUND**. These contain detailed information on taxes and all other sources of revenue and expenditure, plus financial statements detailing current assets, current liabilities, and the amount of assets available for appropriation in 2021.
- IV. **CORPORATE FUND**. These present detailed information by department, and priority of activities, objectives, programs, performance measures, proposed line item expenditures, and staffing. The legend below shows the placement of data within the text boxes of the organizational charts. Each department provides actual, budgeted, and proposed full-time equivalent (FTE) positions over a three year period. Salary schedules for pay plans and grades, as shown in the Position Analysis, are included in the Appendix.

Organization Unit Number		
Organization Unit Name		
2019	2020	2021
FTE	FTE	FTE
Count	Count	Count
Actual	Budgeted	Proposed

- V. **CAPITAL BUDGET**. The District’s current and long-term programs for capital construction, modernization, and rehabilitation are detailed in the Construction Fund and Capital Improvements Bond Fund.
- VI. **STORMWATER MANAGEMENT FUND**. The District’s current and long-term programs for the Stormwater Management Fund are detailed.
- VII. **OTHER FUNDS**. Information detailing the Reserve Claim Fund, Bond Redemption and Interest Sinking Funds, and the MWRD Retirement Fund are provided in this section.
- VIII. **TAX LEVY ORDINANCES**. These present the financial and management plan of the District as a legal document which coordinates and establishes the legal authority for the District to obtain and expend funds during the fiscal year.
- IX. **APPENDIX**. Information detailing the District’s compensation plan, glossaries, acronym list, awards, and organizational memberships.

To aid the reader in finding specific information quickly, there is a Table of Contents inserted on the manila tabbed divider before each section.

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SECTION I

BUDGET FOREWORD

This section introduces the budget with explanations of the organization and structure of the District's Budget. It also presents an overview of the substance of the 2021 Budget. It includes the following:

- In the *Budget Message*, the Executive Director discusses his 2021 Budget Recommendations.
- In the *Strategic Business Plan*, an update of the strategic business plan is presented.
- The *Budget Message/Highlights* section includes a statement of the District's operational goals and accomplishments and a narrative on major issues, policy, and program changes. It is in this section that broad policy, program objectives, and operational accomplishments are defined.
- In the *Financial Policies, Objectives, and Accomplishments* section, an overview of the financial guidelines and accomplishments of the District is presented.
- The *Policy Development and the Budget Process* section describes policy development and the total budget process. The detailed budget process is presented in 12 clearly stated steps with a flowchart of the budget cycle.
- The *Annual Appropriation Ordinance* gives legal effect to the entire budget document as enacted into law by the Board of Commissioners under authority of the Illinois Compiled Statutes. It includes an explanation of the crosshatch (#) symbols used with some personnel positions within the budget, indicating changes to positions once vacated.

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Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

October 13, 2020

Honorable Ladies and Gentlemen:

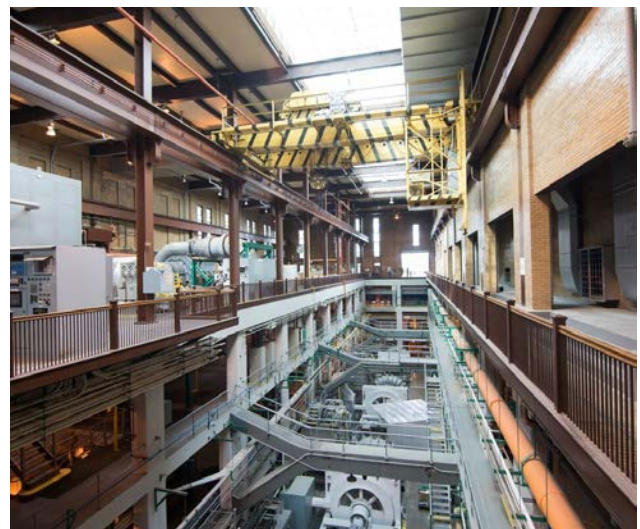
I am pleased to present the 2021 Executive Director's Budget Recommendations for the Metropolitan Water Reclamation District of Greater Chicago (District) which continue to support the District's mission to protect the health and safety of the residents of Cook County, protect Lake Michigan, and protect businesses and homes from flooding. The \$1.1 billion 2021 Budget Recommendations provide an operational and capital plan that will prepare the District for the future in these uncertain times.

The 2021 budget was prepared during an unprecedented year of challenges. The COVID-19 global pandemic necessitated adapting processes to continue to meet our mission while prioritizing the health and safety of our employees and the residents of Cook County. The 2021 budget anticipates slow economic recovery in 2021 and 2022 by limiting revenue growth over the next two years. The District has a long history of proactive and responsible financial management and a strong reserve balance that will stabilize operations during both volatile economic conditions and changing weather patterns. The 2021 Executive Director's Budget Recommendations provide flexibility to meet operational needs with controlled expenditure growth and targeted investment in programs that will prepare the District for the future.

Pandemic Response

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 commensurate level of productivity.

In addition, the District continued to operate its flood control facilities throughout the record rainfall received throughout our service area in May 2020, during Illinois' Stay at Home Executive Order. As the area received over 9.5 inches of rainfall, the District's Deep Tunnel and Reservoir system, as well the regional stormwater reservoirs in our network of flood control facilities, helped to reduce combined sewer overflows and alleviate flooding in the region by storing billions of gallons of stormwater runoff.



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

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.



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.

The District's public education efforts have continued, shifting to virtual formats. Virtual tours allow participants to not only see the water reclamation process, but also travel back in time to see how the Chicago River was reversed, descend 300 feet into the deep tunnel system, and travel with a crew of scientists as they sample fish. During the spring of 2020, the District proactively disseminated fact sheets and information to minimize the spread of COVID-19, including information regarding the safety of biosolids, information regarding the region's water infrastructure, and managing flood waters during a pandemic. Additionally, our 8th Annual Sustainability Summit will be held virtually and will be designed to equip and empower partnering municipalities and environmental advocates with information on sustainability programs and initiatives.

Operating Budget

The 2021 Corporate Fund Budget Recommendation is \$397.7 million, a decrease of \$0.5 million from the 2020 Budget, holding the line on expenditures even as the District faces inflationary cost increases. Consistent, proactive 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.

In 2019, six of seven water reclamation plants (WRPs) received National Association of Clean Water Agencies Platinum Peak Performance Awards for maintaining 100 percent compliance with National Pollutant Discharge Elimination Permits for at least five consecutive years. All seven WRPs have earned 99.20 percent or higher compliance since 2010. Additionally, the District was recognized as a Utility of the Future Today, a distinction for water agencies that have increased efficiency in operations, enhanced productivity, and achieved long-term sustainability.

Capital Budget

The 2021 Capital Improvement Program Recommendation is \$254.4 million. Of the total budget, 41.3 percent is dedicated to projects at the seven WRPs, including roof replacements, service tunnel rehabilitation, concrete replacement, and boiler replacements.

Long-range capital planning is critical to ensuring that the District continues to improve efficiency and protect the water environment while remaining affordable for the taxpayer. The District utilizes grants, State Revolving Fund loans, general obligation and alternative revenue bonds, and pay-as-you-go funding to maximize value. The District is in the process of applying to the Water Infrastructure Finance and Innovation Act loan program to provide another option for low-cost financing.

The 2021 Property Tax Levy for the payment of principal and interest on bonds and loans is \$247.4 million, remaining virtually flat to the 2020 Property Tax Levy of \$247.3 million. The Construction Fund is a property-tax supported fund designed to finance small construction projects on a pay-as-you-go basis. The 2021 Property Tax Levy is recommended to be \$7.0 million.

Stormwater Management

Changing weather patterns and intense bursts of precipitation can quickly overwhelm systems throughout the region. The District has made significant investments in developing over 170 capital stormwater projects since it assumed the authority for stormwater management in 2004. The implementation of these projects, which range in both size and scope, provide flood protection for thousands of homes, businesses, and critical infrastructure. Through the Stormwater Partnership Program, the District has partnered with other local municipalities to design and construct over 140 regional and local stormwater management projects.

The Watershed Management Ordinance (WMO) establishes uniform and minimum stormwater regulations throughout Cook County and was updated in 2020. Among the changes made to the WMO, the District increased stormwater detention requirements based on the Illinois State Water Survey's Updated Bulletin 75 rainfall data.

The 2021 Budget continues the District’s commitment to reduce flooding. The 2021 Stormwater Management Fund Recommendation is \$110.0 million to further our investment in flood control projects and support of local stormwater issues. The 2021 Property Tax Levy will remain flat to the 2020 Property Tax Levy at \$52.9 million.

Financial Summary

The District continues to maintain a AAA bond rating from 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 Fund demonstrate the District’s commitment to long-term fiscal management and contribute to strong credit ratings. The District began 2020 in a very strong financial position, contributing \$20.0 million in advance funding to the Retirement Fund to maintain growth in the Retirement Fund’s funded ratio.

The District’s appropriation and tax levy for the 2021 Final Budget, compared to the 2020 Budget as Adjusted is:

	2021	2020 Adjusted	Increase (Decrease)	Percent Change
Total Tax Levy	\$ 658,492,358	\$ 651,357,170	\$ 7,135,188	1.1 %
Aggregate Levy	\$ 358,122,400	\$ 351,117,200	\$ 7,005,200	2.0 %
Appropriation	\$ 1,121,942,550	\$ 1,151,786,467	\$ (29,843,917)	(2.6)%

The aggregate levy is statutorily limited to an annual increase of five percent or the Consumer Price Index (CPI), whichever is lower. The increase in the 2021 aggregate levy is equal to the estimated CPI plus new property for 2021.

Conclusion

The 2021 Budget and the Five-Year Financial Plan were developed with the understanding that excess budgetary fund balance will be required to sustain operations during the U-shaped economic recovery. Using the Strategic Business Plan as a guideline to establish priorities, the operation, maintenance, and investment in the District’s infrastructure, flood control projects, and other essential services will continue to receive primary focus. The District’s Strategic Business Plan, *Recovering Resources, Transforming Water*, encompasses the District’s mission and provides a framework for evaluating new projects, ensuring sustainability, and providing clean water resources for generations to come. 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.

Respectfully submitted,



Brian A. Perkovich
Executive Director

STRATEGIC BUSINESS PLAN

Recovering Resources, Transforming Water

2021 UPDATE TO THE 2015-2021 STRATEGIC BUSINESS PLAN (Updated September 10, 2020)

The District's Strategic Business Plan is used throughout the year to measure results of its service to the communities throughout its 882.1 square mile service area and communicate progress to the Board of Commissioners, staff, and taxpayers. Reviewed and updated annually, this plan serves as a guiding document until replaced by a new Strategic Business Plan.

There have been significant achievements made during this Strategic Business Plan cycle. The Tunnel and Reservoir Plan's (TARP) 7.9 billion gallon Thornton Composite Reservoir came online in 2015 and the 3.5 billion gallon McCook Reservoir Stage 1 was placed into service in 2017. These reservoirs provide over 11 billion gallons of flood protection and water quality improvements to the Chicago Area Waterway System. Also in 2015, the District received authority to recover resources from its operational processes and receive revenue to help offset treatment costs, while at the same time benefiting the treatment process.

The District developed over 100 capital stormwater projects to address regional and local flooding issues. These stormwater projects incorporate elements of both green and gray infrastructure ranging in size from massive reservoirs to green alleys and permeable parking lots. We are also completing design or construction of large regional stormwater projects throughout the county. In addition, we have dozens of active partnerships through intergovernmental agreements with local governmental organizations to address local flooding through the use of green and gray infrastructure improvements, as well as through the acquisition of flood-prone residential structures. These projects are vital to the health and well-being of our constituents.

Illinois has just experienced the wettest May on record for the third consecutive year, and we see our stormwater program as essential to creating a resilient, sustainable Chicagoland, given intensifying precipitation. The many stormwater management projects and TARP are more important than ever as we work to address unpredictable weather patterns.

The District strives to be a sustainable partner in the region by recovering resources, lowering carbon emissions, creating new revenue streams, and promoting resiliency. We replaced Imhoff Tanks with new primary settling tanks at the Stickney Water Reclamation Plant (WRP) to improve treatment, reduce operational costs, increase digester gas production, reduce odor potential, and reduce greenhouse gas emissions. The District produces an effective soil amendment and recovers nutrients, clean water, and energy that can be used to encourage economic job creation and add benefit to our communities. The District's real estate holdings are used to add value to the communities we serve.

The District's Mission Statement and Values continue to guide the District's future. The 2021 update to the Strategic Business Plan follows.

MISSION

The District will protect the health and safety of the public in its service area, protect the quality of the water supply source (Lake Michigan), improve the quality of water in watercourses in its service area, protect businesses and homes from flood damages, and manage water as a vital resource for its service area. The District is committed to achieving the highest standards of excellence in fulfilling its mission.

VALUES

Excellence

We believe excellence is a never-ending journey to exceed the expectations placed upon us as individuals and as an organization.

Individual excellence is exhibited by performing one's responsibilities to the best of his or her ability. We promote employee development and encourage everyone to perform at their best. Organizational excellence is obtained by continuous improvement to existing processes. Excellence at both levels is achieved through proactive, resourceful, reliable, and prudent execution of processes and responsibilities. Striving for excellence will result in continuous improvements in the way we operate and the quality of the environment.

Innovation

We seek optimal solutions to provide the best services and products available.

Innovation increases efficiency and performance by being adaptable and strategic in the face of change. Meaningful, productive change involves looking at challenges and opportunities from new perspectives and then developing and implementing new ideas to address the challenge. We embrace research as the means through which we acquire information to address challenges and take advantage of opportunities through innovative solutions. We are open to implementing new concepts and sharing what we have learned from our diverse experiences and, in the process, evolving. Embracing growth within the District's mission, we continue to be a model of wastewater treatment and stewardship of the water environment.

Respect

We create an atmosphere of open communication that rewards commitment and performance and is responsive to the needs of our employees and our communities.

Respect is measured by how we treat each other and by how we value the contributions that flow from our diversity, the productivity of our relationships, and each well done job, no matter the job. Maintaining a respectful, courteous, and fair workplace allows for effective communication, heightened levels of workplace participation, and innovation due to diverse thinking.

Safety and Well-Being

We are dedicated to safeguarding our greatest assets - our employees - together with the environment and our communities.

There is always time to do it safely. We strive to provide a safe environment and improve the well-being of our employees and our communities. We continually seek new ways to improve safety performance by routinely training employees in safe operating practices and regulatory responsibilities. We incorporate safety and wellness in all planning, operations, and activities, including considerations related to the current and future pandemic. Continuously improving our safety practices will improve the well-being of our employees and the District as a whole.

Accountability

We are dedicated to fulfilling our responsibility by being accountable to our taxpayers, coworkers, and the environment.

As public service employees, we bring a high degree of integrity, professionalism, quality, and caring to our work. We have a commitment to our communities to provide service with the highest level of transparency and accountability. Acting with accountability will make us a stronger organization by earning the respect, trust, and confidence of our coworkers and the communities we serve.

VISION

The vision statement “*Recovering Resources, Transforming Water*” captures the changing landscape of the water industry. The District is looking to add value in traditional and non-traditional ways. This vision has produced six main goals for the organization. These goals are listed below with a descriptive statement that captures the thinking behind each goal.

Add Value: Every employee at the District will look for opportunities to add value.

Excellence: Excellence is not an act, but a habit.

Recover Resources: The District will pursue recovery of resources for beneficial use.

Develop Employees: Personal and professional growth leads to valued contributions.

Leading Partnerships: We recognize the importance of active involvement in the world around us.

Information Technology: It is essential for the District to have a robust and formal Information Technology (IT) governance model as needs and desired investments in IT outpace the resources available.

GOALS AND STRATEGIES

The Strategic Business Plan outlines six major goals aimed at achieving the vision of the District. Under each goal, strategies to accomplish the goal are described. Each strategy has performance measures. The measures are used to ensure efforts are achieving the desired results. During the annual strategic planning review, the measures are used to adjust the plan as needed so the District can remain focused on continual improvement.

GOAL 1 - Add Value

Every employee at the District will look for opportunities to add value. The District will be focused on adding value at every level in the organization. Each employee is challenged to add value in every interaction either internal or external to the agency. The following specific strategies have been developed to meet this goal:

Customer Service: Every employee’s action should mindfully fulfill the customer’s needs.

- Issue permits in less than 30 days;
- Utilize informed compliance to supplement the traditional enforcement business model;
- Develop and implement effective flood mitigation programs for our customers;
- Structure a multi-dimensional, culture changing strategy around green infrastructure;
- Develop and implement targeted odor control strategies.

Real Estate: Explore opportunities for community partnerships aimed at reducing waste and our carbon footprint and achieve other improvements in the environment.

- Work with communities to revitalize the urban forest through the “Restore the Canopy” program;
- Utilize Fulton County property as a test bed for nutrient control research and demonstration to foster partnerships with other organizations for a statewide approach to address excess nutrient discharges.

GOAL 2 - Excellence

Excellence is not an act, but a habit. Excellence should be our goal in everything we do, from meeting compliance objectives to delivering projects on time. In order to achieve excellence, the organization should focus on results. It is the measure of the results that determines the degree of success.

Finances: Ensure the responsible use of resources in the delivery of services.

- Continue the prioritization of projects to ensure best use of current resources;
- Provide base budget targets and assure approvals above base are tied to strategic initiatives;
- Manage resources to ensure financial stability.

Process Evaluation: Develop processes that are results and solutions oriented.

- Modernize and update aging infrastructure;
- Optimize energy intensive processes;
- Optimize chemical intensive processes;
- Optimize work distribution processes and workflow;
- Update the Laboratory Information Management System to improve plant data reporting;
- Replace slower, labor intensive laboratory analysis methods with more efficient and faster methods.

Sense of Urgency: Establish a sense of urgency in delivering community services.

- Deliver and implement a flood relief plan for Cook County;
- Sustain excellence in maintenance and operations;
- Expedite capital improvement program projects in design, bid, contract award, and construction schedule.

Performance Management: The District will develop performance measures that reflect the contributions of staff and automatically report the organization's performance to the public.

GOAL 3 - Recover Resources

The District will pursue the recovery of resources. The District understands the obligation of every organization to implement sustainable and resilient practices. The District also understands the importance of a sustainable economy and financial base. Therefore, the District will seek opportunities to recover resources, return materials to the economy, and earn revenue to offset operation costs.

Water: Pursue reuse applications for the high-quality water produced at our WRPs and for the capture and reuse of stormwater.

- Explore reuse opportunities in the Kirie, Calumet, and Stickney industrial corridors.

Phosphorus: Recover phosphorus for environmentally friendly reuse.

- Optimize recovery process at the Stickney WRP;
- Evaluate recovery processes at the Calumet and Egan WRPs;
- Explore algae nutrient removal processes as an additional recovery resource.

Energy: Reduce energy consumption and increase renewable energy production.

- Maximize use of digester gas;
- Optimize aeration processes and reduce energy consumption;
- Document and seek opportunities to reduce the carbon footprint.

Biosolids: Maximize the utilization of Exceptional Quality (EQ) biosolids and compost throughout our service area.

- Develop partnerships with state and local organizations to use EQ biosolids in construction and brownfield restoration projects;
- Utilize wood chips as a feedstock for production of biosolids compost;
- Identify and take advantage of beneficial use opportunities for biosolids;
- Provide bulk distribution points at each WRP for public use, where feasible.

Recycle and Prevention: Promote environmental stewardship through recycling and preventative measures.

- Recycle demolition material on all District construction projects;
- Ensure disposal availability for medications and other pharmaceutical products;
- Explore opportunities for recycle partnerships;

- Maximize community outreach through event tabling, presentations, facility tours, handouts, photos, videos, and other public communication tools (media advisories, press releases, etc.) to educate the public about wastewater treatment, stormwater management, pollution prevention, and water wellness;
- Expand educational outreach by offering tours of District facilities beginning at the fifth-grade level.

GOAL 4 - Develop Employees

Personal and professional growth leads to valued contributions. Employees at the District are among the best in the industry. To maintain a leadership role in the water industry, the District needs to develop future leadership and pass down competencies. The District will invest in its future by investing in its employees.

- Develop and implement leadership initiatives that support succession planning;
- Develop and implement competency-based individual development plans;
- Continue to foster a culture that recognizes the value of every employee;
- Encourage employees to attend virtual seminars and training classes in place of attending in person due to pandemic conditions.

GOAL 5 - Leading Partnerships

We recognize the importance of active involvement in the world around us.

Relationships: Develop strategic relationships with constituents through active involvement in a variety of organizations and events on a local, state, and national level.

- Inventory and align professional memberships and participation;
- Participate in active leadership roles in a variety of organizations;
- Utilize our enhanced awareness from strategic relationships to make informed decisions;
- Engage in community outreach and education activities to encourage students to consider a STEM career in the water industry.

Leadership: Promote the District as one of the top leaders in the water industry.

- Provide active leadership in local, state, and federal water issues;
- Engage in international conversation to share best management practices.

GOAL 6 - Information Technology

It is essential for the District to have a robust and formal IT governance model as the needs and desired investments in IT outpace the resources available. IT security, business continuity, and compliance requirements need sensible and enforceable policies. The IT Department will focus on providing the District an appropriate balance between maintaining a secure computing environment and providing readily accessible, easy to use applications.

- Implement a modern web content management system that provides a streamlined approach for storing and delivering web content;
- Develop a framework for deploying web services and data integration technologies to streamline access to various hosted data systems and applications;
- Continue to improve upon customer service by being transparent via IT Service Management, including providing a service catalog and real-time insight into all service tickets;
- Provide a secure internet environment and implement measures to proactively prevent external infiltration and intrusion;
- Maintain and update applications to improve the user experience on the District's external facing website;
- Further develop remote network infrastructure which will allow a greater number of District employees to work seamlessly from home due to pandemic conditions.

Budget Message / Highlights

The following pages illustrate how the District is implementing the Strategic Business Plan by summarizing major policies, ongoing programs, and initiatives that directly support the development of the District's 2021 annual budget. Specific strategies for each Goal highlight how the District is meeting our mission and the vision of "Recovering Resources, Transforming Water."

Goal 1 - Add Value

Develop and implement effective flood mitigation programs for our customers. The mission of the Stormwater Management Fund is to protect the safety of Cook County's residents and minimize flood damage by coordinating, planning, implementing, financing, and operating regional stormwater management projects and to administer uniform rules for watershed development. The framework of the District's countywide Stormwater Management Program is presented in the Cook County Stormwater Management Plan.

In 2011, the District completed detailed watershed plans (DWPs) identifying flooding problems within each of the six major watersheds within its service area. As a part of the Capital Improvement Program, the District began preliminary and final engineering for regional projects identified within the DWPs and approved by the Board. In 2014, the Illinois General Assembly expanded the authority of the District's Stormwater Management Program to allow the District to address local drainage problems and acquire flood-prone property from property owners on a voluntary basis. These legislative changes allow the District to identify and assist municipalities with the implementation of projects that address local flooding concerns.

Structure a multi-dimensional, culture changing strategy around Green Infrastructure. Managing stormwater includes not only building traditional flood control measures, but also incorporating Green Infrastructure into regional planning. In 2017, the District began accepting annual applications to help fund local government projects that utilize Green Infrastructure. Between 2017 and 2019 the District accepted 136 applications and selected 60 projects for funding. In 2020, the District accepted 32 applications and selections for 2021 funding are ongoing. 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 also reduces runoff volumes and improves water quality in separate sewer service areas and provides social benefits that enhance the livability of communities throughout the region. The 2021 Budget includes \$31.1 million in the Stormwater Management Fund for Intergovernmental Agreements that include Green Infrastructure projects and other stormwater improvements.

Achieve environmental improvements. Following a successful pilot scale operation in 2019, the District began using herd animals to control native prairie vegetation at the Calumet WRP. A hard-working herd grazed through invasive species, providing a natural solution to maintaining over 30 acres of Native Prairie Landscapes that manage stormwater. In 2021, the program will be expanded to include detention reservoirs and additional areas within the District boundaries. The goats and sheep eat invasive species in hard-to-reach places without the use of herbicides, pesticides, or the carbon footprint of mowers and specialized equipment. This has proven to be a creative and environmentally friendly solution to the maintenance of these important green spaces.



Maximize our real estate portfolio. Over the years, the District has acquired substantial real property holdings to carry out its corporate responsibilities. The District currently owns approximately 24,000 acres of land located in Cook, Will, DuPage, and Fulton Counties in Illinois, about half of which are adjacent to the 76.1 miles of navigable waterways it helps manage, which include the Cal-Sag Channel, Chicago Sanitary and Ship Canal (Main Channel), and the North Shore Channel.

The District's land holdings are necessary to carry out its lawfully authorized corporate purpose of wastewater collection, treatment, disposal, and ancillary activities. The additional corporate responsibility of stormwater management conferred by the Illinois General Assembly in 2004 has increased the District's activities and may result in an increase of its land holdings in Cook County to facilitate the construction of projects. The District's land holdings are generally categorized as corporate or non-corporate use properties. Corporate use properties are those land holdings which are used or will soon be used for the District's corporate purposes. Non-corporate use properties are those land holdings which are not immediately required for corporate purposes, but may be required for future use or it is in the District's best interest strategically to maintain ownership.

Budget Message / Highlights

Currently, non-corporate land holdings include approximately 4,900 acres in Cook County, 450 acres in DuPage County, and 670 acres in Will County. These non-corporate use properties are for the most part managed by the Real Estate Division of the District's Law Department. These properties may be leased to other parties until required for corporate purposes in accordance with requirements set forth in state law (70 ILCS 2605/8-8c). State law provides, among other things, that a District lease to a private party/entity may be awarded only upon open and public competitive bidding to the highest responsible bidder. Additionally, state law provides that the District may issue permits or grant easements for others to use District land, provided such use would not interfere with the District's corporate purposes. Management of District land currently includes over 185 leases, 413 easements, and 60 permits.



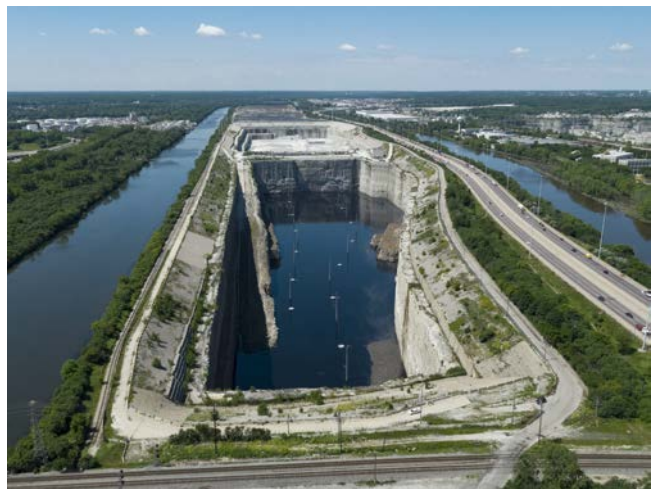
This baseball field in Ford Heights was constructed using Exceptional Quality compost provided by the District. The field gives local baseball players an attractive place to play.

The District continues to pursue a balanced and mixed-use approach with respect to administering its non-corporate use properties. This balanced program seeks to maximize rental income in those instances where District land is made available for private use, while setting aside substantial holdings for public recreational use by leasing to other governmental entities (park districts, municipalities, and forest preserve districts). The leases to other governmental entities are for a nominal fee and typically for the express purpose of enhancing public access to, and the development of parks, hiking and bicycle trails, and passive recreational use along the waterways. The District's balanced approach has resulted in approximately 75 percent of District leased lands being leased to governmental entities for public recreational or other public use. The other approximately 25 percent of District leased lands are leased to private parties for industrial and business purposes from which the District expects to derive approximately \$24.5 million in rental and lease revenue in 2021.

Goal 2 - Excellence

Manage resources to ensure financial stability. The District provides and subsidizes health care benefits for its retirees through a statutorily authorized Other Postemployment Benefits (OPEB) Trust for the purpose of providing for the funding and payment of health benefits for retired, disabled, or terminated employees of the District or for their dependents and beneficiaries. Since the Trust was established in 2007, the District adopted an OPEB advance funding policy meant to (i) improve the District's financial position by reducing the amount of future employer contributions and (ii) serve to establish a reserve to help ensure the financial ability to provide health care coverage for District retirees and annuitants in the future.

The current funding policy includes a 100 percent target funding level, an advance funding period of 12 years, and a defined advance funding amount of \$5.0 million to be contributed in each of the 12 years from 2015 through 2026. No further advance funding contributions are expected after 2026. Through December 31, 2020, \$142.4 million has been contributed by the District to the OPEB Trust. The advance funding contribution for 2020 was \$5.0 million and the 2021 budgeted contribution is \$5.0 million. While authorized by statute, there is currently no legal requirement for the District to partially or fully fund the OPEB Trust. The accumulated unfunded OPEB obligation was \$72.2 million as of the most recent actuarial valuation on December 31, 2019. The policies adopted by the District are cautious by design and will provide ample opportunity for adjustment. Future direction may also be changed significantly by national health care policies.



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

Budget Message / Highlights

Investment activities incorporated sustainability considerations according to the revised Investment Policy and guidelines implemented in December 2019. Companies that score higher on environmental, social, governance/leadership (ESG) factors tend to have stronger fundamentals that mitigate financial risk, which puts those companies in a better position for long-term stability and profitability. In addition, investing in companies that prioritize sustainable business practices is expected to help protect our environment for future generations. Consequently, in 2020 the District began to incorporate ESG, human capital, and business model/innovation factors into its investment evaluations. The District adopted the integration approach to its investment process, combining sustainability criteria with traditional financial considerations to identify and invest in companies that are better sustainability performers within a sector or industry group.

Independent ratings and research are used to evaluate sustainability factors defined above. The Bloomberg Financial system provides sustainability ratings from Sustainalytics, which is the leading independent global provider of ESG and corporate governance research and ratings to investors. The United Nation Sustainable Development Goals are periodically reviewed by the District for each public company issuing investments that the District is considering for purchase. As of August 31, 2020, 93 percent of the District's commercial paper holding are in the upper half of Sustainalytics rankings for ESG factors and 64 percent of the District's approved commercial paper issuers acknowledge at least four out of 17 United Nation Sustainable Development Goals. The District also maximizes opportunities to invest in government agency and municipal bond instruments, which are designed to support ESG and sustainability factors by nature. All government agency and municipal bond investments in the District's inventory directly or indirectly support ESG practices.

Ensure accountability to taxpayers. For the first time in agency history, the District entered into an Intergovernmental Agreement with Cook County to allow the Office of the Independent Inspector General to provide services to the District. Inspectors General are accountable to the taxpayers. Their role is to detect and prevent waste, fraud, and abuse and thereby build trust in government. The Inspector General investigates complaints or allegations of wrongdoing or misconduct within the programs or operations of the District.

Update the Laboratory Information Management System (LIMS) to increase efficiency and productivity of the laboratory, ensure accuracy of data, enhance compliance with the National Environmental Laboratory Accreditation Program, and reduce reliance on the Information Technology Department. The District's current LIMS was originally purchased approximately 25 years ago and has required significant modifications to meet the District's evolving needs in the course of this time. The custom software features prevent the present LIMS from being upgraded or supported by the vendor. In order to meet the District's requirements, a replacement LIMS will be purchased and implementation will begin in 2021 and be completed in 2022. The new LIMS is expected to provide many new functionalities that will be configurable rather than customizable and will fit the District's business practices. It will allow for growth and flexibility as needs and requirements change.



The District's five laboratory sections perform approximately 400,000 analyses annually to ensure compliance with the National Pollutant Discharge Elimination System permit limits and fulfillment of the Industrial User Program.

Sustain excellence in maintenance and operations. In recognition of its efforts, the District was recognized as a Utility of the Future Today in 2020. The Utility of the Future Today program is a collaboration effort by the National Association of Clean Water Agencies, the Water Environment Federation, the Water Research Foundation, and the WaterReuse Association to recognize utilities that have increased efficiency in operations, enhanced productivity, and achieved long-term sustainability. Utilities receiving this distinction have demonstrated excellence in resource recovery, engagement as a leader in the full water cycle and broader social, economic, and environmental sustainability, community engagement through partnerships when needed to operate outside of the traditional span of utility and transformation of the internal utility culture in support of these innovations.

Modernize and update aging infrastructure. The District continually works to maintain, repair, and improve its infrastructure. The District is completely overhauling TARP Pumps 1 and 3 in the South Pump House and Pump 5 in the North Pump House of the Mainstream Pumping Station, including the associated motors, discharge cone valves, and associated actuators. In addition, the pump control components will be upgraded. These extremely large high head pumps have been in service for over 25 years. The work will begin in 2020 and will be completed in 2023. Once the overhaul is complete, there will be a reduction in the electricity

Budget Message / Highlights

usage to power these pumps, as they will operate more efficiently by being able to pump more fluid in less time. The overhaul will restore the reliability and extend the useful life of pumps and motors.

Protect the quality of Lake Michigan water: The District strives to minimize all sewage discharges to Lake Michigan including discharges to the lake caused by excessive rainfall runoff. To continue to protect Lake Michigan, our region's fresh drinking water supply, and protect the public health, the District will continue to monitor potential sources of discharges that may threaten Lake Michigan and will minimize combined sewer discharges to the lake through careful operation of TARP and the waterway system.

Protect aquatic life and public recreation: The District operates instream and sidestream elevated pool aeration stations to maintain sufficient dissolved oxygen in key sections of the Chicago Area Waterway System (CAWS) to protect aquatic life. The District conducts chemical and biological monitoring of District service area waterways 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 began a four-year CAWS phosphorus assessment and reduction study to guide future phosphorus reduction planning at the District's three largest WRPs. Additionally, a new telemetry system was introduced in 2020 to collect real-time water quality data from the CAWS which provides reliable and timely information for better decision making and successful watershed planning.



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

Provide flood protection and improved water quality to residents under the Tunnel and Reservoir Plan (TARP): TARP Phase I was fully completed in 2006 and consists of 109.4 miles of deep rock tunnels designed to capture up to 2.3 billion gallons of the first flush of sewage contaminated stormwater from combined sewers that had previously flowed into the area waterways. TARP Phase II includes three storage reservoirs built at the end of the tunnels to provide an additional 15.0 billion gallons of capacity. These reservoirs are described below and additional information for the TARP system projects status is on page 370.

Majewski Reservoir: This 350 million gallon reservoir was completed in 1998 and has prevented over 7.6 billion gallons of combined sewer overflow from entering the waterways and mitigated over \$560 million in flood damage.

Thornton Composite Reservoir: In November 2015, the Thornton Composite Reservoir became operational. Through July of 2020, approximately 39.0 billion gallons of polluted water have been captured.

McCook Reservoir: The McCook Reservoir, the last component of the TARP system, serves 3.1 million people in 37 communities, including most of Chicago, and will provide a total volume of 10.0 billion gallons when completed. The first stage opened on December 4, 2017 with 3.5 billion gallons of storage. The second stage is still being mined and will provide 6.5 billion gallons of storage when completed in 2029. The McCook Reservoir is projected to bring more than \$140 million annually in flood reduction benefits to residents in its service area. Through July 2020, approximately 62.0 billion gallons of polluted water have been captured.

A new 20-foot diameter inflow tunnel and gate shaft is being constructed to connect the existing Des Plaines Tunnel system directly to the McCook Reservoir. Scheduled to be completed in 2021, this connection will provide a greater benefit to the communities served by the Des Plaines Tunnel.

Budget Message / Highlights

Collection, Treatment, and Solids Utilization for the Maintenance & Operations Department

	2021 Budgeted	2020 Budgeted	2019 Actual	2020-2021 % Change
Total cost of collection (millions)	\$53.0	\$52.2	\$51.5	1.6 %
Total cost of treatment (millions)	\$82.2	\$78.3	\$70.5	5.0 %
Total cost of solids utilization (millions)	\$24.9	\$23.8	\$20.8	4.8 %

Number of full time equivalent employees:

Collection	245	247	245	(0.8)%
Treatment	380	383	381	(0.8)%
Solids Utilization	39	39	42	— %

Daily average flow/design maximum flow million gallons per day (MGD) level of treatment by plant:

Stickney WRP - Secondary	1,200/1,440	1,200/1,440	1,200/1,440
Calumet WRP - Secondary	354/430	354/430	354/430
O'Brien WRP - Secondary	333/450	333/450	333/450
Kirie WRP - Secondary	52/110	52/110	52/110
Egan WRP - Tertiary	30/50	30/50	30/50
Hanover Park WRP - Tertiary	12/22	12/22	12/22
Lemont WRP - Secondary	2.3/4	2.3/4	2.3/4

Outputs:

Amount of wastewater collected and treated by plant:

	2021 Budgeted	2020 Budgeted	2019 Actual	2020-2021 % Change
Stickney WRP (million gallons)	290,000	285,000	298,833	1.8 %
Calumet WRP (million gallons)	100,000	95,000	112,188	5.3 %
O'Brien WRP (million gallons)	90,000	85,000	93,531	5.9 %
Kirie WRP (million gallons)	16,600	15,000	17,404	10.7 %
Egan WRP (million gallons)	9,050	9,050	9,910	— %
Hanover Park WRP (million gallons)	3,950	3,950	3,510	— %
Fox River Water Reclamation District (contract agreement)	2,200	2,150	2,219	2.3 %
Lemont WRP (million gallons)	1,000	1,000	1,077	— %

Outputs:

Dry tons of biosolids utilized by area:

	2021 Budgeted	2020 Budgeted	2019 Actual	2020-2021 % Change
North Service Area	1,000	1,000	769	— %
Calumet Service Area	23,000	23,000	15,660	— %
Stickney Service Area	76,000	76,000	41,940	— %

Outcomes:

Achievement of water reclamation plant pollution permit requirements by plant:

	2019	2018	2017	2016
Stickney WRP	99.20%	99.83%	99.94%	99.77 %
Calumet WRP	100.00%	100.00%	100.00%	100.00 %
O'Brien WRP	100.00%	100.00%	100.00%	100.00 %
Kirie WRP	100.00%	100.00%	100.00%	100.00 %
Egan WRP	100.00%	100.00%	100.00%	100.00 %
Hanover Park WRP	100.00%	100.00%	100.00%	100.00 %
Lemont WRP	100.00%	100.00%	100.00%	100.00 %

Budget Message / Highlights

Provide sewage collection and treatment and maintain award-winning plants. In 2021, the District expects to collect and treat approximately 512.8 billion gallons of wastewater at our seven WRPs. These services will be performed in compliance with discharge permits issued by the Illinois Environmental Protection Agency, which regulates the quality of our effluent as it leaves our treatment plants. Our high level of compliance emphasizes our excellent performance. This is reflected in a 99.89 percent overall compliance with the National Pollutant Discharge Elimination System (NPDES) requirements in 2019. This compliance resulted in six Platinum Peak Performance Awards from the National Association of Clean Water Agencies. See page 12 for Collection, Treatment, and Solids Utilization data.

Goal 3 - Recover Resources

Maximize use of digester gas. Combined Heat and Power, also known as cogeneration, is the concurrent production of electricity and useful thermal energy from a single source. The Combined Heat and Power system at the Egan WRP will utilize biogas, a byproduct of wastewater treatment, to produce electricity and recover the engine heat for beneficial reuse in the form of hot water heating. The contract is anticipated to be awarded in 2021.

Recover phosphorus in a slow release fertilizer for environmentally-friendly reuse. In partnership with Ostara Nutrient Recovery Technologies, the District opened the world's largest nutrient recovery facility at the Stickney WRP. Phosphorus and nitrogen recovery will provide significant environmental benefits to the CAWS and downstream through the Mississippi River to the Gulf of Mexico. Excess phosphorus in waterways can cause algae to grow and bloom, creating toxic conditions that destroy aquatic life and severely limit recreational activities. Ostara's technology recovers phosphorus and nitrogen to create a high value fertilizer that is both economically and environmentally viable. The District expects to produce and ship approximately 1,280 tons of phosphorus pellets in 2021.

Provide bulk distribution points of biosolids at each WRP for public use. Regulatory changes in Illinois now have eased restrictions on the distribution and use of Exceptional Quality (EQ) biosolids. As a result, the District's EQ compost has grown in popularity among local businesses, non-profit organizations, and governmental agencies. The District's EQ compost and air-dried biosolids products are also registered with the Illinois Department of Agriculture as soil amendments, resulting in the ability to increase distribution of these products locally within our service area. The District now offers EQ compost for no charge to residents, non-profit organizations, and governmental agencies within Cook County.

Maximize community outreach through event tabling, presentations, facility tours, handouts, photos, videos, and other public communication tools (media advisories, press releases, etc.) to educate the public about wastewater treatment, stormwater management, pollution prevention, and water wellness.



Residents stopped by the Stickney Water Reclamation Plant to pick up free Exceptional Quality compost.

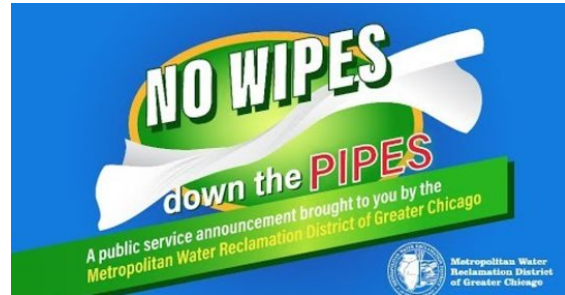
In 2019, two Road Show events were held countywide to showcase the work of the various departments and provided the public an opportunity to learn more about the District. Due to the Pandemic, Public Affairs pivoted to online methods of communication for community outreach and implemented robust social media efforts.

Employees throughout the District lead lively interactive activities and posted informative literature that describes and supports our mission. Our staff are experts in their fields and represent various District departments, including engineering, stormwater management, plant operations, microbiology, information technology, water quality/monitoring, and others. Staff strive to educate the public about the work of the District and how that work benefits residents, businesses, and visitors to Cook County.

Some examples of education tools that were created in 2020 are the monthly MWRD "Flow" (For the Love Of Water) an electronic newsletter to share news and notes, an interactive word scramble game for kids to emphasize how important it is to flush with care, and a YouTube video called "No Wipes Down the Pipes." The COVID-19 pandemic increased the demand for household cleaning items, including disinfecting wipes, paper towels, and toilet paper which were sometimes difficult to find. As a result,

Budget Message / Highlights

people turned to alternatives such as so-called "flushable" wipes and other paper products. This has the potential to cause clogged pipes in homes and in smaller sewer systems. The District's water reclamation plants have seen an increase in these paper products on screens that work to filter out debris at the beginning of the wastewater treatment process. In this educational video, MWRD President Kari K. Steele demonstrates how various products do not break down or dissolve sufficiently in water, and as a result, those materials can clog pipes in homes and cause sewer backups in homes and neighborhoods. Water going down storm drains in separate sewer communities flows directly to local waterways.



The video can be found on YouTube by using the following website: <https://www.youtube.com/watch?v=2CbnYdRetD4&t=6s>

Goal 4 - Develop Employees

Continue to foster a culture that recognizes the value of every employee. The District's female and minority workforce rates are 26 and 43 percent, respectively, as of June 30, 2020. The rates are calculated based on published data from the 2010 census.

In 2020, the District hired six Trainees under a unique apprenticeship partnership with one of the unions that represents District employees. This program focused recruitment from a diverse candidate pool and the selected individuals will train over a three-year period so that they can qualify to become skilled in their craft. The District will continue to explore additional trainee and apprenticeship opportunities in the skilled craft classifications with the goal of increasing female and minority representation in these classifications.

A total of 1,941 positions are budgeted for 2021, a decrease of 12 budgeted positions from 2020. The District continues to budget to slow the growth of future salary appropriations to fit within restrictions on property taxes resulting from the Property Tax Extension Limitation Act.

Salary related expenditures, not including benefits, are the largest item in our operating budget, comprising approximately 52 percent of the Corporate Fund appropriation. It is challenging to match future appropriation requirements with restricted growth in property tax revenue without considering these costs. We continue to leverage technology and look for efficiencies in our processes to reduce staff time. The District's newly implemented eLearning platform is being leveraged to provide employees with online training, which now also includes live training sessions. The new platform has been very beneficial during the COVID-19 pandemic in our continued commitment to develop employees for both their current positions and for future career opportunities at the District.

The District continues to look for opportunities to eliminate layers within the organization and consolidate job classifications where possible to provide flexibility in the use of staff. The District continues its policy of staff reductions only through attrition. For two decades, the staff size and composition has been managed through the use of our "crosshatch program." A "#1" following a position title in the budget indicates that the position will be dropped immediately upon becoming vacant. A "#2" after a position title signifies that when the position is vacated, the person filling the vacancy will receive the title in the parentheses. It can also indicate that while a grade level for a class title has been lowered, the incumbent in the position will be retained at the current grade level. This is indicated by a notation of the new grade level in parentheses following the title. A "#4" after a title signifies that while a class title has been assigned to the Technical, Administrative and Managerial (TAM) salary schedule, the incumbent in the position will be compensated under the previously assigned Professional and Managerial or General Service salary schedule. When the position is vacated, the person filling the vacancy by promotion or new appointment will be compensated under the TAM salary schedule.

Develop and implement leadership initiatives that support succession planning. The District is committed to further developing its employees through training, coaching, and by providing leadership opportunities for supervisors and leaders. In conjunction with the efforts of the employee selection team, these endeavors will build depth in the talent of our employees and provide a broader range of ample internal candidates for succession planning. To support these goals, the District will implement a new online supervisory training program in 2021 and 2022 customized to the District's policies and procedures to develop employees for internal leadership roles.

Budget Message / Highlights

Develop and implement competency-based individual development plans. The District plans to improve the competency-based performance evaluation process by including expanding measurable competencies and providing more opportunities for supervisors and employees to set goals, provide coaching, feedback, and individual development plans. A new cloud-based system will be implemented in 2020.

Goal 5 - Leading Partnerships

Develop strategic relationships with constituents through active involvement in a variety of organizations and events on a local, state, and national level. The District is actively developing strategic partnerships such as those described below. For a complete list of professional memberships, please see page 556.

Provide active leadership in local, state, and federal water issues. The District initiated and completed a seven-year microbial source monitoring of the CAWS via metagenomics in collaboration with Argonne National Laboratories in 2020. The results of this unprecedented research can be used to guide future development of standards and actions to further improve water quality in the areas of the CAWS designated for primary contact recreation in the CAWS and for a greater understanding for urban waterways.

The Monitoring & Research Department is managing and funding the CAWS Phosphorus Assessment and Reduction Plan, with input from stakeholders represented in the CAWS Nutrient Oversight Committee. The District's leadership on this comprehensive study will improve water quality by identifying issues that may be related to phosphorus and laying out a plan for phosphorus reductions and other solutions. The study began in 2020 and will continue until 2023.

Richard Fisher, Principal Civil Engineer, recently was selected to be a member of FEMA's Hazard Mitigation External Stakeholder Working Group. The External Stakeholder Working Group provides an opportunity for FEMA staff to increase engagement and transparency with non-federal partners in the Hazard Mitigation Assistance programs at the state, federally recognized tribe, territory, regional, and local levels.

Goal 6 - Information Technology

Develop a framework for deploying web services and data integration technologies to streamline access to various hosted data systems and applications. The Information Technology Department continues to balance the technology needs of the District with available resources while focusing on security and service delivery and maintaining transparency. The District plays a vital role in the overall upkeep of critical infrastructure throughout Cook County and keeping the District's information technology systems secure is crucial to maintaining service delivery to the community. To ensure that these systems remain secure from outside attacks, security training is being expanded and new tools are being implemented to enhance the security of the District's systems.

As technology advances, new tools and systems are being developed that help further the District's mission. The role of the Information Technology Department is to assist departments in developing and executing these advancements to help keep costs in line and service levels high. Access to online applications and mobile technology is being expanded and internal applications are being deployed to provide departments with the tools they need to maintain and enhance service delivery to the community.

Implement a modern web content management system that provides a streamlined approach for storing and delivering web content. Communication internally and externally is important to ensure operations run smoothly and the public is informed about District services and initiatives. Web content and services are being upgraded to provide transparency in services delivered to District departments and information to District constituents.

Further develop remote network infrastructure which will allow a greater number of District employees to work seamlessly from home due to pandemic conditions. The Information Technology Department has developed multiple teleworker profiles that will provide the best equipment, security, and network access to ensure the District's staff can work effectively, whether at home or in the office. The evolution from a stationary, office-based configuration to a mobile workforce will modernize the District's approach to office technology. The onset of the COVID-19 pandemic has brought the need for a robust mobile solution into greater focus and further development of these capabilities will ensure the District is more prepared for future working challenges.

Budget Message / Highlights

2021 Budget Overview

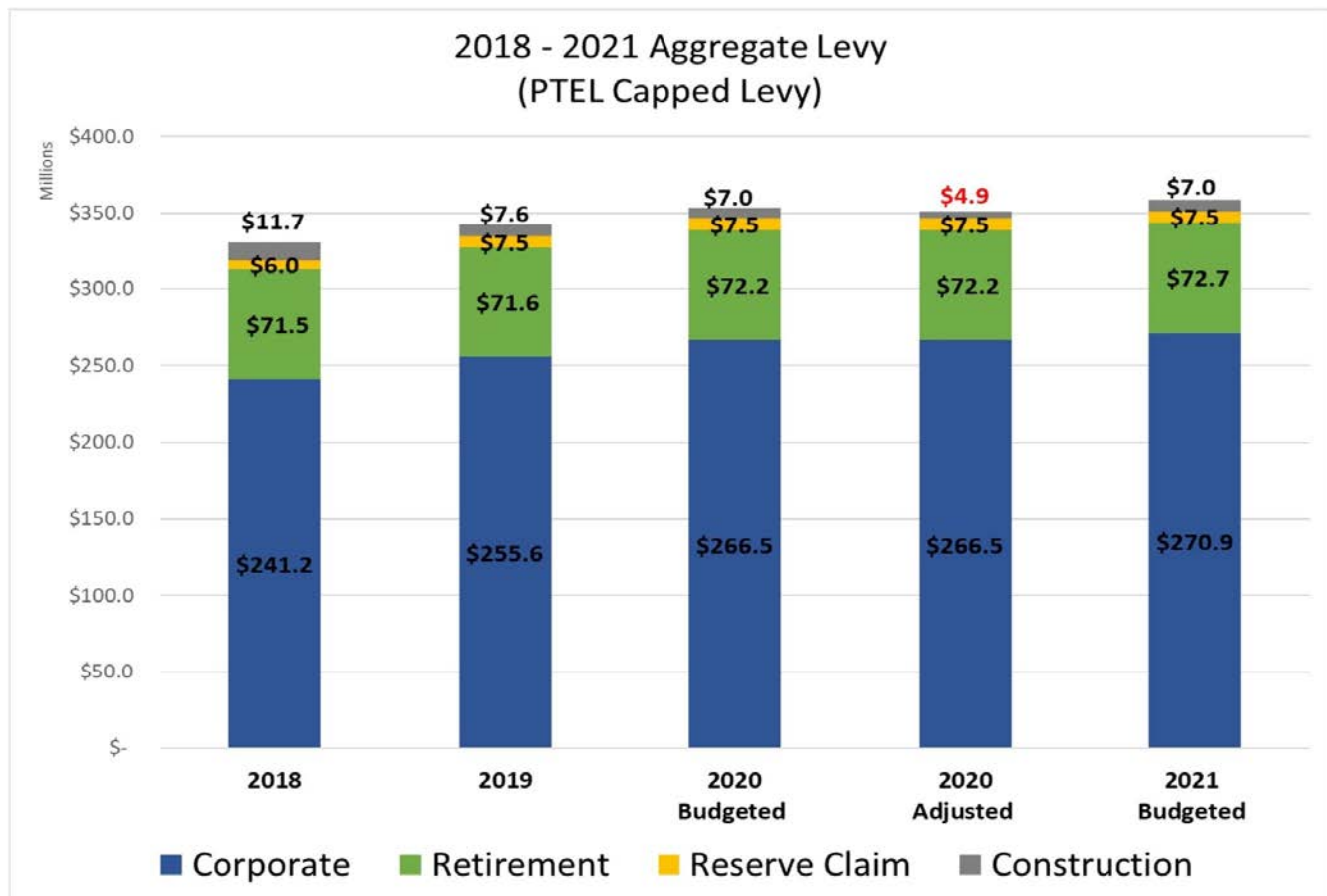
The District's 2021 Budget of \$1,121.9 million has been influenced by the global pandemic, economic shutdown, and shifting weather patterns. The uncertain economic outlook and low inflation will impact the District's ability to raise revenue in 2021 and 2022, while the operational needs continue to grow. Illinois Property Tax Extension Limitation statute remains the primary limiting factor for the District's long-term financial planning. It limits increases in property tax levies for our aggregate or operating funds to an increase of five percent or the change in the national Consumer Price Index, whichever is less.

Under the Property Tax Extension Limitation, the District has been able to increase the Aggregate Property Tax Levy approximately \$11.0 million annually. Since 2018, this allowable increase has been realized in the Corporate Fund. For the 2020 levy year, collected in 2021, the District anticipates a \$2.1 million reduction to the Construction Fund Levy.

Based on current Consumer Price Index projections of 1.5 percent for 2020, the 2021 Property Tax Levy is expected to increase approximately \$4.4 million over the 2020 levy. Additionally, economically sensitive revenues including User Charge, Personal Property Replacement Tax, and Investment Income are all expected to decline from the 2020 budget and the expected 2020 year-end estimates.

The District faced difficult choices to address declining Corporate Fund revenues. The 2021 Corporate Fund Budget is \$397.7 million, a decrease of \$0.5 million, or 0.1 percent, from the 2020 Adjusted Budget. Projects, such as a planned Enterprise Resource Planning upgrade (\$5.0 million), have been deferred. In 2021, the District will actively manage costs, while plant maintenance and operational costs continue to grow. The Maintenance & Operations budget will increase by \$6.1 million, or 3.0 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, an implementation of online reporting for industrial users, and an improved interactive vendor portal.

The District's strong reserves and commitment to fiscally responsible management of our resources will aid in overcoming this period of economic uncertainty. A complete Five-Year Financial Forecast for all funds can be found beginning on page 57.



Budget Message / Highlights

Tax Levy, Tax Rate, and Appropriations

The overall 2021 tax levy required to finance the 2021 Budget is \$658.5 million, an increase of \$7.1 million, or 1.1 percent, from the 2020 Adjusted Budget. The increase is due to an aggregate 2.0 percent increase in the Corporate, Construction, Retirement, and Reserve Claim Funds. The Stormwater Management Fund Levy is remaining flat to 2020, while there is an increase of \$0.1 million, or 0.1 percent in the Bond Redemption & Interest Fund.

Among the funds subject to the Property Tax Extension Limitation law, the Corporate Fund levy has an increase of \$4.4 million, or 1.7 percent, while the Retirement Fund levy has an increase of \$0.5 million, or 0.7 percent. The Reserve Claim Fund levy is remaining flat at \$7.5 million and the Construction Fund is remaining flat to the 2020 Original Levy, an increase of \$2.1 million from the projected 2020 Adjusted Levy of \$4.9 million due to the PTEL reduction expected for the 2020 Levy.

The overall tax rate for 2021, based on the most recent Equalized Assessed Valuation (EAV), is estimated to be 37.84 cents per \$100 of assessed valuation, a 0.69 cent decrease from the 2020 Adjusted Tax Rate. The allowance for loss in collection of property taxes is budgeted at 3.5 percent, no change from 2020. The budgeted loss will be maintained at this level, based on trends in the required refunds of prior property tax payments.

Overall appropriations for 2021 total \$1,121.9 million, a decrease of \$29.8 million, or 2.6 percent, from the 2020 Adjusted Budget. The decrease is primarily due to the \$20.0 million advance funding to the Retirement Fund to maintain growth in the funded ratio during 2020. Additionally, there is a decrease of \$4.3 million in the Capital Improvements Bond Fund, which is appropriated on an obligation basis and based on project schedules. A decrease in the Bond Redemption & Interest Fund of \$0.9 million is attributable to repayment schedules, a decrease in the Construction Fund of \$3.9 million, a decrease of \$6.3 million in the Stormwater Management Fund, and a \$0.5 million decrease in the Corporate Fund. The Reserve Claim Fund will increase by \$5.2 million. Explanations of these changes are provided in the following detailed Fund summaries.

<u>Levies</u>	2021	2020 Adjusted	Increase (Decrease)	Percent Change
Corporate Fund	\$ 270,880,900	\$ 266,455,300	\$ 4,425,600	1.7 %
Construction Fund	7,000,000	4,934,300	2,065,700	41.9 %
Stormwater Management Fund	52,926,000	52,926,000	—	— %
Retirement Fund	72,741,500	72,227,600	513,900	0.7 %
Reserve Claim Fund	7,500,000	7,500,000	—	— %
Bond Redemption & Interest Fund	247,443,958	247,313,970	129,988	0.1 %
TOTAL	\$ 658,492,358	\$ 651,357,170	\$ 7,135,188	1.1 %
<u>Appropriations</u>	2021	2020 Adjusted	Increase (Decrease)	Percent Change
Corporate Fund	\$ 397,719,000	\$ 398,200,800	\$ (481,800)	(0.1)%
Construction Fund	14,103,200	18,044,400	(3,941,200)	(21.8)%
Capital Improvements Bond Fund	240,276,700	244,547,400	(4,270,700)	(1.7)%
Stormwater Management Fund	109,965,900	116,258,000	(6,292,100)	(5.4)%
Retirement Fund	88,127,000	107,319,000	(19,192,000)	(17.9)%
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)%
TOTAL	\$ 1,121,942,550	\$ 1,151,786,467	\$ (29,843,917)	(2.6)%

Comparisons of the estimated taxes paid by the owner of a home with a market value of \$100,000 for 2021 as budgeted, and 2020 as adjusted for the 2019 EAV, are as follows:

	2021 Budgeted	2020 Adjusted	Variance	Percent Change
Estimated taxes for \$100,000 home	\$110.15	\$112.16	\$(2.01)	(1.79)%

Budget Message / Highlights

Basis of Budgeting and Accounting

The basis of budgeting and the basis of accounting determine when revenues and expenditures are recognized for the purposes of budget control and financial reporting. As per Illinois Compiled Statutes, the District’s budget is adopted and executed such that receipts are recognized on a cash basis and expenditures on an accrual basis or as soon as they are incurred. The Comprehensive Annual Financial Report is prepared using the modified accrual basis of accounting in conformity with Generally Accepted Accounting Principles (GAAP). The exceptions between the basis of budgeting and the basis of accounting are noted below.

In the Corporate, Construction, and Stormwater Management Fund budgets, revenues are recognized on a cash basis except for property and personal property replacement taxes, which are recognized based on working cash borrowing plus an estimate of collections of property and property replacement taxes over and above the working cash borrowing. Expenditures are recognized on a GAAP basis except for inventory expenditures, which are accounted for on the purchase method for budgetary purposes and on the consumption method for GAAP financial reporting purposes. Transfers in and transfers out to other funds are considered other financing sources and uses.

The Capital Improvements Bond Fund (CIBF) is budgeted on an “obligation” basis of accounting, which records total expenditures and grant revenues in the period in which contracts or grants are awarded. Appropriations lapse at year-end for the Corporate, Construction, Retirement, Stormwater Management, and Debt Service Funds. Appropriations for the CIBF lapse at the end of the year to the extent of the unencumbered balances. Encumbered balances are not reported as reservations of fund balances, as the amounts are reappropriated in the following year.



The government-wide and fiduciary financial statements are reported using the economic resource measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of the period of related cash flows. Property taxes are recognized in the year of levy and personal property replacement taxes are recognized in the year earned. Grants and similar items are recognized as revenue in the fiscal year that all eligibility requirements have been met.

The District’s governmental funds are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Under the modified accrual basis, revenues are recognized when susceptible to accrual, i.e., when measurable and available to finance operations. Expenditures are recognized in the period in which the fund liability is incurred, except for principal and interest on long-term debt, compensated absences, claims, judgments, and arbitrage, which are recognized when due and payable.

The accounting and reporting treatment applied to the capital assets and long-term liabilities associated with a fund are determined by its measurement focus. Since governmental funds are accounted for on the current financial resources measurement focus, only current assets and current liabilities are included on their balance sheets. Their reported fund balance (net current assets) is considered a measure of “available spendable resources.” Governmental fund operating statements present increases (revenues and other financing sources) and decreases (expenditures and other financing uses) in net current assets. Accordingly, they are said to present a summary of sources and uses of “available spendable resources” during a period.

Property taxes, user charge revenue, interest, land rentals, and personal property replacement tax revenue are accrued to the extent that they are measurable and available to satisfy liabilities of the reporting period. In general, the revenue recognition period is limited to amounts collected within 60 days following year-end. Receivables that are unavailable are reported as deferred revenue.

Grants from federal and state agencies are recorded as revenues in fund financial statements when reimbursable expenditures are incurred, or other eligibility requirements imposed by the provider are met, and the grant resources are measurable and available.

Property taxes attach as an enforceable lien on property as of January 1 of the levy year. They are levied and recorded as a receivable as of January 1 and are due in two installments in the following year.

Budget Message / Highlights

Corporate Fund

The Corporate Fund is the District's general operating fund and includes appropriation requests for the day-to-day operational costs anticipated for 2021. The total appropriation for the Corporate Fund in 2021 is \$397.7 million, a decrease of \$0.5 million, or 0.1 percent, from the 2020 Adjusted Budget.

The 2021 tax levy for the Corporate Fund is \$270.9 million, an increase of \$4.4 million, or 1.7 percent, compared to the 2020 Adjusted Budget. In 2021, property taxes and user charge revenues remain the primary funding sources for the District's Corporate Fund. Illinois law limits the tax rate of this fund to 41.00 cents per \$100 of EAV. The estimated tax rate for the Corporate Fund in 2021 is 15.56 cents, a decrease of 0.21 cents from 2020 Adjusted Tax Rate. User charges, budgeted at \$37.0 million for 2021, are collected from industrial, commercial, and non-profit organizations to recover operations, maintenance, and replacement costs proportional to their sewage discharges, in excess of property taxes collected.

Stormwater Management Fund

The Stormwater Management Fund is utilized to plan, implement, and finance stormwater management activities throughout all of Cook County, including stream maintenance in areas that currently lie outside the District's boundaries. The fund consolidates the stormwater management activities of the Engineering and Maintenance & Operations Departments and supports the activities outlined in the Cook County Stormwater Management Plan, which serves as a framework for the District's countywide Stormwater Management Program.

One of the initial goals of the Stormwater Management Program was to develop detailed watershed plans (DWPs) for each of the watersheds in Cook County. The DWPs identified and prioritized "regional" stormwater projects based on a benefit to cost ratio. These include streambank stabilization projects, which involve addressing critical active streambank erosion threatening public safety, structures, and/or infrastructure, or flood control projects. The Board of Commissioners has approved over 26 regional projects for design and construction.



Excavation at the Addison Creek Reservoir in Bellwood, Illinois.

In 2014, the State Legislature expanded the authorities of the District's stormwater management legislation to allow for the District to address local drainage problems and acquire flood-prone property from property owners on a voluntary basis. These legislative changes form the basis of the District's Stormwater Partnership Program, the intent of which is to identify and assist municipalities with the implementation of projects that address local flooding concerns through a variety of engineered solutions utilizing both Green Infrastructure and traditional gray projects, along with flood-prone property acquisitions. The District is also developing Stormwater Master Plans to comprehensively address flooding by identifying potential projects within publicly and privately owned property. It is anticipated that Stormwater Master Plans will be developed where planning assistance is needed over the next several years following the process defined through initial pilot studies completed in 2016. Through the District's Flood-Prone Property Acquisition Program, funding assistance is provided to partnering governmental agencies to purchase properties within the designated hazard areas.

Budget Message / Highlights



Construction on the Space to Grow schoolyard at Daniel Boone Elementary School.

In 2011, the District established a Green Infrastructure Program which facilitates the planning, design, and construction of multiple Green Infrastructure projects throughout Cook County. In 2014, the District began a partnership with the Chicago Department of Water Management and the Chicago Public Schools in the Space to Grow program to provide stormwater retention at elementary schools while reconstructing substandard playgrounds. There are currently 25 schools with construction completed, five of which opened in 2020. There are five additional that are planned for construction in 2021.

In addition, since 2017, the District initiated over 85 Green Infrastructure partnerships throughout Cook County for projects that provide flood reduction and other community benefits.

The Watershed Management Ordinance (WMO) establishes uniform and minimum stormwater regulations throughout Cook County. The WMO went into effect on May 1, 2014, and the District's Board of Commissioners most recently amended the WMO on May 7, 2020. The amendment included changes to allow for a regional stormwater detention and volume control trading program pilot study to commence. References to rainfall data were updated from Bulletin 70 (2019) to Bulletin 75. Staff in the Local Sewer Systems Section review permit applications for compliance with the WMO.

The Stormwater Management Fund is used to fund operational costs directly related to the Stormwater Management Program and pay-as-you-go infrastructure projects. It is also used to leverage taxpayer dollars through partnerships with local agencies to fund local Green Infrastructure and stormwater projects. Finally, the Stormwater Management Fund is used to pay the principal and interest on Alternate Revenue Bonds. The 2021 Appropriation for the Stormwater Management Fund is \$110.0 million, a decrease of \$6.3 million, or 5.4 percent, over the 2020 Adjusted Budget and continues to support the District's commitment to mitigate flooding issues throughout Cook County. Property taxes are the primary funding source for the District's Stormwater Management Fund. Illinois law limits the tax rate of this fund to five cents per \$100 of EAV. The estimated tax rate for the Stormwater Management Fund in 2021 is 3.04 cents, a decrease of 0.09 cents from the 2020 Adjusted Tax Rate.

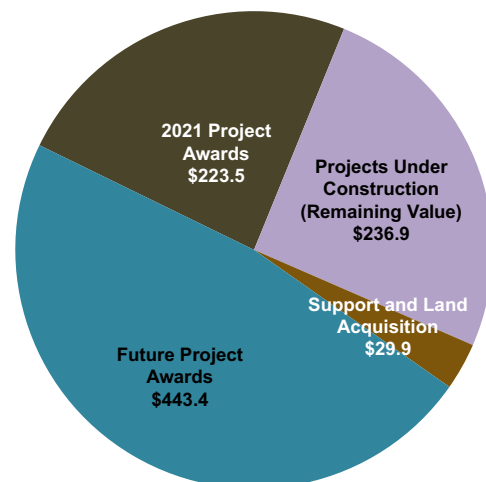
Capital Improvement Program:

Construction Fund and Capital Improvements Bond Fund

The District's overall Capital Improvement Program (CIP) includes 2021 project awards, land acquisition, support, future projects, and the construction value remaining on projects currently under construction. The 2021 CIP has a total estimated cost of \$933.8 million. Capital projects involve the acquisition, improvement, replacement, remodeling, completing, altering, constructing, and enlarging of District facilities. Included are all fixtures which are permanently attached to and made a part of such structures and non-structural improvements.

Projects under construction have been presented and authorized in previous budgets and are recognized in the annual budget as outstanding liabilities in the Capital Improvements Bond Fund (CIBF). In the Construction Fund, projects are re-appropriated. Future projects, not yet appropriated, are included in the annual budget to present a comprehensive picture of the District's CIP. These future projects will be requested for appropriation subject to their priority, design, and available funding.

Overall Capital Improvement Program (million \$)



Budget Message / Highlights

The District utilizes two funds for its CIP: the Construction Fund and the CIBF. The Construction Fund is utilized as a pay-as-you-go capital rehabilitation and modernization program. Capital projects are financed by a tax levy or other funding sufficient to pay for project costs as they are constructed. As the District replaces, rehabilitates, and modernizes aged and less effective infrastructure, capital projects are assigned to the Corporate Fund, Construction Fund, or CIBF based on the nature of the project, dollar magnitude, and useful life of the improvement.

The CIBF includes major capital infrastructure projects whose useful lives extend beyond 20 years, and which will be financed by long-term debt, federal and state grants, Water Infrastructure Finance Innovation Act, and State Revolving Fund loans.

The Illinois Property Tax Extension Limitation Law (Tax Cap) limits new debt that the District can issue by a debt service extension base, which allows local governments with non-referendum authority to continue to issue non-referendum debt as long as the annual debt service levies do not exceed the limit. The debt service extension base is increased annually by the Consumer Price Index or five percent, whichever is less. However, an exemption for projects initiated before October 1, 1991 was granted to the District to enable completion of the TARP.

Construction Fund

The Construction Fund appropriation for 2021 totals \$14.1 million, a decrease of \$3.9 million, or 21.8 percent, from the 2020 Adjusted Budget.

Capital projects in the Construction Fund are primarily supported by property taxes. The 2021 tax levy planned for the Construction Fund is \$7.0 million, an increase of \$2.1 million, or 41.9 percent, from the 2020 Adjusted Levy. A listing and description of proposed projects, projects under construction, and scheduled for 2021 award, can be found in the Capital Budget (Section V) of this budget document.

Capital Improvements Bond Fund

The 2021 appropriation for the Capital Improvements Bond Fund is \$240.3 million, a decrease of \$4.3 million, or 1.7 percent, from the 2020 Budget. The appropriation is based on the scheduled award of \$211.5 million in construction costs on projects. The decrease in appropriation for the CIBF reflects the pattern in the award of major projects. An appropriation for the open value of existing contracts is also carried forward from the prior year. The remaining \$28.8 million appropriation for this fund will provide for studies and professional services to support District design and administration of proposed and ongoing construction activity, including the TARP reservoirs.

A comprehensive narrative and exhibits detailing the CIP is provided in the Capital Budget (Section V) of this budget document. A listing and description of proposed projects, projects under construction, and scheduled for 2021 award, can be found in the Capital Budget (Section V) of this budget document.

Retirement Fund

The Retirement Fund of the District is established under Illinois Compiled Statutes to provide funding and administration for a retirement program for District employees. The Fund is financed with employee and employer contributions and investment income, which are distributed to the fund when collected. The annual appropriation requests for this fund are taxes receivable from previous years' tax levies.

The District has addressed pension liabilities through both funding policies approved by the Board of Commissioners and supporting legislative changes for the Metropolitan Water Reclamation District Retirement Fund. In 2012, a statutory change increased the employee contributions by one percent per year for three years for employees who were members before January 1, 2011. The increased contribution will remain in place until the fund reaches a 90 percent funding ratio.



A District employee administers temperature checks to people entering a District building as a COVID-19 precaution.

Budget Message / Highlights

In 2020, the District transferred \$20.0 million to the Retirement Fund to provide advance funding to maintain growth in the Retirement Fund’s funded ratio, which is 55.9 percent funded as of December 31, 2019. The District’s Funding Policy Goal for the Retirement Fund is to be 100 percent funded by 2050.

The 2021 appropriation for the Retirement Fund is \$88.1 million, a decrease of \$19.2 million, compared to the 2020 Adjusted Budget. The 2021 total tax support for the Retirement Fund is \$91.3 million, which is comprised of \$18.6 million from the District’s Personal Property Replacement Tax allocation and a \$72.7 million property tax levy. The property tax levy of \$72.7 million is an increase of \$0.5 million, or 0.7 percent, compared to the 2020 Adjusted Levy. The appropriation is based on a statutorily required formula that bases the District levy, and subsequent appropriations, on employee contributions made in previous years. The District’s statutory tax levy calculation multiplier is 4.19 of employee contributions. A detailed explanation of the fund’s fiscal status, participation, and income is presented in Section VII of this budget document.

Reserve Claim Fund

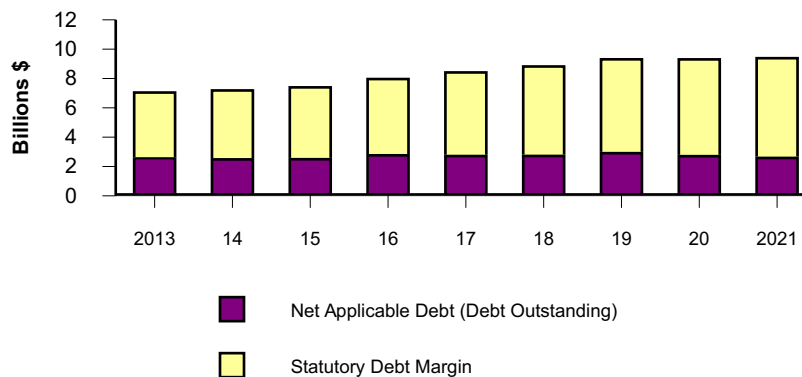
The Reserve Claim Fund acts as the District’s insurance fund. The District is partially self-insured and utilizes this fund for emergency repairs and claims against the District. District policy is to annually levy a half-cent annual tax rate to provide funds for current claims and to accumulate a fund reserve towards the statutorily authorized limit of \$82.0 million.

The 2021 appropriation of \$39.6 million is an increase of \$5.2 million, or 15.2 percent, from the 2020 Adjusted Budget. The practice is to fund toward the maximum fund balance allowable. This estimate is reviewed and adjusted annually. A historical profile of the resources available in the fund is provided in Section VII of this budget document. The levy will remain the same for this fund in 2021. The District is levying against the last known EAV at the maximum rate allowed by state statute in 2021. The Board reaffirmed the policy to permit a levy at the statutorily allowable tax rate to protect the District in the event of catastrophic failure of District operational infrastructure or other claims. For the 2021 Budget, the last known EAV (\$164.1 billion) is for the 2019 levy year.

Bond Redemption & Interest Fund

The Bond Redemption & Interest Fund is the District’s debt service fund. The District finances its major CIP with the sale of long-term general obligation bonds, grants received from the state and federal government, and loans from the Illinois State Water Pollution Control Revolving Loan Fund, or State Revolving Fund (SRF). Principal and interest payments on District general obligation bonds, and SRF loans, require an annual levy and appropriation.

Net Debt and Statutory Debt Margin



The SRF Loan Fund provides low-interest loans to finance qualifying projects. Upon project completion, District bonds are issued at the same low-interest rate. The current interest rate for new loans to the District is 1.4 percent. The District has authorized approximately \$2.2 billion of SRF loans since the program’s inception. Several projects are currently financed through SRF loans.

Budget Message / Highlights

The District expects to receive \$70.0 million in 2021 and approximately \$70.0 million annually from SRF loans for the next several years. The SRF Loan Fund replaced the Federal Construction Grants program from which the District had historically received 55 to 75 percent direct funding for qualifying capital improvements.

The 2021 appropriation for the Bond Redemption & Interest Fund totals \$232.1 million, a decrease of \$0.9 million, or 0.4 percent, compared to the 2020 Adjusted Budget. A debt service graph is found on page 50 that displays debt service from 2013 through 2025 and one on page 524 that displays debt service from 2021 through retirement. The 2021 tax levy for this fund is \$247.4 million, an increase of \$0.1 million, or 0.1 percent, from the 2020 Adjusted Levy.

Non-Referendum Bonding Authority

The District's Capital Improvement Program (CIP) is financed primarily with State Revolving Fund loans, pay-as-you-go funding, and general obligation bond sale proceeds. The 1995 Tax Extension Limitation Law (Tax Cap), together with subsequent amendments to the statute, limit the District's ability to issue debt. The District has authority to issue bonds without seeking voter approval via referendum through the year 2034, effective January 1, 2020. The statutory debt limit is equal to 5.75 percent of the District's EAV. The District's 2019 EAV is \$164.1 billion, setting the District's statutory debt limit at \$9.4 billion. Outstanding debt applicable to the debt limit as of December 31, 2019, totals \$2.7 billion. The debt margin is \$6.8 billion.

The 2021 debt service extension base limit is \$173.1 million. With the inclusion of the levies for the SRF series of bonds for non-TARP projects, Capital Improvements Bonds, and Refunding Bonds, there is approximately \$20.6 million annual debt service available under the statutory debt service limit related to the tax levy year 2020.

Additional bond issues through 2034 will be used to finance capital projects identified by prioritization. Initial estimates and schedules for the projects were analyzed and compared to bond issuance authority and funding availability. The bond issuance authority will generally accommodate the proposed project expenditures through 2034. Extension or increase in the authority may be necessary for additional projects that may be required to meet more stringent NPDES permit discharge limits, including effluent disinfection, nutrient removal, and supplemental aeration.

History of Legislative Amendments Limiting Borrowing Authority	
Public Act 89-0001	The initial Tax Cap legislation that limited non-referendum authority to projects that were initiated prior to October 1, 1991. Effective July 7, 1995
Public Act 89-0385	Provided the District with the authority to issue non-referendum "limited bonds" for capital projects initiated after October 1, 1991. Effective August 18, 1995
Public Act 90-0485	Provided a further modification by authorizing the exclusion of debt for TARP projects from this debt service limit. Effective August 17, 1997
Public Act 93-0279	Increased the dollar limit on bonds that may be issued during any one budget year to not exceed \$150 million, plus the amounts of any bonds authorized and unissued during the three preceding budget years. Effective July 22, 2003
Public Act 96-0501	Allows for an annual increase in the debt service extension limitation base by the lesser of five percent or the percentage increase in the Consumer Price Index beginning with the 2009 levy. Effective August 14, 2009

Financial Policies, Objectives, and Accomplishments

Financial Policies, Objectives, and Accomplishments

In order to meet its federal, state, and local responsibilities, while ensuring cost-effective operations, the District adheres to a number of financial policies. These policies are part of a dynamic process whereby the best use is made of available District resources. The following provides an overview of these policies, their objectives, and the measurable accomplishments resulting from their use.

Budgetary Policies

In order to protect the strong financial position of the District, ensure uninterrupted services, and stabilize annual tax levies, the Board adopted the following policies on December 21, 2006 to enhance and maintain budgetary fund balances. The General Corporate Fund policy was amended on December 10, 2009. The Bond Redemption & Interest Funds Investment Income policy was amended on November 3, 2011. The Stormwater Management Fund policy was adopted on December 10, 2009 and amended on November 3, 2011 and December 17, 2015.

General Corporate Fund

- Corporate Fund undesignated fund balance as of January 1 of each budget year must be maintained at between 12 percent and 15 percent of appropriations. The fund balance may be maintained by not fully appropriating prior year fund balances. This level of fund balance will ensure the District's ability to maintain all operations even in the event of unanticipated revenue shortfalls and provide time to adjust budget and operations;
- Corporate Working Cash Fund must be sufficient to finance 95 percent of the full annual expenditure of the Corporate Fund. This will be financed through transfers of surpluses from the Construction Working Cash Fund, direct tax levies, tax levy financed debt (Working Cash Bonds), and transfers of accumulated interest from other funds. This level of fund balance will continue financing of the Corporate Fund in the event of delays in second installment real estate tax collections;
- Reserve Claim Fund balance will be targeted toward the maximum level permitted by statute, 0.05 percent of the equalized assessed valuation (EAV), whenever economically feasible. This will be financed through tax levies at the maximum 0.5 cents per \$100 of EAV when economically feasible and financially prudent. This level of funding will protect the District in the event that environmental remediation costs cannot be recovered from former industrial tenants of District properties, catastrophic failure of District operational infrastructure, or other claims. As the District is partially self-insured, adequate reserves are critical.

The District will appropriate funds from the unassigned fund balance for emergencies and other requirements that the District believes to be in its best interest. In the event that any of these specific component objectives cannot be met, the Executive Director will report this fact and the underlying causes to the Board with a plan to bring the fund balances back into compliance with policy within a two-year period. In order to maintain relevance, this policy will be reviewed every three years following adoption or sooner at the discretion of the Executive Director.

Stormwater Management Fund

The maximum property tax levy of five cents per \$100 of EAV for the Stormwater Management Fund shall be allocated at a maximum two cents per \$100 of EAV to fund operations and maintenance expenditures and the remainder of the levy shall fund direct cash outflows for capital and capital related expenditures and the interest and redemption of general obligation bond issues for capital projects.

Capital Improvements Bond Fund Investment Income

Investment earnings from the Capital Improvements Bond Fund (CIBF) resulting from all future bond issues will fund an equity transfer to the Bond Redemption & Interest Funds and be used to abate property tax levies or for other corporate needs. This practice will also limit the payment of arbitrage rebates.

Bond Redemption & Interest Funds Investment Income

Fund balances in the Bond Redemption & Interest Funds that might accumulate due to investment income will be identified and used to abate Bond Redemption & Interest property tax levies or for other corporate purposes. These abatements appropriately reduce property tax levies by the amount earned on invested balances above what is necessary for paying principal and interest due over the following 12 months, while still maintaining appropriate fund balances and when not required for other corporate purposes. This policy and the subsequent tax abatements will assist in compliance with the Board's overall tax levy policy, which is not to exceed a five percent increase over the prior year, excluding the Stormwater Management Fund tax levy.

Financial Policies, Objectives, and Accomplishments

Abatement of Interest Rate Subsidies from Build America Bond Issuances

Interest reimbursement payments related to taxes levied for Build America Bond issuances will be presented to the Board for approval to abate, to be used for any lawful corporate purpose, or a combination thereof as determined as part of the annual budget process. Such abatement or alternative lawful use of the funds will be presented to the Board for approval prior to any abatement or use of reimbursement funds.

Capital Improvements Bond Fund Accumulated Income

Revenues that have accumulated in the CIBF from investment income, royalties, grants, or SRF revenues will primarily be used for capital projects. Capital projects are generally in the CIBF; however, capital projects in the Construction or Corporate Funds of critical importance may be financed by transfers from this revenue source. These funds may be transferred to the Bond Redemption & Interest Fund to be used to abate property taxes or may be used for other corporate needs as necessary.

Annual Budget

The District's Annual Budget shall present a complete financial plan for the budget year. The Budget will be prepared and presented as one comprehensive management and balanced financial plan, including capital and operating requirements, financing requirements, requirements for employee retirement, and reserve claim funding.

In addition, the District prepares and manages its budgets based on the following long-standing policies:

- Budget estimates shall be prepared, and appropriations made, in a manner that reflects the use of program and performance principles and unit cost data. Appropriations shall be arranged according to funds, programs, and organizational units;
- Historical levels of funding and expenditure shall be included in the Budget to provide comparisons. Financial forecasting of future requirements shall be included to provide estimates of future financial and operating conditions;
- The Budget shall contain separate and combined estimated balance sheets for each fund, with estimates of current assets and liabilities as available for appropriation at the beginning of the budget year;
- The Budget shall include a statement showing the method of arriving at the net tax figure, and provide estimates of all taxes to be levied for such budget year, as well as all other current receipts to be derived from other revenue sources;
- Statements shall be included in the Budget, which detail bonded indebtedness of the District, and show bonds authorized and unsold, District borrowing capacity, and the maturity dates of bond issues and corresponding rates of interest;
- The District will comply with the 1995 Tax Cap and Board policy limiting increases in the total property tax levy to five percent, excluding the Stormwater Management Fund.

Retirement Fund

On October 2, 2014, the Board adopted a policy establishing the objectives, goals, and funding sources for the annual contribution to the Metropolitan Water Reclamation District Retirement Fund.

Policy Objectives:

- Provide for a funding plan based on actuarially determined contributions;
- Provide funding discipline to ensure promised benefits can be paid;
- Seek reasonable and equitable allocation of the cost of benefits over time;
- Minimize volatility of the District's contributions to the extent reasonably possible and consistent with other policy goals;
- Support the goals of accountability and transparency with clear benchmarks and reporting.

Funding Goal: The funding goal of the District is to contribute annually to the Retirement Fund an amount that over time will increase the ratio of Retirement Fund assets to accrued liabilities to 100 percent by the year 2050.

Source of Funding: The source of funding for the District's contribution is the annual real estate tax levy and personal property replacement tax receipts as allowed under 40 ILCS 5/13-503.

The District may, at its discretion, transfer excess interest income to the Fund in accordance with 70 ILCS 2605/5.9. Such transfers will be made in addition to the annual tax levy amount funded by real estate and personal property replacement tax receipts.

Financial Policies, Objectives, and Accomplishments

Implementation of Funding Policy:

- In order to achieve the goals and objectives, the District will annually contribute: (1) an amount equivalent to the maximum employer contribution allowable by statute or (2) if the maximum amount exceeds the amount available for contribution from the District's tax levy in any budget year, the District may contribute an amount determined by the Fund actuary based on a triennial projection that exceeds the minimum employer contribution required by the statute and achieves a funded ratio of 100 percent by the year 2050.

Benchmarks:

- Progress toward the funding goal will be determined in part by an actuarial projection to be performed by the Fund's actuary every three years. This triennial projection will calculate a consistent multiple through the year 2050 that (1) satisfies the statutory requirements every year and (2) achieves a funded ratio of 100 percent by 2050. The projection multiple will serve as a guide for determining employer contributions until the next projection is performed. In addition to the triennial projection, the funded ratio calculated each year by the Fund actuary will serve as a benchmark to determine progress toward the funding goal.

Budgetary Objectives

- The District shall make every effort to minimize the tax levy through the use of sound management and cost-effective operations.
- The District will maintain a positive relationship between revenues and expenditures.
- The financing of the Corporate, Stormwater Management, and Construction Funds budgets will be managed through use of the Corporate, Stormwater and Construction Working Cash Funds, respectively. Interfund transfers will be used to minimize property tax levies for the Working Cash Funds.
- The District's Budget shall be prepared and presented in such a manner that it serves as a clear and comprehensive policy document, financial plan, operations guide, and communications device to its staff, public officials, and citizens.

Budgetary Accomplishments

The District's property tax levies are in compliance with the Tax Cap Law. Fiscal plans have been developed and implemented to reduce expenditures as necessary to meet property tax revenue constraints while meeting our statutory and regulatory responsibilities.

The District has effectively institutionalized a financing strategy that avoids short-term financing of District operations. The bond rating agencies have favorably recognized this practice. For 2021, the Working Cash Funds have sufficient balances to provide the desired level of financing without imposing a tax levy.

The Five-Year Financial Forecast component of the Budget and interim budgetary reporting have identified future revenue shortfalls well ahead of time to allow for legislative relief to be sought or for other management plans and programs to be developed to avoid actual revenue shortfalls or financial overcommitments.

For the 35th consecutive year, the GFOA of the United States and Canada has presented the Distinguished Budget Presentation Award for the District's 2019 Annual Budget. It is anticipated that the District will receive the 2020 award before the end of the year. The entire 2021 Budget is available at www.mwrdd.org.

Investment and Cash Management Policy

The District's formal investment policy, in place since December 1999, and last revised in November 2018, states in its preamble that, "It shall be the policy of the District that all public funds available, not restricted by immediate need, be invested in investment securities so as to maximize return without sacrifice of safety or necessary liquidity." This policy complies with Public Act 90-688 requiring all public entities within the State of Illinois to have a formal investment policy passed by its governing authority and sets forth the parameters and objectives of the District's investment and cash management policy.

The primary objectives of investment activities, in priority order, are safety, liquidity, and yield.

District funds can be invested in such securities as authorized by Illinois Public Act 235, the Public Funds Investment Act. The investments which the District may purchase are limited to the following: (1) securities, which are fully guaranteed by the U.S. Government as to principal and interest; (2) certain U.S. Government Agency securities; (3) certificates of deposit or time deposits of banks and savings and loan associations which are insured by a federal corporation; (4) short-term discount obligations of the Federal National Mortgage Association; (5) certain short-term obligations of corporations (commercial paper) rated in the highest

***Financial Policies,
Objectives, and
Accomplishments***

classifications by at least two of the major rating services; (6) fully collateralized repurchase agreements; (7) the State Treasurer’s Illinois and Prime Funds; (8) money market mutual funds and certain other instruments; and (9) municipal bonds of the state, or of any other state, or of any political subdivisions thereof, whether interest is taxable or tax-exempt under federal law, rated within the four highest classifications by a major rating service.

Certificates of deposit or time deposits will be collateralized with securities of the U.S. Government, in an amount equal to 105 percent (at market) of the funds on deposit, or with a Federal Home Loan Bank letter of credit equal to 102 percent (at market).

Funds received are to be deposited on the day of receipt and invested as soon as the funds become available, if not immediately required for cash flow needs.

Investment Objectives

- To maintain an average daily investment of at least 99 percent of funds available for investment.
- To increase minority and community development banking and broker/dealer participation in District investments to 30 percent of invested funds.

Investment Accomplishments

In the past ten years, the interest income earned on investments has been:

2011	\$	9,800,000	2016	\$	5,892,000
2012		10,300,000	2017		8,555,000
2013		11,525,000	2018		14,829,000
2014		8,335,000	2019		17,843,000
2015		6,426,000	2020		9,946,000 (Estimated)
			Total	\$	103,451,000

Bonded Debt Policy

Bonded debt of the District is to be issued only in the amounts and for the purposes to which Illinois Statutes limit the District.

Bonded debt issued for working cash or capital improvement purposes is to be issued as general obligation debt of the District. Capital Improvements bonded debt is to be issued to mature no more than 30 years from the year of issue.

Bonded debt is to be issued only when needed, and in amounts necessary for meeting such needs, unless financial market conditions and/or projections indicate that it is in the District’s best interest to deviate from this practice.

Excess fund balances in the Bond Redemption & Interest Fund may be identified and used to abate Bond Redemption & Interest Fund levies.

Bonded Debt Objectives

- To maintain or improve the District’s Aa2, AAA, and AA+ bond ratings from Moody’s Investor Services, Fitch Ratings, and Standard & Poor’s Corporation, respectively.
- To provide timely and cost-effective bonded debt financing.
- To structure future debt service so as to provide a stable trend in future debt service tax levies.

Bonded Debt Accomplishments

The District has maintained strong bond ratings despite the economic challenges facing the overlapping governments.

The primary reason for the recent downgrades in ratings is the pressure on the District’s tax base due to the significant debt burden and pension liabilities for major governmental agencies in Cook County, reflecting Moody’s and Standard & Poor’s opinion on the affordability of possible tax increases by other agencies and how this could impact Cook County residents. In addition, Moody’s changed its pension rating methodology in April 2013 and implemented different assumptions to estimate the unfunded pension liability than is currently required by governmental accounting standards. (See Bond Rating History on the following page.)

Financial Policies, Objectives, and Accomplishments

Bond Rating History

Fitch Ratings		Standard & Poor's Corporation		Moody's Investor Services	
2001-present	AAA	2016-present	AA+	2015-present	Aa2
1999-2001	AA+	2006-2016	AAA	2013-2015	Aa1
1995-1999	AA	2001-2006	AA+	2002-2013	Aaa
		1969-2001	AA	1999-2002	Aa1
				1997-1999	Aa1
				1974-1997	Aa2
				1968-1974	Aa
				1944-1968	A1
				1938-1944	Baa

The Illinois Legislature amended the Metropolitan Water Reclamation District Act to provide that the District must levy a direct annual tax to pay the principal and interest on indebtedness within 30 years after contracting the debt, enabling the District to issue debt for a maximum of 30 years after contracting the debt. In addition, the District's Act was amended during 2019 to extend non-referendum bonding authority to December 31, 2034, effective on January 1, 2020.

Financial and Accounting Policies

The significant accounting policies of the District conform to GAAP in the United States of America, promulgated by the Government Accounting Standards Board (GASB) as applicable to governmental units.

The basic accounting and reporting entity of the District is a "fund." The District's governmental funds are reported using the current financial resources measurement focus and modified accrual basis of accounting.

The fiduciary funds of the District are the Pension Trust Fund and the OPEB Trust Fund. Trust fund assets and liabilities are accounted for on the full accrual basis, and investments are recorded at market value. Property taxes, user charge revenue, and the personal property replacement tax are accrued to the extent that they are measurable and available to satisfy liabilities of the reporting period.

An internal audit function is maintained as an independent appraisal activity for the review of accounting, financial, internal control structure, and other operations. It aids managerial control by measuring and evaluating the effectiveness of and compliance with District policies, procedures, and other internal controls, as directed by the Executive Director.

Financial and Accounting Objectives

- District financial information is available through the Comprehensive Annual Financial Report (CAFR), Budget Report, Grantor Agency Reports, and supplementary information.
- District financial reports are prepared in compliance with GAAP to fulfill the District's duty to be publicly accountable while allowing users to assess that accountability.
- District financial reports are designed to assist users in evaluating the District's ongoing operations and assessing the level of services provided and our ability to meet obligations as they become due.
- The annual audit performed by independent certified public accountants ensures compliance with generally accepted accounting principles including GASB statements. In addition to meeting the requirements as set forth in the State of Illinois Compiled Statutes, Chapter 70, 2605/5.12, the audit will also ensure compliance with the Federal Single Audit Act regulations in OMB Circular A-133.
- GASB 87 will be implemented in 2021 as required in order to improve lease reporting. Going forward, leases will be accounted for and reported as financings for the right to use an underlying asset. As the District is the lessor for hundreds of leases and easements, the new reporting model will have a substantial impact on the District's reporting for leases.
- The Internal Auditing Section assists the Executive Director by furnishing independent and objective analyses, appraisals, and recommendations for improvement concerning the activities reviewed.
- On July 13, 2006, the Board adopted a policy to address GASB 45, requiring reporting of the future liability for maintaining Other Postemployment Benefits (OPEB), primarily retiree health insurance benefits.

Financial Policies, Objectives, and Accomplishments

- An irrevocable trust, the Metropolitan Water Reclamation District Retiree Health Care Trust, was established to fund the future OPEB liability with the following operating parameters. On October 2, 2014, the funding policy was amended by the Board with the following parameters:
 - 100 percent maximum funding level;
 - 12 year funding period;
 - \$5 million funding in each of the 12 years 2015 through 2026, with no further advance funding contributions required after 2026. Beginning in 2027, cash to be withdrawn from the Trust to fund claims and insurance premiums will be determined by the plan's actuary with the funding percentage to be maintained at 100 percent for all future years.
 - On November 19, 2009, the Board adopted the OPEB Trust Investment Policy designed to control risk and provide guidance in establishing a prudent investment strategy for the Trust. The policy was subsequently revised most recently on November 15, 2018 to allow for new asset allocation targets structured to provide competitive performance while minimizing the potential for losses. The current policy allows for a range of exposure to four aggregate asset classes including domestic equities, international equities, fixed income securities, along with money market funds and cash.

The District has adopted the following fund balance policy in conformity with GASB 54, Fund Balance Reporting and Governmental Fund Type Definitions:

- *Committed Fund Balances* - The District's Board shall establish, modify, or rescind a fund balance commitment by formal action of the Board;
- *Assigned Fund Balances* - The Executive Director may assign amounts of fund balances to a specific purpose;
- *Accounting Policies of Fund Balances* - The General Corporate Fund is a combination of the Corporate, Working Cash, and Reserve Claim Funds. In the General Corporate Fund, the District considers restricted amounts to have been spent first when an expenditure is incurred for purposes for which both restricted and unrestricted fund balance is available, followed by committed amounts, and then assigned amounts. Unassigned amounts are used only after the other categories of fund balance have been fully utilized. In governmental funds, other than the General Corporate Fund, the District considers restricted amounts to have been spent last. When an expenditure is incurred for purposes for which both restricted and unrestricted fund balance is available, the District will first utilize assigned amounts, followed by committed amounts, and then restricted amounts.

For the year ended December 31, 2015, the Board adopted a policy to implement GASB 68. The following categories are recognized and reported in the CAFR to better illustrate the pension liability to the District:

- Net pension liability
- Annual pension expense

Financial Accomplishments

The GFOA awarded a Certificate of Achievement for Excellence in Financial Reporting to the District for its CAFR for the year ended December 31, 2018, and for the MWRD Retiree Health Care Trust for the year ended December 31, 2018. This is the 44th consecutive year and 12th consecutive year that the District has received these prestigious awards, respectively, and it is anticipated that the 2019 CAFRs will receive the award before the end of 2020. The CAFRs are available at www.mwrdd.org. The external audit of the District's 2019 financial statements, completed on May 8, 2020, includes an unmodified opinion. In 2020, the Internal Audit Section completed 12 audits in addition to financial reviews of lease applications.

Policy Development and The Budget Process

Policy Development and the Budget Process

Policy development for the District, performed on both the legislative and executive level, is ongoing and integrally related to the budget process.

Planning and Policy Development Activities of the Board of Commissioners

The District’s Board is the organization’s legislative branch wherein planning is done through a standing committee structure, whereby committee chairpersons and vice-chairpersons are elected by the Board concurrent with the biannual election of officers. With the exception of the Committee on Finance, whose chair is specifically referred to in the District’s enabling legislation, the focus of each committee is determined by the Board itself. The members of these committees are made up of fellow commissioners. The Board’s committees follow:

Affirmative Action	Budget and Employment	Engineering
Ethics	Federal Legislation	Finance
Industrial Waste and Water Pollution	Information and Technology	Judiciary
Labor and Industrial Relations	Maintenance and Operations	Monitoring and Research
Municipalities	Procurement	Public Information and Education
Pension, Human Resources, and Civil Service	Public Health and Welfare	Real Estate Development
State Legislation and Rules	Stormwater Management	

These standing committees develop plans and formulate policies that are then brought before the entire Board for formal adoption. These plans and policies provide direction to both the Board itself and the staff. On critical issues, and where broad discussion is warranted for future consensus building, the committee chairperson periodically calls “study sessions” inviting public testimony and discussion.

District Commissioners participate in regional planning and policy development as members of commissions, associations, and steering committees. By law, the Chairman of Finance serves on the Cook County Public Building Commission. The District has formally designated Commissioner representatives on the Chicago Metropolitan Agency for Planning and Fulton County Steering Committee. District participation in these regional planning committees ensures regional coordination, cooperation, and communication for policy development and planning.

The Board periodically recruits pro bono ad hoc Blue Ribbon Committees made up of government and business leaders to solicit input on issues of either regional interest or where expertise in an area outside the District’s primary functions is required.

Formal adoption of District policies is enacted at regularly scheduled Board meetings (semi-monthly) or at special Board meetings focused on a specific issue.

Strategic Business Plan

Policy decisions and budgetary priorities are guided by the District’s Strategic Business Plan. The plan is updated annually and 2021 is the final year of the current plan, *Recovering Resources, Transforming Water*. The plan sets values, mission, a vision statement, and goals and strategies that guide decision making and is used throughout the year to measure results and communicate progress to the Board of Commissioners and staff. It serves as a guiding document until replaced by a new Strategic Business Plan.

Planning Activities by Staff

The Executive Director serves as the District’s Chief Executive Officer and is responsible for the day-to-day administration of the organization. It is through the direction and authority of this office that compliance with the laws governing the agency and the policies established by the Board is assured. Under the direction of these laws and policies, staff planning takes place on various organizational platforms. Through organizational planning units, steering committees, task forces, and general managerial planning, District staff establishes organizational goals, objectives, and priorities. Planning takes place on both an interdepartmental and intradepartmental basis. Each committee or task force has representation that crosses departmental lines to ensure corporate agreement.

Policy Development and The Budget Process

Committees and Task Forces Planning

Other formal planning is accomplished through the utilization of committees and task forces. Committees and task forces meet monthly with the exception of the Board of Standardization, which meets quarterly or as needed. A list of the various staff committees and task forces is as follows:

Inventory Review Board	Biosolids Task Force	Non-Core Business Project Committee
Board of Standardization	Injury Task Force	Records Management Committee
Natural Gas Committee	Audit Committee	Operations Committee

Each of these planning groups is delegated the responsibility to serve as District-wide planners for specific organizational needs. The Operations Committee includes subcommittees with designated assignments and purpose. These subcommittees work independently and then report their recommendations to the committee of the whole.

The Budget Process and Budget Procedures

The Management & Budget Section of General Administration, staff to the Executive Director, prepares the Annual Budget and five-year financial plan, including coordinating and consolidating the capital and maintenance plans for the upcoming and future years. Revenue projections and debt service requirements are examined along with the financial feasibility of capital projects in light of external and self-imposed financial constraints. The end product of this process is the Annual Appropriation Ordinance and a Five-Year Financial Forecast.

The 2021-2025 Five-Year Financial Forecast is prepared prior to the Executive Director's Budget Recommendations and reflects the best estimates of revenues, fund equity, and appropriation needs available at the time. The forecast is presented to the Executive Director. Subject to his review and approval, it is then included in the Budget. The projections are a tool designed to aid the District in planning and controlling its financial position over a longer range than the Annual Budget. It contributes to making the budget a comprehensive financial plan of District operations, past, present, and future. It summarizes the tax impact of the District's strategic goals and objectives.

All participants in the planning process are made aware of the District's budget process and cycle. The budget calendar is relatively the same from year-to-year and is distributed to the Board and staff in the first quarter of the preceding budget year. Correspondingly, planning groups develop plans, schedules, and detailed justification for personnel, contractual services, materials and supplies, equipment, and capital projects to comply with the annual budgeting process and cycle. Existing facilities' plans, historical expenditures, cash-flow projections, and long-term forecasts provide valuable guidelines as to the availability of resources for the upcoming budget development. These guidelines both facilitate the development of the budget and allow for meaningful debate during the budget review process as to priorities and organizational goals for the budget year, as well as future years. An outline of the Annual Budget process and procedures follows. The Strategic Business Plan guides the development of the Budget and the Five-Year Financial Forecast.

Policy Development and The Budget Process

The fiscal year of the District begins on January 1 and ends on December 31.

1. After the first half of the fiscal year, the Budget Office holds a meeting with departmental budget representatives to discuss policy and procedures for budget preparation that begins in July. Instructions are distributed to departments, together with guidelines from the Executive Director, which indicate the direction the Budget should follow for the coming fiscal year. The basic forms are returned to the Budget Office and a general summary is prepared for the Executive Director, who conducts departmental hearings in August.
2. A revenue meeting is conducted by the Executive Director, Administrative Services Officer, and Budget Officer, along with those departments responsible for revenue items. Available resources used to finance the Budget are analyzed at this meeting.
3. When departmental estimates are approved and final decisions are made, a Budget Message is prepared and the proposals of the Executive Director become the initial budget document. After departmental requests are finalized, the Executive Director's Budget Recommendations are published within 15 days. The Executive Director's Budget Recommendations are published and presented to the Board in October. At all times, the Budget figures are balanced between revenues and expenditures.
4. The Board holds a study session on the Capital Improvement Program in October.
5. The Board's Committee on Budget and Employment holds public meetings with the Executive Director and department heads regarding the Executive Director's proposals.
6. At the conclusion of these hearings, the Committee on Budget and Employment recommends the preparation of a second document, a supplement to the Executive Director's Budget Recommendations called the "Tentative Budget," which incorporates changes approved at the hearings. Once printed, this is placed on public display, along with the Executive Director's Budget Recommendations, for a minimum of 10 days. An advertisement is published in a general circulation newspaper announcing the availability of the Tentative Budget for inspection at the main office of the District, and specifying the time and date of the public hearing.
7. At least one public hearing is held between 10 and 20 days after the Budget has been made available for public inspection. All interested individuals and groups are invited to participate.
8. After the public hearing, the Committee on Budget and Employment presents the Tentative Budget, which includes revisions and the approved Appropriation and Tax Levy Ordinances, to the Board for adoption. This action must take place before January 1.
9. The Budget, as adopted by the Board, can be amended once at the next Regular Meeting of the Board. No amendment, however, can be requested before a minimum of five days after the Budget has been adopted. Amendments for contracts and/or services not received before December 31 must be reappropriated in the new Budget and are included through this amendment process.
10. The final budget document "As Adopted and Amended" is produced, and an abbreviated version, known as the "short form" is published in a newspaper of general circulation before January 20 of the fiscal year.
11. Budget implementation begins on January 1. The Finance Department and Budget Office provide control of appropriations and ensure that all expenditures are made in accordance with budget specifications. The manual entitled "Budget Code Book" is published in conformance with the Adopted Budget and is used to administer, control, and account for the Budget.
12. Supplemental appropriations can be made for the appropriation of revenues from federal or state grants, loans, bond issues, and emergencies. The Executive Director is authorized to transfer appropriations between line items within an object class of expenditure within a department. After March 1 of each fiscal year, transfers of appropriations between objects of expenditures or between departments must be presented for approval to the Board in accordance with applicable statutes.
13. The Board can authorize, by a two-thirds majority, the transfer of accumulated investment income between funds and the transfer of assets among the Working Cash Funds.

CALENDAR FOR 2021 BUDGET

- Executive Director's Budget Recommendations
Submitted to Board of Commissioners Tuesday, October 13, 2020

- Board of Commissioners Holds a Study Session on the Capital
Improvement Program immediately following the Regular Board Meeting Thursday, October 15, 2020

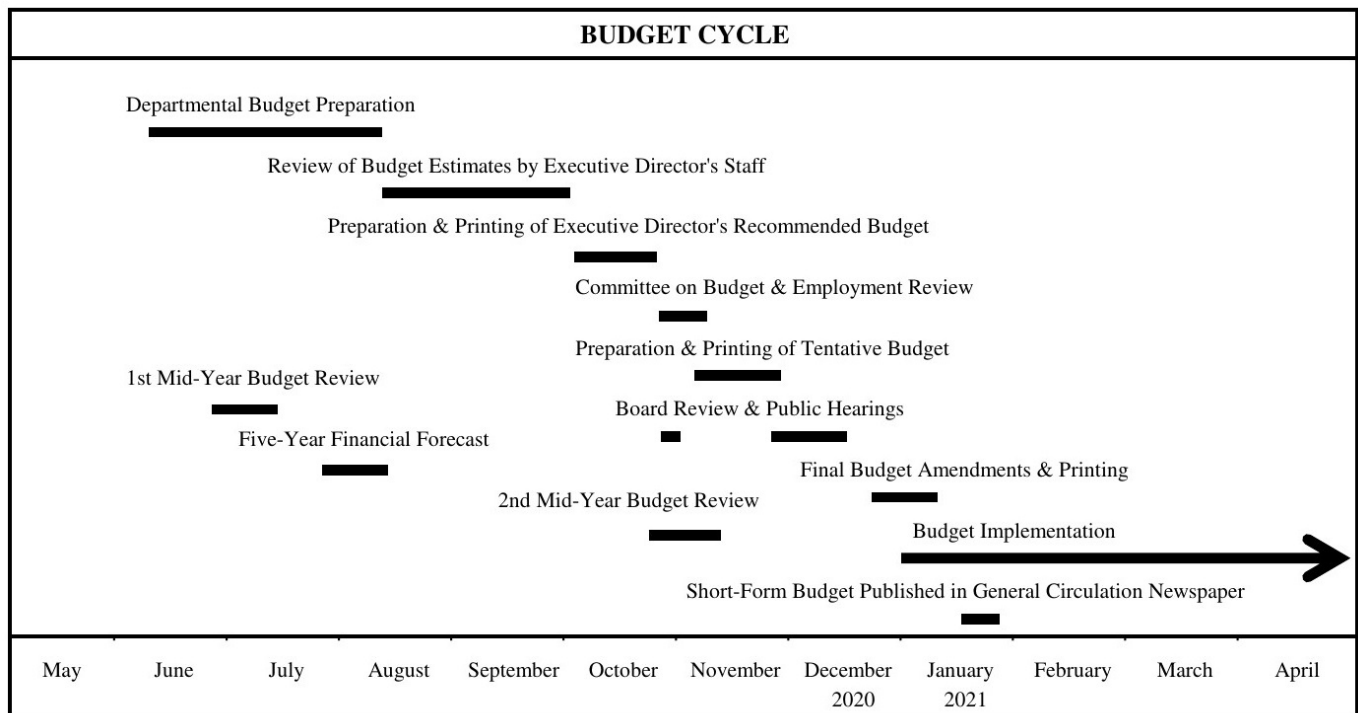
- Committee on Budget & Employment Hearings at 1:00 P.M. Thursday, November 5, 2020
(Friday, November 6, 2020, if necessary)

- Committee on Budget & Employment Submits Tentative Budget
to Board of Commissioners for Public Display Thursday, November 19, 2020

- Board of Commissioners Holds a Public Hearing
on the Budget at 2:00 P.M. Thursday, December 3, 2020

- Board of Commissioners Adopts the Budget Thursday, December 10, 2020

- Board of Commissioners Amends the Adopted Budget Thursday, December 17, 2020



The procedure for the annual budget process is detailed on the previous page.

APPROPRIATION ORDINANCE NUMBER O20-008

**ANNUAL APPROPRIATION ORDINANCE OF THE
METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO
FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2021
AND ENDING DECEMBER 31, 2021**

BE IT ORDAINED by the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago:

Section 1. That this Ordinance be and the same is hereby termed the “Annual Appropriation Ordinance of the Metropolitan Water Reclamation District of Greater Chicago for the fiscal year beginning January 1, 2021 and ending December 31, 2021.”

Section 2. That the amounts hereinafter set forth or so much thereof as may be authorized by law and as may be needed, and not exceeding the aggregate sum allocated to and expendable by each department or principal division, be and the same are hereby appropriated for the payment of: (a) interest coupons on bonds; (b) sinking fund requirements for the payment of the principal of said bonds; (c) the Metropolitan Water Reclamation District Retirement Fund; (d) Construction Fund purposes; (e) Capital Improvements Bond Fund purposes; (f) Reserve Claim Fund; (g) Stormwater Management Fund purposes; and (h) all other corporate purposes of the Metropolitan Water Reclamation District of Greater Chicago during the fiscal year beginning January 1, 2021 and ending December 31, 2021.

Section 3. That for the purposes of accounting and expenditure control, the budgetary accounts set forth under the recital of estimated resources of the Metropolitan Water Reclamation District of Greater Chicago and budgetary accounts and code designations set forth in this Ordinance, shall be the official code designations of the Metropolitan Water Reclamation District of Greater Chicago and that the manual of Classification of Budgetary Code Accounts issued by General Administration of the Metropolitan Water Reclamation District of Greater Chicago, as revised, shall be in conformity therewith.

Section 4. That the Clerk and the other Heads of Departments of the Metropolitan Water Reclamation District of Greater Chicago shall use the aforesaid official code designations in administering the Appropriation Ordinance and in accounting for expenditures authorized herein.

Section 5. That wherever an appropriation is made under the classification “Personal Services,” “Contractual Services,” “Materials and Supplies,” “Machinery and Equipment,” “Capital Improvements,” “Land” or “Fixed and other Charges,” it is supported by a schedule of Line Items.

The Executive Director is authorized to transfer appropriations between line items within an object class of expenditure within a department. Transfers of appropriations between objects of expenditure or between departments must

be presented for approval to the Board of Commissioners in accordance with applicable statutes.

All expenditures against such appropriations shall be made in accordance with such supporting Line Item Schedules, and no voucher shall be approved by the Clerk for a sum exceeding the amount shown in said schedules; that the titles and the compensations appearing in the Personal Services supporting schedules shall be construed to be the official titles and maximum compensation for the same.

(a) Included in the appropriation for Total Personal Services is Account Number 601010 “Salaries of Regular Employees” that includes District pickup of employees’ contributions to the Pension Fund and in applicable departments, divisions or sections is Account Number 601060 “Compensation Plan Adjustments” provided for the purpose of implementing the Compensation Plan and associated salary and pay grade schedules for classified employees and exempt secretaries as adopted by the Board of Commissioners. The amount set up under Account Number 601060 “Compensation Plan Adjustments” includes (1) the adjustment of salaries for employees eligible to receive step increases based on the prescribed standards of service and performance, (2) changes in Labor and Trades Wage Schedule Classifications as authorized by the Board of Commissioners, and (3) payments to eligible employees for incentive pay for unused sick leave, retirements, severance, termination, and unused overtime and/or vacation pay as authorized by the Board of Commissioners.

(b) The symbol “#” or crosshatch followed by a number, when used in the budget document, means the following:

#1. After a title, signifies that the incumbent will retain the title until he or she vacates the position and then the position will be dropped.

#2. After a title, signifies that when the position is vacated, the person filling the vacancy will receive the title within the parentheses. It can also indicate that while a grade level for a class title has been lowered, the incumbent in the position will be retained at the current grade level. This is indicated by a notation of the new grade level in parentheses following the title.

#4. After a title, signifies that while a class title has been assigned to the Technical, Administrative and Managerial (TAM) salary schedule, the incumbent in the position will be compensated under the previously assigned Professional and Managerial (PM) or General Service (GS) salary schedule. When the position is vacated, the person filling the vacancy by promotion or

APPROPRIATION ORDINANCE NUMBER O20-008

**ANNUAL APPROPRIATION ORDINANCE OF THE
METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO
FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2021
AND ENDING DECEMBER 31, 2021
(CONTINUED)**

new appointment will be compensated under the TAM salary schedule.

Section 6. That amounts appropriated under classifications other than “Personal Services” to any department or division of the Metropolitan Water Reclamation District of Greater Chicago shall be expended under the following conditions:

(a) Insofar as practicable, all contracts for purchases and open market orders for purchases to be charged against such appropriation shall be based upon specifications which are definite and certain as to character and quality, and which conform to standard specifications for the various classes of Materials and Supplies, Machinery and Equipment already prescribed or hereafter to be prescribed by the Board of Standardization of the Metropolitan Water Reclamation District of Greater Chicago.

(b) The Clerk of the Metropolitan Water Reclamation District of Greater Chicago shall certify to the sufficiency of appropriations out of which such amounts due under contracts are to be paid.

(c) The Director of Procurement and Materials Management shall certify that the specifications for purchases of such Materials and Supplies, and Machinery and Equipment, for which standard specifications have been prescribed by the Board of Standardization of the Metropolitan Water Reclamation District of Greater Chicago, are in conformity with such standard specifications.

(d) All open market orders issued by any department or division for Materials and Supplies, and Machinery and Equipment, for which specifications shall have been prescribed by the Board of Standardization of the Metropolitan Water Reclamation District of Greater Chicago, shall contain a description of the goods ordered and insofar as practicable and feasible conform with such standard specifications.

(e) The Director of Procurement and Materials Management shall, in auditing claims for goods delivered on open market order, determine through inspection or otherwise, whether the goods delivered conform to such standard specifications.

(f) Every contract or purchase order involving amounts in excess of \$10,000.00 shall be signed by the Chairman of the Committee on Finance or other duly authorized officer of the Board of Commissioners, by the Executive Director, by the Clerk, and by the Director of Procurement and Materials Management of the Metropolitan Water Reclamation District of Greater Chicago.

The only exception to the above is for contracts and purchase orders for materials, supplies, and equipment, for which the competitive bid threshold is \$25,000.00. Contracts and purchase orders for these items that do not involve amounts in excess of \$25,000.00 only require the signature of the Director of Procurement and Materials Management of the Metropolitan Water Reclamation District of Greater Chicago.

(g) The Comptroller of the Metropolitan Water Reclamation District of Greater Chicago shall conduct audits of all expenditures. The Comptroller shall report the results of such audits to the President and the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago.

Section 7. That no employee shall have the right to demand continuous employment and compensation by reason of the appropriation if it becomes necessary to lay an employee off due to lack of work or lack of funds.

Section 8. That the supporting schedules and statements including unpaid bills and the item objects and purposes are appropriated for as follows:

NOTE PAGE

SECTION II

BUDGET AND FINANCIAL SUMMARIES, SCHEDULES, AND EXHIBITS

This section includes a broad overview of the 2021 Budget with comparisons to past years and the projection of future District needs.

It begins by asking two basic questions: Where Does the Money Come From? and Where Does the Money Go? Answers are presented graphically using a dollar bill to illustrate.

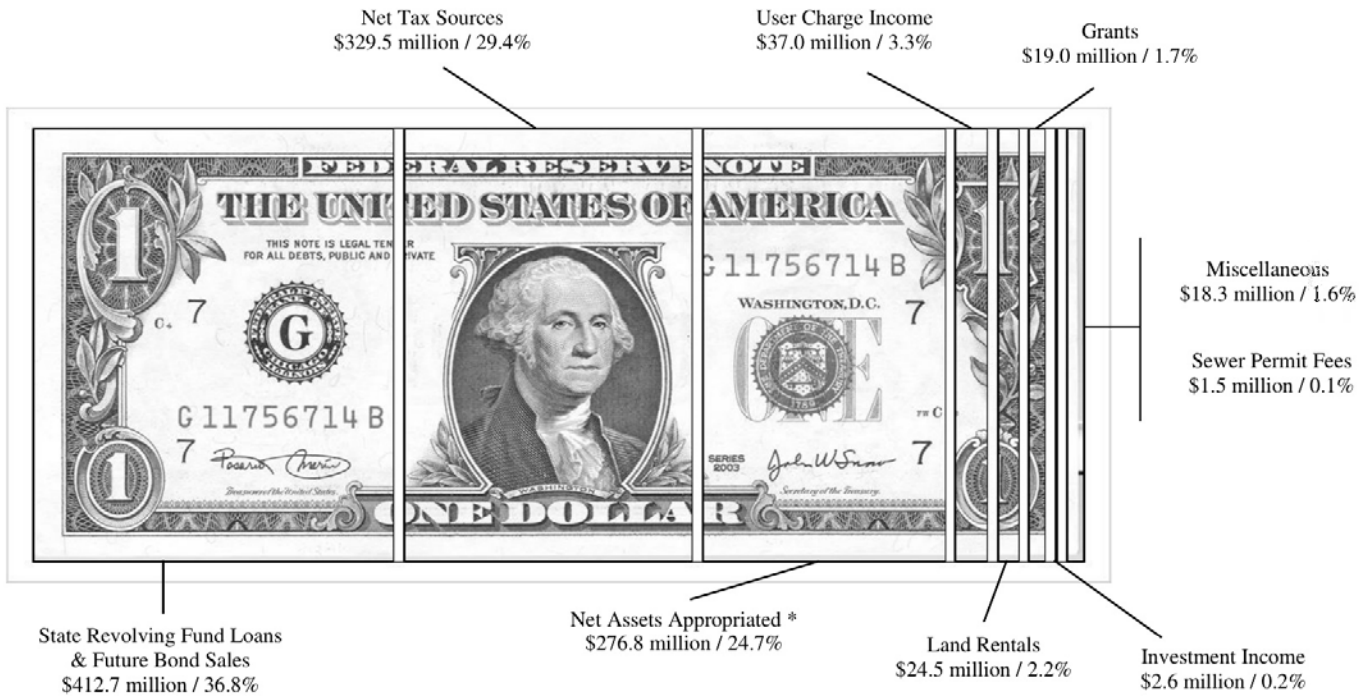
The comparison of budget and current year appropriations, tax levies, and tax rates by fund is one of the most comprehensive and most useful comparisons in the budget.

Continuing to look at the overall picture, this section presents a detailed view of the entire budget, organizing information in different ways so that the user can compare budget and current year appropriations by department, fund, object, and program. Allocation of personnel is also compared by year, department, and fund.

Having looked at the budget plan for 2021 and comparing it to previous years, this section also provides a projection of the future: the comprehensive Five-Year Financial Forecast for 2021 - 2025.

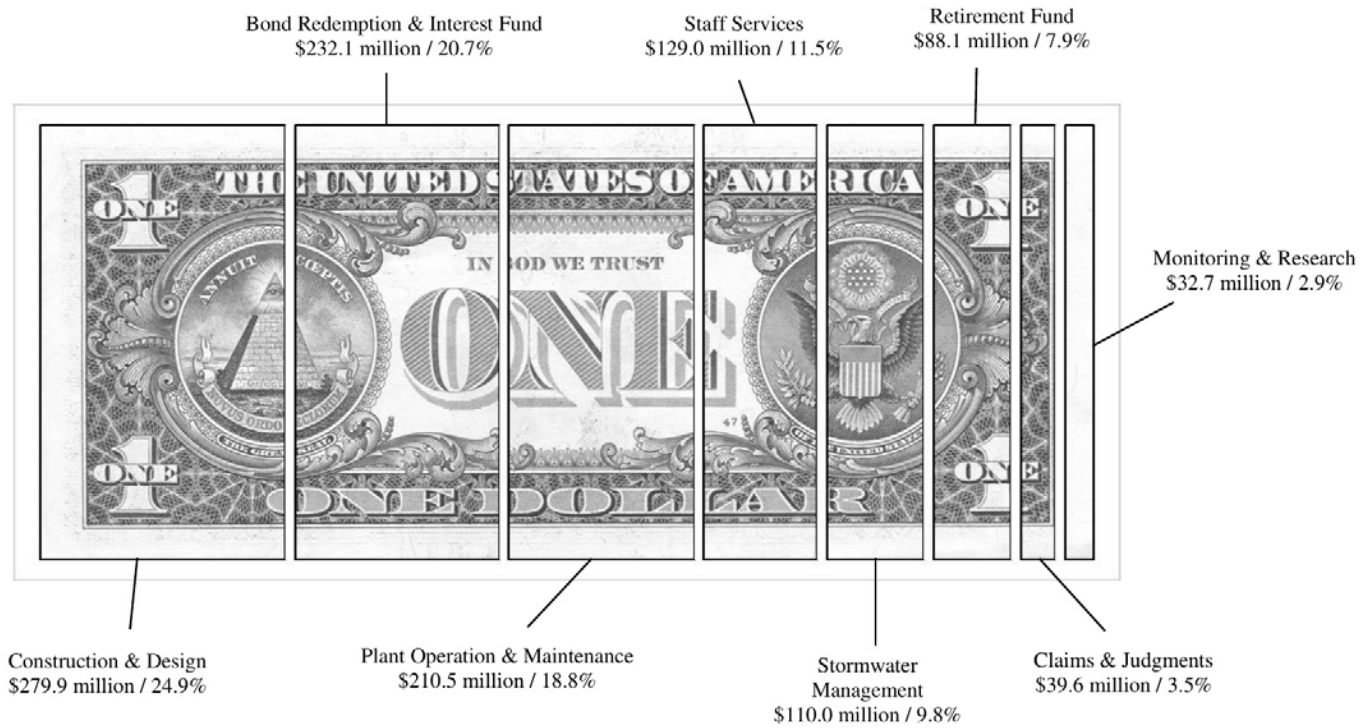
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WHERE THE MONEY COMES FROM: \$1,121.9 MILLION



* \$276.8 of the \$329.5 Net Assets Appropriable detailed in the analysis on the following page will be appropriated as revenue for 2021 (excludes Capital Improvements Bond Fund).

WHERE THE MONEY GOES: \$1,121.9 MILLION



SUMMARY OF NET ASSETS APPROPRIABLE
at January 1, 2021
(In Millions)

CURRENT ASSETS	FUND								TOTAL
	CORPORATE	CAPITAL IMPROVEMENTS BOND	CONSTRUCTION	STORMWATER MANAGEMENT	RETIREMENT	BOND REDEMPTION & INTEREST	RESERVE CLAIM		
Cash & Investments	\$ 132.4	\$ 252.0	\$ 11.9	\$ 39.2	\$ —	\$ 99.1	\$ 32.4	\$	567.2
Restricted Cash	—	—	—	—	—	—	—	—	—
Deposit with Escrow Agent	—	—	—	—	—	—	—	—	—
Taxes Receivable	258.4	—	4.6	51.4	69.7	239.6	7.3		631.1
Replacement Tax	19.0	—	—	—	18.4	—	—		37.4
Grants	—	—	—	—	—	—	—		—
State Revolving Fund Loans Receivable	—	—	—	—	—	—	—		—
Due from Other Funds	—	—	—	—	—	—	—		—
Total	\$ 409.8	\$ 252.0	\$ 16.6	\$ 90.7	\$ 88.1	\$ 338.8	\$ 39.7	\$	1,235.7

**CURRENT LIABILITIES,
DESIGNATIONS AND RESTRICTIONS**

Unpaid Bill and Contingent Liabilities	\$ 22.7	\$ 269.2	\$ 2.5	\$ 4.6	\$ —	\$ —	\$ 0.3	\$	299.3
Due to Working Cash Funds	256.1	—	6.7	26.5	—	—	—		289.3
Liabilities for Restricted Assets	—	168.4	—	—	—	—	—		168.4
Principal and Interest	—	—	—	—	—	112.9	—		112.9
Total	\$ 278.8	\$ 437.6	\$ 9.2	\$ 31.1	\$ —	\$ 112.9	\$ 0.3	\$	869.9
*Net Assets Appropriable	\$ 131.0	\$ (185.6)	\$ 7.4	\$ 59.5	\$ 88.1	\$ 225.9	\$ 39.4	\$	365.8
Budget Reserve	\$ (89.0)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$	(89.0)
Net Assets Appropriated	\$ 42.1	\$ (185.6)	\$ 7.4	\$ 59.5	\$ 88.1	\$ 225.9	\$ 39.4	\$	276.8
Equity Transfer for Stormwater Bond Payment	\$ —	\$ —	\$ —	\$ (6.0)	\$ —	\$ 6.0	\$ —	\$	—
Equity Transfer	\$ 4.5	\$ (4.5)	\$ —	\$ —	\$ —	\$ —	\$ —	\$	—

* Net Assets Appropriable = Current Assets - Current Liabilities

Note: Amounts are rounded.

ESTIMATED TAX RATE

Estimated tax rate to be levied for each \$100.00 of assessed valuation as equalized to finance the appropriations of the Metropolitan Water Reclamation District of Greater Chicago is as follows:

Upon all taxable property within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago as said territorial limits exist on January 1, 2021.

Gross Corporate Fund	15.56¢
Construction Fund	0.40
Stormwater Management Fund	3.04
Retirement Fund	4.18
Reserve Claim Fund	0.43
Subtotal	<u>23.61¢</u>

Bond Redemption & Interest Fund:

Capital Improvements Bonds - Series:

2016 Qualified Energy Conservation Limited Tax Series F	0.01¢
2009 Limited Tax Series	2.04
2011 Limited Tax Series B	1.06
2011 Unlimited Tax Series C	0.12
2014 Limited Tax Series C	0.15
2014 Unlimited Tax Series A	0.30
2014 Alternate Revenue Unlimited Tax Series B	0.19
2016 Alternate Revenue Unlimited Tax Series E	0.22
2016 Unlimited Tax Series C	0.09
2016 Limited Tax Series D	0.17

State Revolving Fund Bonds - Series:

Various	5.78¢
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Refunding Bonds - Series:

2007 Unlimited Tax Series A	1.54¢
2007 Unlimited Tax Series B	0.29
2007 Limited Tax Series C	0.32
2014 Limited Tax Series D	0.99
2016 Unlimited Tax Series A	0.84
2016 Limited Tax Series B	0.12

Subtotal Bond Redemption & Interest Fund	<u>14.23¢</u>
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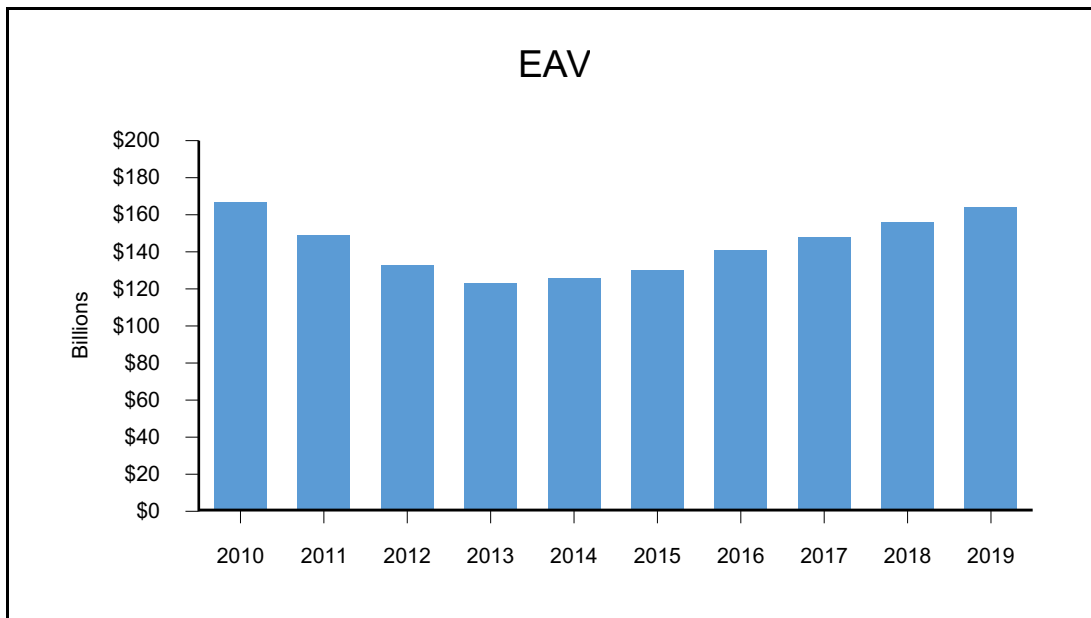
TOTAL ESTIMATED TAX RATE - 2021	<u>37.84¢</u>
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TAXABLE PROPERTY WITHIN THE DISTRICT (Equalized Assessed Valuation)

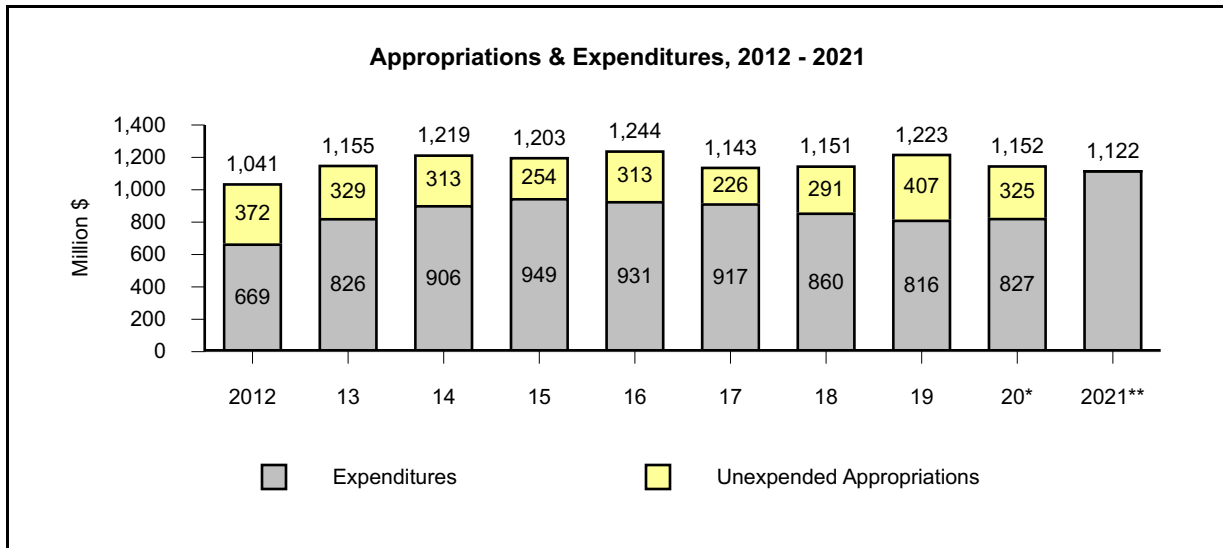
The equalized assessed property valuation (EAV) of the Metropolitan Water Reclamation District increased 5.3 percent from 2018 to 2019, showing sustained growth for the fourth straight year. The boundaries of the District encompass 91 percent of the area of Cook County. The District is located in one of the strongest and most economically diverse geographical areas of the country. The growth in commercial, industrial, and residential sectors in both downtown Chicago and the suburbs contributes to the strong base and the growth in the value of properties located within the District. The Cook County Assessor is responsible for all taxable real property within Cook County except for railroad property and pollution control facilities, which are assessed directly by the State of Illinois.

The equalized assessed valuation of real estate property is determined in Cook County based on market values of real estate, reduced by a classification factor determined by property use, and then multiplied by the State of Illinois equalization factor. The statutory objective is to value property at 33 1/3 percent of estimated fair market value.

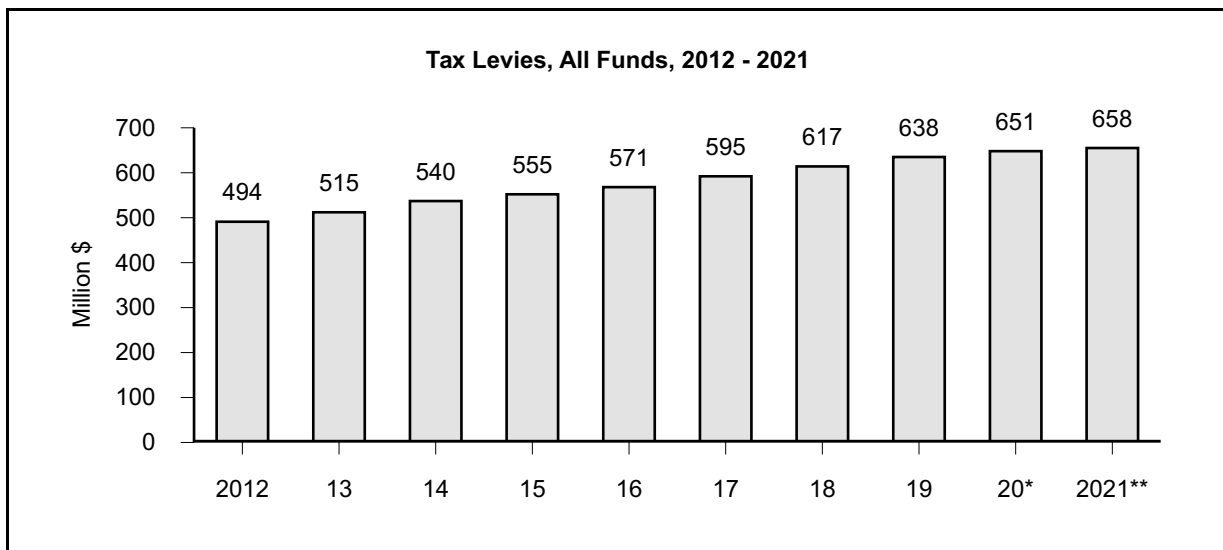
The equalized assessed property valuation of the District is very important due to the primary reliance of the District on the property tax to fund current operations and future capital programs.



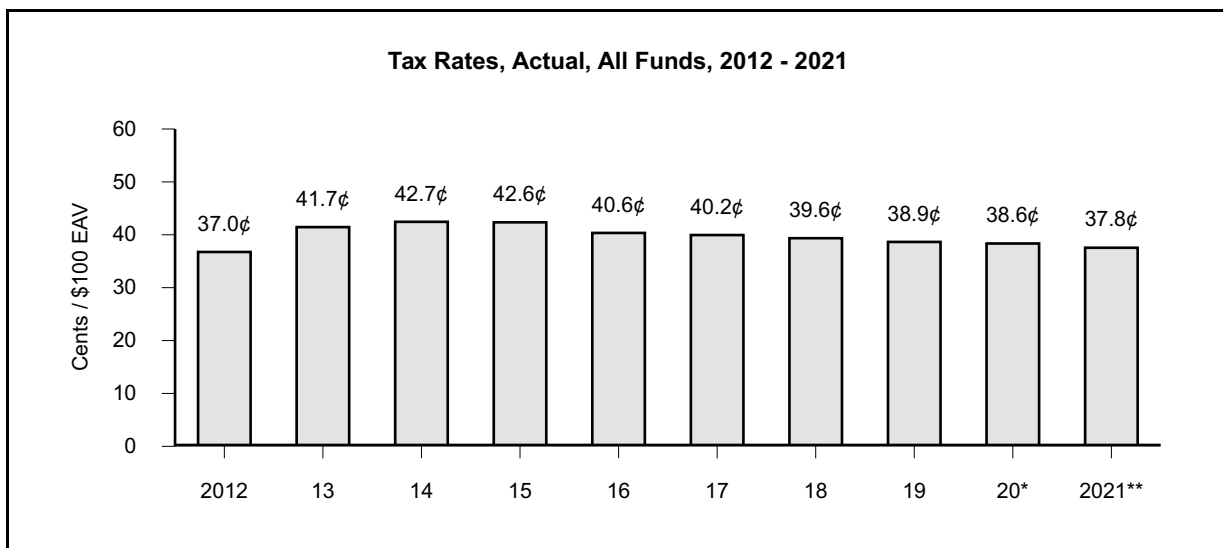
Year	Real Property	Railroad Property and Pollution Control Facilities	Total
2010	166.66 billion	256.82 million	166.92 billion
2011	148.77 billion	275.01 million	149.05 billion
2012	133.11 billion	286.93 million	133.40 billion
2013	123.11 billion	311.53 million	123.42 billion
2014	125.43 billion	308.36 million	125.74 billion
2015	129.96 billion	344.38 million	130.30 billion
2016	140.40 billion	350.47 million	140.75 billion
2017	147.58 billion	362.43 million	147.95 billion
2018	155.39 billion	397.83 million	155.79 billion
2019	163.65 billion	407.72 million	164.05 billion



*Adjusted
 **Estimated
 Note: Amounts are rounded.



*Adjusted
 **Estimated



*Adjusted
 **Estimated using 2019 EAV

COMPARATIVE STATEMENT OF APPROPRIATIONS AND TAX LEVIES 2021-2019 ALL FUNDS

APPROPRIATIONS	2021 **	2020 AS PASSED	2020 AS ADJUSTED *	2019 ACTUAL
FUND				
Corporate Fund	\$ 397,719,000	\$ 398,200,800	\$ 398,200,800	\$ 377,612,500
Construction Fund	14,103,200	18,044,400	18,044,400	18,340,300
Capital Improvements Bond Fund ***	240,276,700	244,547,400	244,547,400	378,173,800
Stormwater Management Fund	109,965,900	116,258,000	116,258,000	91,410,100
Retirement Fund	88,127,000	107,319,000	107,319,000	87,281,000
Reserve Claim Fund	39,624,900	34,395,000	34,395,000	31,767,800
Bond Redemption & Interest Fund	232,125,850	233,021,867	233,021,867	238,357,541
TOTAL	\$ 1,121,942,550	\$ 1,151,786,467	\$ 1,151,786,467	\$ 1,222,943,041
LEVIES				
Corporate Fund	\$ 270,880,900	\$ 266,455,300	\$ 266,455,300	\$ 255,557,993
Construction Fund	7,000,000	7,000,000	4,934,300	7,600,000
Stormwater Management Fund	52,926,000	52,926,000	52,926,000	52,926,000
Retirement Fund	72,741,500	72,227,600	72,227,600	71,565,400
Reserve Claim Fund	7,500,000	7,500,000	7,500,000	7,500,000
Subtotal	\$ 411,048,400	\$ 406,108,900	\$ 404,043,200	\$ 395,149,393
Bond Redemption & Interest Fund:				
Capital Improvements Bonds - Series:				
2016 Qualified Energy Conservation Limited Tax Series F	\$ 165,804	\$ 165,804	\$ 165,804	\$ 165,804
2009 Limited Tax Series	35,564,767	35,564,767	35,564,767	35,564,767
2011 Limited Tax Series B	18,413,569	20,865,901	20,865,901	18,950,616
2011 Unlimited Tax Series C	2,142,416	2,142,417	2,142,417	2,515,991
2014 Limited Tax Series C	2,571,244	7,434,975	7,434,975	8,286,788
2014 Unlimited Tax Series A	5,181,348	5,181,348	5,181,348	5,181,348
2014 Alternate Revenue Unlimited Tax Series B ****	3,388,705	3,390,570	3,390,570	3,390,570
2016 Alternate Revenue Unlimited Tax Series E ****	3,756,477	2,590,674	2,590,674	2,590,674
Alternate Revenue Abatement ****	—	—	—	(5,981,244)
2016 Unlimited Tax Series C	1,554,405	1,554,405	1,554,405	1,554,405
2016 Limited Tax Series D	2,917,099	1,036,270	1,036,270	1,036,270
State Revolving Fund Bonds - Series: Various	100,648,212	98,657,072	99,433,455	100,170,457
State Revolving Fund Stormwater Abatement****	—	—	—	(203,389)
Refunding Bonds - Series:				
2007 Unlimited Tax Series A	26,717,876	26,727,980	26,727,980	26,694,301
2007 Unlimited Tax Series B	4,996,749	4,996,749	4,996,749	4,996,749
2007 Limited Tax Series C	5,541,607	5,541,607	5,541,607	5,541,607
2014 Limited Tax Series D	17,186,270	13,989,638	13,989,638	15,895,337
2016 Unlimited Tax Series A	14,555,959	14,555,959	14,555,959	14,555,959
2016 Limited Tax Series B	2,141,451	2,141,451	2,141,451	2,141,451
Subtotal Bond Redemption & Interest Fund	\$ 247,443,958	\$ 246,537,587	\$ 247,313,970	\$ 243,048,461
TOTAL	\$ 658,492,358	\$ 652,646,487	\$ 651,357,170	\$ 638,197,854
Abatement after the budget year ****	(11,221,507)	(8,121,101)	(6,184,633)	
Total (after planned abatement)	\$ 647,270,851	\$ 644,525,386	\$ 645,172,537	

NOTES: * As Adjusted reflects the 2019 EAV (\$164,054,703,895) estimated to increase 3.0 percent, plus any subsequent supplemental levies or appropriations.

** 2021 reflects an estimated 3.0 percent increase in EAV from the 2020 estimate.

*** Prior year obligations for the Capital Improvements Bond Fund are included in the Appropriation for Liabilities.

**** As part of the plan of financing, it is intended and anticipated that tax revenues deposited in the Stormwater Management Fund be transferred to the Bond Redemption & Interest Fund and used to abate taxes levied for this issue.

COMPARATIVE STATEMENT OF TAX RATES 2021-2019 ALL FUNDS

Per \$100 in Equalized Assessed Valuation (EAV)

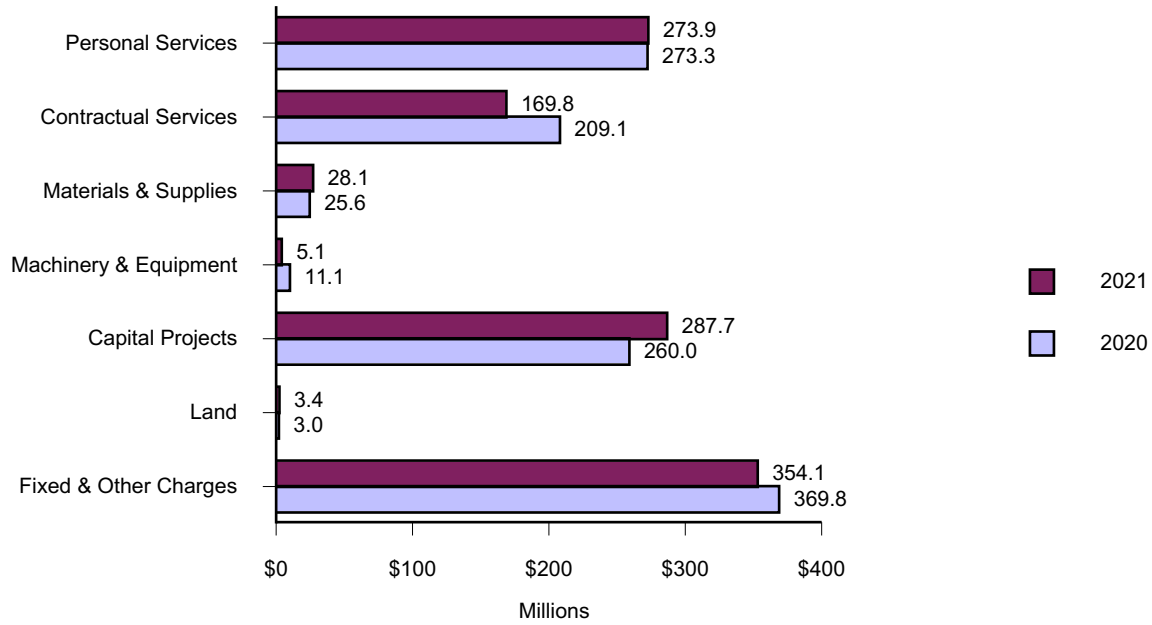
FUND		2021 **	2020 AS PASSED	2020 AS ADJUSTED *	2019 ACTUAL
	tax rate limit				
Corporate Fund	41¢	15.56¢	16.12¢	15.77¢	15.58¢
Construction Fund	10¢	0.40	0.42	0.29	0.46
Stormwater Management Fund	5¢	3.04	3.20	3.13	3.23
Retirement Fund		4.18	4.37	4.27	4.36
Reserve Claim Fund	½ ¢	0.43	0.45	0.44	0.46
Subtotal		23.61¢	24.56¢	23.90¢	24.09¢
Bond Redemption & Interest Fund:					
Capital Improvement & Interest Fund:					
2016 Qualified Energy Conservation Limited Tax Series F		0.01¢	0.01¢	0.01¢	0.01¢
2009 Limited Tax Series		2.04	2.15	2.10	2.17
2011 Limited Tax Series B		1.06	1.26	1.23	1.16
2011 Unlimited Tax Series C		0.12	0.13	0.13	0.15
2014 Limited Tax Series C		0.15	0.45	0.44	0.51
2014 Unlimited Tax Series A		0.30	0.31	0.31	0.32
2014 Alternate Revenue Unlimited Tax Series B ***		0.19	0.21	0.20	0.21
2016 Alternate Revenue Unlimited Tax Series E ***		0.22	0.16	0.15	0.16
Alternate Revenue Abatement ***		—	—	—	(0.37)
2016 Unlimited Tax Series C		0.09	0.09	0.09	0.09
2016 Limited Tax Series D		0.17	0.06	0.06	0.06
State Revolving Fund Bonds - Series:					
Various		5.78	5.97	5.88	6.11
Refunding Bonds - Series:					
2007 Unlimited Tax Series A		1.54	1.62	1.58	1.63
2007 Unlimited Tax Series B		0.29	0.30	0.30	0.30
2007 Limited Tax Series C		0.32	0.34	0.33	0.34
2014 Limited Tax Series D		0.99	0.85	0.83	0.97
2016 Unlimited Tax Series A		0.84	0.88	0.86	0.89
2016 Limited Tax Series B		0.12	0.13	0.13	0.13
Subtotal Bond Redemption & Interest Fund		14.23¢	14.92¢	14.63¢	14.84¢
TOTAL		37.84¢	39.48¢	38.53¢	38.93¢

NOTES: * As Adjusted reflects the 2019 EAV (\$164,054,703,895) estimated to increase 3.0 percent, plus any subsequent supplemental levies or appropriations.

** 2021 reflects an estimated 3.0 percent increase in EAV from the 2020 estimate.

*** As part of the plan of financing, it is intended and anticipated that tax revenues deposited in the Stormwater Management Fund be transferred to the Bond Redemption & Interest Fund and used to abate taxes levied for this issue.

COMPARATIVE APPROPRIATIONS BY MAJOR OBJECT OF EXPENDITURE



COMPARATIVE APPROPRIATIONS BY MAJOR CHARACTER OF EXPENDITURE



COMPARATIVE APPROPRIATIONS BY MAJOR OBJECT OF EXPENDITURE 2021-2020 ALL FUNDS

ORGANIZATION or FUND	YEAR	TOTAL	PERSONAL SERVICES	CONTRACTUAL SERVICES	MATERIALS & SUPPLIES	MACHINERY & EQUIPMENT	CAPITAL PROJECTS	LAND	FIXED & OTHER CHARGES
Board of Commissioners	2021	\$ 5,212,300	\$ 4,294,800	\$ 892,000	\$ 25,500	\$ —	\$ —	\$ —	\$ —
	2020	\$ 5,294,300	\$ 4,314,700	\$ 954,100	\$ 25,500	\$ —	\$ —	\$ —	\$ —
General Administration	2021	20,953,100	13,682,100	5,704,300	314,500	1,252,200	—	—	—
	2020	29,712,200	12,403,200	8,082,200	425,200	8,801,600	—	—	—
Monitoring & Research	2021	32,724,200	29,580,100	1,370,400	544,000	1,229,700	—	—	—
	2020	31,827,100	29,679,000	1,075,300	481,800	591,000	—	—	—
Procurement & Materls. Management	2021	10,509,200	6,081,800	494,500	3,932,900	—	—	—	—
	2020	9,944,900	6,031,600	260,300	3,448,000	130,000	75,000	—	—
Human Resources	2021	61,099,700	55,624,000	5,177,700	292,000	6,000	—	—	—
	2020	61,446,800	56,182,400	4,971,300	293,100	—	—	—	—
Information Technology	2021	18,987,200	8,952,900	8,773,200	1,056,100	205,000	—	—	—
	2020	18,492,400	8,896,800	7,998,700	1,360,400	236,500	—	—	—
Law	2021	7,952,200	5,760,200	1,342,300	19,200	—	—	—	830,500
	2020	7,274,200	5,562,100	937,900	19,200	—	—	—	755,000
Finance	2021	3,876,900	3,402,900	457,500	16,500	—	—	—	—
	2020	3,883,200	3,481,400	390,800	11,000	—	—	—	—
Maint. & Operations:									
General Division	2021	13,845,500	11,509,800	1,790,600	497,100	48,000	—	—	—
	2020	33,059,200	13,925,900	17,963,400	812,400	357,500	—	—	—
North Service Area	2021	48,256,000	26,096,400	18,259,500	3,585,700	314,400	—	—	—
	2020	45,642,200	26,350,100	16,022,600	2,916,500	353,000	—	—	—
Calumet Service Area	2021	44,338,000	20,625,400	19,571,700	3,543,900	597,000	—	—	—
	2020	39,017,300	20,050,400	15,841,700	2,966,200	159,000	—	—	—
Stickney Service Area	2021	104,039,100	42,120,100	47,205,900	14,082,100	631,000	—	—	—
	2020	86,695,900	40,437,500	33,550,000	12,620,900	87,500	—	—	—
TOTAL Maintenance & Operations	2021	\$ 210,478,600	\$ 100,351,700	\$ 86,827,700	\$ 21,708,800	\$ 1,590,400	\$ —	\$ —	\$ —
	2020	\$ 204,414,600	\$ 100,763,900	\$ 83,377,700	\$ 19,316,000	\$ 957,000	\$ —	\$ —	\$ —
Engineering	2021	25,925,600	24,443,700	1,393,200	88,700	—	—	—	—
	2020	25,911,100	25,055,000	779,400	76,700	—	—	—	—
TOTAL Corporate Fund	2021	\$ 397,719,000	\$ 252,174,200	\$ 112,432,800	\$ 27,998,200	\$ 4,283,300	\$ —	\$ —	\$ 830,500
	2020	\$ 398,200,800	\$ 252,370,100	\$ 108,827,700	\$ 25,456,900	\$ 10,716,100	\$ 75,000	\$ —	\$ 755,000
Construction Fund	2021	14,103,200	—	4,484,200	—	62,000	9,557,000	—	—
	2020	18,044,400	—	5,060,700	—	248,000	12,735,700	—	—
Capital Improvements Bond Fund	2021	240,276,700	—	4,212,600	—	—	233,752,100	750,000	1,562,000
	2020	244,547,400	—	19,612,100	—	—	223,492,800	300,000	1,142,500
Stormwater Management Fund	2021	109,965,900	11,692,500	48,632,600	113,100	705,000	44,382,700	2,640,000	1,800,000
	2020	116,258,000	10,901,800	75,561,100	103,900	155,000	23,736,200	2,650,000	3,150,000
Bond Redemption & Interest Fund	2021	232,125,850	—	—	—	—	—	—	232,125,850
	2020	233,021,867	—	—	—	—	—	—	233,021,867
Retirement Fund	2021	88,127,000	—	—	—	—	—	—	88,127,000
	2020	107,319,000	—	—	—	—	—	—	107,319,000
Reserve Claim Fund	2021	39,624,900	10,000,000	—	—	—	—	—	29,624,900
	2020	34,395,000	10,000,000	—	—	—	—	—	24,395,000
GRAND TOTAL	2021	\$ 1,121,942,550	\$ 273,866,700	\$ 169,762,200	\$ 28,111,300	\$ 5,050,300	\$ 287,691,800	\$ 3,390,000	\$ 354,070,250
	2020	\$ 1,151,786,467	\$ 273,271,900	\$ 209,061,600	\$ 25,560,800	\$ 11,119,100	\$ 260,039,700	\$ 2,950,000	\$ 369,783,367
PERCENTAGES	2021	100.0%	24.4%	15.1%	2.5%	0.5%	25.6%	0.3%	31.6%
	2020	100.0%	23.7%	18.2%	2.2%	1.0%	22.6%	0.3%	32.1%

Note: Percentages are rounded.

**COMPARATIVE APPROPRIATIONS BY CHARACTER OF EXPENDITURE
2021-2020 ALL FUNDS**

ORGANIZATION OR FUND	YEAR	TOTAL	CURRENT EXPENSE	CAPITAL OUTLAY	DEBT RETIREMENT
Board of Commissioners	2021	\$ 5,212,300	\$ 5,212,300	\$ —	\$ —
	2020	\$ 5,294,300	\$ 5,294,300	\$ —	\$ —
General Administration	2021	20,953,100	19,700,900	1,252,200	—
	2020	29,712,200	20,910,600	8,801,600	—
Monitoring & Research	2021	32,724,200	31,494,500	1,229,700	—
	2020	31,827,100	31,236,100	591,000	—
Procurement & Materials Management	2021	10,509,200	10,509,200	—	—
	2020	9,944,900	9,739,900	205,000	—
Human Resources	2021	61,099,700	61,093,700	6,000	—
	2020	61,446,800	61,446,800	—	—
Information Technology	2021	18,987,200	18,782,200	205,000	—
	2020	18,492,400	18,255,900	236,500	—
Law	2021	7,952,200	7,952,200	—	—
	2020	7,274,200	7,274,200	—	—
Finance	2021	3,876,900	3,876,900	—	—
	2020	3,883,200	3,883,200	—	—
Maintenance & Operations:					
General Division	2021	13,845,500	13,797,500	48,000	—
	2020	33,059,200	32,701,700	357,500	—
North Service Area	2021	48,256,000	47,941,600	314,400	—
	2020	45,642,200	45,289,200	353,000	—
Calumet Service Area	2021	44,338,000	43,741,000	597,000	—
	2020	39,017,300	38,858,300	159,000	—
Stickney Service Area	2021	104,039,100	103,408,100	631,000	—
	2020	86,695,900	86,608,400	87,500	—
TOTAL Maintenance & Operations	2021	\$ 210,478,600	\$ 208,888,200	\$ 1,590,400	\$ —
	2020	\$ 204,414,600	\$ 203,457,600	\$ 957,000	\$ —
Engineering	2021	25,925,600	25,925,600	—	—
	2020	25,911,100	25,911,100	—	—
TOTAL Corporate Fund	2021	\$ 397,719,000	\$ 393,435,700	\$ 4,283,300	\$ —
	2020	\$ 398,200,800	\$ 387,409,700	\$ 10,791,100	\$ —
Construction Fund	2021	14,103,200	4,484,200	9,619,000	—
	2020	18,044,400	5,060,700	12,983,700	—
Capital Improvements Bond Fund	2021	240,276,700	5,524,600	234,752,100	—
	2020	244,547,400	20,504,600	224,042,800	—
Stormwater Management Fund	2021	109,965,900	62,238,200	47,727,700	—
	2020	116,258,000	89,716,800	26,541,200	—
Bond Redemption & Interest Fund	2021	232,125,850	—	—	232,125,850
	2020	233,021,867	—	—	233,021,867
Retirement Fund	2021	88,127,000	88,127,000	—	—
	2020	107,319,000	107,319,000	—	—
Reserve Claim Fund	2021	39,624,900	39,624,900	—	—
	2020	34,395,000	34,395,000	—	—
GRAND TOTAL	2021	\$ 1,121,942,550	\$ 593,434,600	\$ 296,382,100	\$ 232,125,850
	2020	\$ 1,151,786,467	\$ 644,405,800	\$ 274,358,800	\$ 233,021,867
PERCENTAGES	2021	100%	53%	26%	21%
	2020	100%	56%	24%	20%

Note: Percentages are rounded.

2021 - 2020* PROGRAM APPROPRIATION - ALL FUNDS
BY DEPARTMENT AND MAJOR PROGRAM
(In Millions)

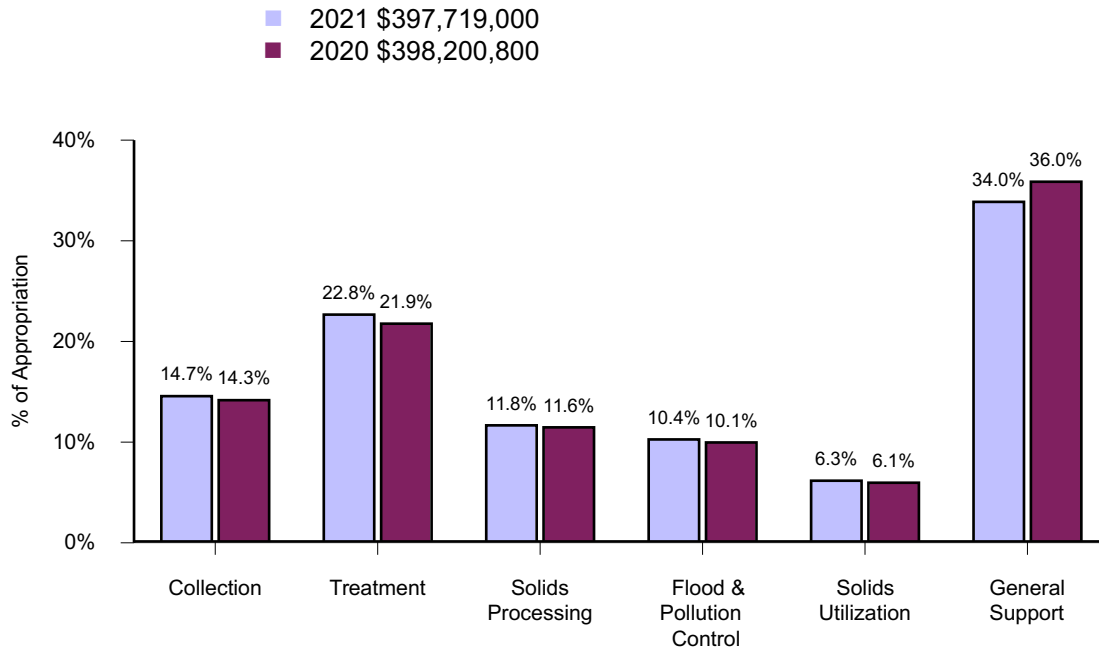
DEPARTMENT	MAJOR PROGRAM															
	COLLECTION		TREATMENT		SOLIDS PROCESSING		SOLIDS UTILIZATION		FLOOD & POLLUTION CONTROL		GENERAL SUPPORT		TOTAL			
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020		
Board of Commissioners	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 5.2	\$ 5.3	\$ 5.2	\$ 5.3
General Administration	—	—	—	—	—	—	—	—	—	—	—	—	21.0	29.7	21.0	29.7
Monitoring & Research	—	—	—	—	—	—	—	—	—	32.3	31.4	0.4	0.4	32.7	31.8	
Procurement & Materials Management	—	—	—	—	—	—	—	—	—	—	—	10.5	9.9	10.5	9.9	
Human Resources	—	—	—	—	—	—	—	—	—	—	—	61.1	61.4	61.1	61.4	
Information Technology	—	—	—	—	—	—	—	—	—	—	—	19.0	18.5	19.0	18.5	
Law	—	—	—	—	—	—	—	—	—	0.5	0.5	7.5	6.8	8.0	7.3	
Finance	—	—	—	—	—	—	—	—	—	0.3	0.3	3.6	3.6	3.9	3.9	
Maintenance & Operations	53.0	52.2	82.2	78.3	40.4	39.9	24.9	23.8	5.3	5.0	4.6	5.3	210.5	204.4		
Engineering	5.3	4.9	8.6	8.8	6.4	6.4	0.3	0.4	3.1	3.1	2.3	2.3	25.9	25.9		
Total Corporate Fund	\$ 58.3	\$ 57.1	\$ 90.8	\$ 87.1	\$ 46.9	\$ 46.3	\$ 25.2	\$ 24.1	\$ 41.4	\$ 40.3	\$ 135.2	\$ 143.3	\$ 397.7	\$ 398.2		
Construction and Capital Improvements Bond Funds	\$ 51.5	\$ 31.5	\$ 98.6	\$ 112.7	\$ 6.6	\$ 18.3	\$ 3.4	\$ 1.4	\$ 93.5	\$ 96.6	\$ 0.8	\$ 2.1	\$ 254.4	\$ 262.6		
Stormwater Management Fund	—	—	—	—	—	—	—	—	109.8	116.1	0.1	0.1	110.0	116.3		
Miscellaneous (Debt Service, Retirement, and Reserve Funds)	—	—	—	—	—	—	—	—	—	—	—	359.9	374.7	359.9	374.7	
GRAND TOTAL	\$ 109.8	\$ 88.6	\$ 189.4	\$ 199.8	\$ 53.4	\$ 64.6	\$ 28.7	\$ 25.6	\$ 244.8	\$ 253.0	\$ 495.9	\$ 520.3	\$ 1,121.9	\$ 1,151.8		

Notes: Totals are rounded.
*Adjusted Appropriation

APPROPRIATION DISTRIBUTION BY MAJOR PROGRAM

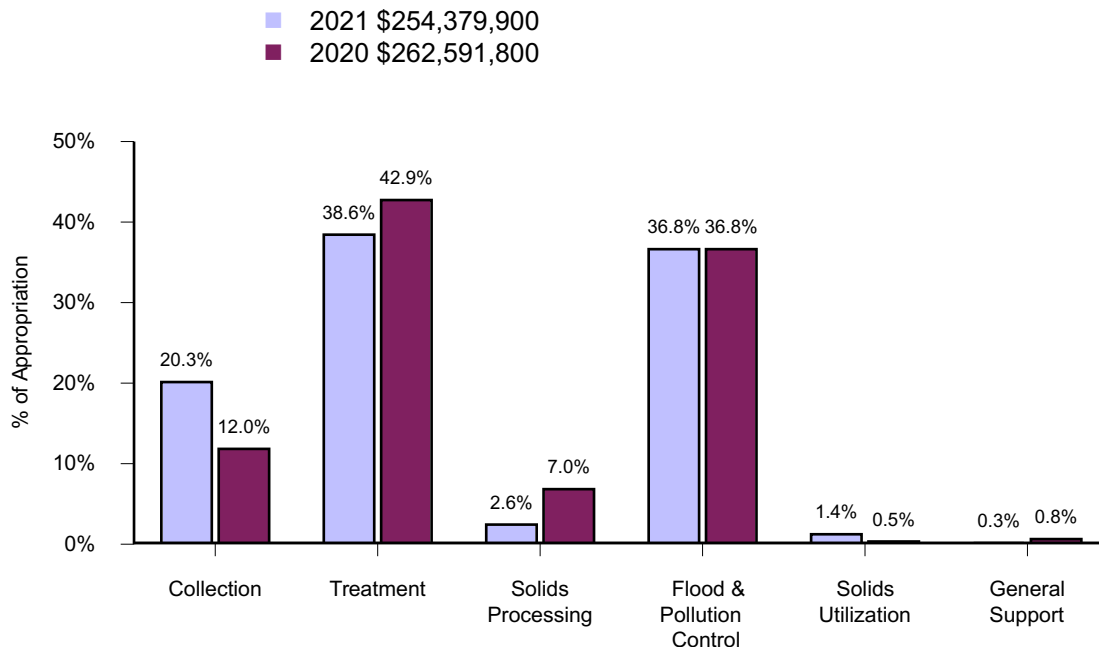
To comply with Illinois State Statute, it is necessary to prepare budget estimates and appropriate funds according to programs, as well as organizational units, performance principles, and unit cost data. The two charts on this page show the relationship of major objectives or functions within the Corporate, Construction, and Capital Improvements Bond Funds. The charts compare major program appropriations to the total fund appropriations for 2021 and 2020, as shown on the following page.

Corporate Fund



Note: Percentages are rounded.

Capital Improvements Bond & Construction Funds



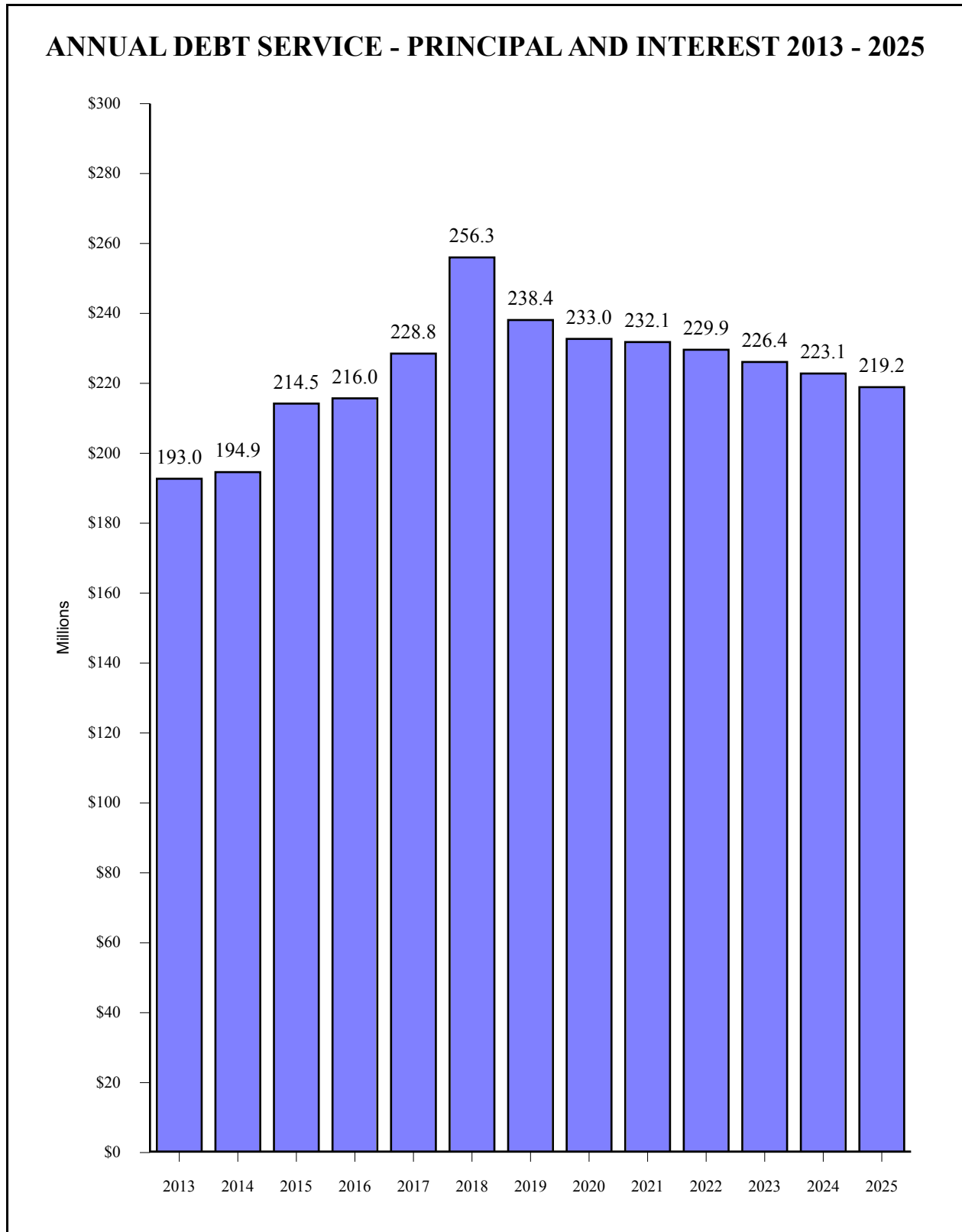
Note: Percentages are rounded.

2021 - 2020 PROGRAM APPROPRIATION COMPARISON ALL FUNDS

PROGRAM OBJECTIVE

NUMBER	NAME	2021 BUDGET	2020 BUDGET	DOLLAR INCREASE (DECREASE)	PERCENT INCREASE (DECREASE)	FTE POSITIONS	
						2021	2020
1000	Collection	\$ 109,770,558	\$ 88,616,244	\$ 21,154,314	23.9	277	282
2000	Treatment	189,367,617	199,757,908	(10,390,291)	(5.2)	451	456
3000	Solids Processing	53,417,756	64,579,901	(11,162,145)	(17.3)	251	254
4000	Flood & Pollution Control	244,785,977	252,999,608	(8,213,631)	(3.2)	444	441
5000	Solids Utilization	28,656,214	25,569,973	3,086,241	12.1	41	41
7000	General Support (Debt, Retirement, Law, etc.)	495,944,428	520,262,833	(24,318,405)	(4.7)	477	479
TOTAL		\$ 1,121,942,550	\$ 1,151,786,467	\$ (29,843,917)	(2.6)	1,941	1,953

SUMMARY BY FUND	2021 BUDGET	2020 BUDGET	DOLLAR INCREASE (DECREASE)	PERCENT INCREASE (DECREASE)	FTE POSITIONS	
					2021	2020
Corporate Fund	\$ 397,719,000	\$ 398,200,800	\$ (481,800)	(0.1)	1,845	1,862
Construction & Capital Improvements Bond Funds	254,379,900	262,591,800	(8,211,900)	(3.1)	—	—
Stormwater Management Fund	109,965,900	116,258,000	(6,292,100)	(5.4)	96	91
Retirement Fund	88,127,000	107,319,000	(19,192,000)	(17.9)	—	—
Bond Redemption & Interest Fund	232,125,850	233,021,867	(896,017)	(0.4)	—	—
Reserve Claim Fund	39,624,900	34,395,000	5,229,900	15.2	—	—
TOTAL	\$ 1,121,942,550	\$ 1,151,786,467	\$ (29,843,917)	(2.6)	1,941	1,953



This chart shows debt service for current bonds outstanding. The increase in 2018 is due to the advance payment of \$28.4 million, resulting in a savings of \$9.6 million over the life of the loans. Increases in 2017 and 2015 are due to issuances of July 2016 Limited and Unlimited Tax Series Bonds and December 2014 Limited and Unlimited Tax Series Bonds, respectively.

Bonds to be sold in the future are not included in this chart and are detailed in the Five-Year Financial Forecast on pages 58 and 66.

**OUTSTANDING BONDS AND ESTIMATED STATUTORY DEBT MARGIN
DECEMBER 31, 2020**

BOND SERIES	DATE OF MATURITY	INTEREST RATES	AMOUNT PAYABLE
Capital Improvements Bonds - Series:			
2009 Limited Tax Series	2038	5.72%	\$ 600,000,000
2011 Limited Tax Series B	2032	3.1% to 5.0%	213,555,000
2011 Unlimited Tax Series C	2031	3.0% to 5.0%	41,500,000
2014 Unlimited Tax Series A	2044	5.0%	100,000,000
2014 Alternate Revenue Unlimited Tax Series B	2044	2.0% to 5.0%	45,190,000
2014 Limited Tax Series C	2028	2.0% to 5.0%	54,095,000
2016 Unlimited Tax Series C	2045	5.0%	30,000,000
2016 Limited Tax Series D	2030	5.0%	20,000,000
2016 Alternate Revenue Unlimited Tax Series E	2045	5.0%	50,000,000
2016 Qualified Energy Conservation Limited Tax Series F	2036	4.0%	4,000,000
SUBTOTAL - Capital Improvements Bonds:			<u>\$ 1,158,340,000</u>
Refunding Bonds - Series:			
2007 Unlimited Tax Series A	2022	4.0% to 5.0%	\$ 47,950,000
2007 Unlimited Tax Series B	2035	4.0% to 5.0%	91,845,000
2007 Limited Tax Series C	2033	4.0% to 5.0%	101,860,000
2014 Limited Tax Series D	2022	2.0% to 5.0%	27,900,000
2016 Unlimited Tax Series A	2031	5.0%	280,930,000
2016 Limited Tax Series B	2031	5.0%	41,330,000
SUBTOTAL - Refunding Bonds:			<u>\$ 591,815,000</u>
State Revolving Fund Bonds - Series:			
97CC SRF L172031	2022	2.54%	\$ 3,483,863
97DD SRF L171152	2023	2.91%	2,964,619
01A SRF L172126	2024	2.57%	12,630,836
01B SRF L172127	2025	2.50%	16,311,797
01C SRF L172128	2026	2.50%	17,341,084
14F SRF L175342	2039	1.75%	76,376,463
16C SRF L175367	2039	1.76%	11,306,704
16D SRF L175460	2038	1.75%	7,062,631
14O SRF L175305	2038	1.75%	2,911,277
04A SRF L172485	2027	2.50%	10,081,760
04B SRF L172488	2027	2.50%	11,777,460
04C SRF L172493	2027	2.50%	1,029,870
04D SRF L172494	2027	2.50%	987,620
04E SRF L172495	2028	2.50%	3,517,651
04F SRF L172496	2031	—%	2,086,711
04G SRF L172611	2027	2.50%	1,604,425
04H SRF L172849	2029	2.50%	26,937,480
07A SRF L172625	2030	2.50%	23,298,581
07B SRF L172850	2031	2.50%	16,281,767
07C SRF L172770	2031	—%	35,000,000
07D SRF L172763	2030	2.50%	5,314,150
09A SRF L173074	2032	1.25%	28,392,644
09B SRF L173064	2031	—%	4,020,343
09C SRF L173063	2031	—%	1,175,550
09D SRF L174558	2032	2.30%	25,296,179
09E SRF L173005	2032	1.25%	23,270,348
09F SRF L174557	2032	1.25%	38,634,716
09G SRF L173075	2032	1.25%	18,100,500
09H SRF L173800	2031	—%	386,320
09I SRF L174675	2031	1.25%	6,192,611
12A SRF L174710	2034	2.30%	5,525,494
12B SRF L174712	2034	2.30%	4,732,158

**OUTSTANDING BONDS AND ESTIMATED STATUTORY DEBT MARGIN
DECEMBER 31, 2020**

BOND SERIES	DATE OF MATURITY	INTEREST RATES	AMOUNT PAYABLE
State Revolving Fund Bonds - Series (continued):			
12C SRF L174621	2036	2.00%	\$ 11,575,739
12D SRF L174988	2032	1.93%	20,654,012
12E SRF L174709	2035	1.93%	4,434,709
12F SRF L174989	2032	1.93%	42,002,712
12G SRF L174923	2038	1.93%	31,294,752
12H SRF L174924	2032	1.93%	18,699,441
12I SRF L175222	2037	2.21%	4,214,069
12J SRF L175172	2035	2.00%	2,105,093
12K SRF L174925	2036	2.00%	10,919,333
12L SRF L175161	2037	2.21%	28,077,930
12M SRF L175168	2038	2.21%	10,966,347
12N SRF L175164	2036	2.00%	2,353,875
12O SRF L175166	2036	2.00%	3,775,809
14A SRF L173076	2036	2.21%	67,805,937
14B SRF L175171	2036	2.21%	2,314,112
14C SRF L174559	2036	2.30%	17,016,101
14D SRF L175263	2038	1.86%	11,868,620
14E SRF L173062	2038	1.86%	40,278,537
14G SRF L175152	2038	1.86%	18,797,072
14H SRF L175355	2036	1.86%	1,052,215
14I SRF L175223	2038	1.86%	8,162,357
14J SRF L175219	2036	2.21%	3,717,902
14K SRF L175366	2038	1.86%	4,769,516
14L SRF L175368	2038	1.75%	4,989,302
14M SRF L175372	2038	2.22%	1,333,948
14N SRF L175371	2038	1.75%	1,270,512
14P SRF L175369	2038	1.56%	3,647,176
14Q SRF L175539	2040	1.76%	1,805,369
16A SRF L174555	2038	1.75%	118,634,802
16B SRF L172129	2040	1.84%	1,923,830
16K SRF L172741	2040	2.00%	284,546
SUBTOTAL - State Revolving Fund Bonds:			\$ 944,779,289
TOTAL OUTSTANDING BONDS:			\$ 2,694,934,289

CALCULATION OF ESTIMATED STATUTORY DEBT MARGIN

Debt Applicable to Debt Limit:			
Outstanding Bonds		\$ 2,694,934,289	
Less: Alternate Revenue Bonds Outstanding		(95,190,000)	
Bond Anticipation Notes - Principal		30,000,000	
Bond Anticipation Notes - Interest		500,000	
Capital Lease - Biosolids Facility		30,401,635	
Liabilities of Tax Financed Funds		3,000,000	\$ 2,663,645,924
Less Applicable Assets:			
Cash and Investments - Bond Redemption & Interest Fund		\$ (99,148,800)	
Interest on Bonds Payable in Next Twelve Months		109,379,960	\$ 10,231,160
NET DEBT APPLICABLE TO LIMIT:			\$ 2,673,877,084
Statutory Debt Limit 5.75% of 2019 EAV			\$ 9,433,145,474
Less Net Debt Applicable to Limit			2,673,877,084
ESTIMATED STATUTORY DEBT MARGIN:			\$ 6,759,268,390

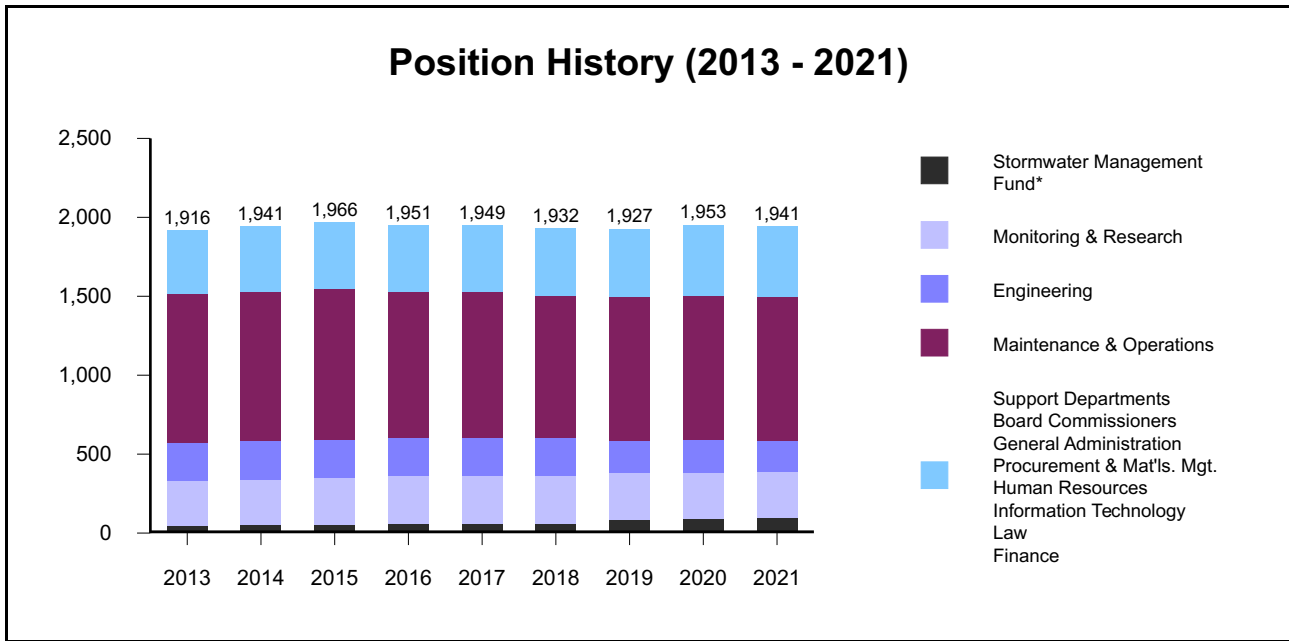
**ACCOUNT SUMMARY COMPARISON
2021 - 2020 ALL FUNDS**

ORGANIZATION OR FUND	Account Appropriation		Increase (Decrease) 2021-2020	
	2021	2020	Dollars	Percent
Board of Commissioners	\$ 5,212,300	\$ 5,294,300	\$ (82,000)	(1.5)
General Administration	20,953,100	29,712,200	(8,759,100)	(29.5)
Monitoring & Research	32,724,200	31,827,100	897,100	2.8
Procurement & Materials Management	10,509,200	9,944,900	564,300	5.7
Human Resources	61,099,700	61,446,800	(347,100)	(0.6)
Information Technology	18,987,200	18,492,400	494,800	2.7
Law	7,952,200	7,274,200	678,000	9.3
Finance	3,876,900	3,883,200	(6,300)	(0.2)
Maintenance & Operations:				
General Division	13,845,500	33,059,200	(19,213,700)	(58.1)
North Service Area	48,256,000	45,642,200	2,613,800	5.7
Calumet Service Area	44,338,000	39,017,300	5,320,700	13.6
Stickney Service Area	104,039,100	86,695,900	17,343,200	20.0
TOTAL Maintenance & Operations	\$ 210,478,600	\$ 204,414,600	\$ 6,064,000	3.0
Engineering	25,925,600	25,911,100	14,500	0.1
TOTAL Corporate Fund	\$ 397,719,000	\$ 398,200,800	\$ (481,800)	(0.1)
Construction Fund	14,103,200	18,044,400	(3,941,200)	(21.8)
Capital Improvements Bond Fund	240,276,700	244,547,400	(4,270,700)	(1.7)
TOTAL Capital Budget	\$ 254,379,900	\$ 262,591,800	\$ (8,211,900)	(3.1)
Stormwater Management Fund	109,965,900	116,258,000	(6,292,100)	(5.4)
Bond Redemption & Interest Fund	232,125,850	233,021,867	(896,017)	(0.4)
Retirement Fund	88,127,000	107,319,000	(19,192,000)	(17.9)
Reserve Claim Fund	39,624,900	34,395,000	5,229,900	15.2
GRAND TOTAL	<u>\$1,121,942,550</u>	<u>\$1,151,786,467</u>	<u>\$ (29,843,917)</u>	(2.6)

**PERSONNEL SUMMARY COMPARISON
2021 - 2019 ALL FUNDS**

ORGANIZATION OR FUND	Proposed FTEs 2021	Budgeted FTEs 2020	Actual FTEs 2019	Increase (Decrease) 2021-2020	
				FTEs	Percent
Board of Commissioners	36	36	36	—	—
General Administration	121	121	119	—	—
Monitoring & Research	292	294	297	(2)	(0.7)
Procurement & Materials Management	61	63	61	(2)	(3.2)
Human Resources	93	92	81	1	1.1
Information Technology	70	70	65	—	—
Law	38	38	38	—	—
Finance	27	27	27	—	—
Maintenance & Operations:					
General Division	92	112	115	(20)	(17.9)
North Service Area	239	247	244	(8)	(3.2)
Calumet Service Area	193	188	188	5	2.7
Stickney Service Area	384	369	369	15	4.1
TOTAL Maintenance & Operations	908	916	916	(8)	(0.9)
Engineering	199	205	202	(6)	(2.9)
TOTAL Corporate Fund	1,845	1,862	1,842	(17)	(0.9)
Construction Fund	—	—	—	—	—
Capital Improvements Bond Fund	—	—	—	—	—
TOTAL Capital Budget	—	—	—	—	—
Stormwater Management Fund	96	91	85	5	5.5
Bond Redemption & Interest Fund	—	—	—	—	—
Retirement Fund	—	—	—	—	—
Reserve Claim Fund	—	—	—	—	—
GRAND TOTAL	1,941	1,953	1,927	(12)	(0.6)

PERSONAL SERVICE APPROPRIATIONS



*In 2021, 96 positions for the Maintenance & Operations and Engineering Departments are budgeted in the Stormwater Management Fund, while the operations remain within the departments.

The exhibit above shows the actual staffing from 2013 to 2019, along with the budgeted positions for 2020 and 2021. The staffing increases in 2014 and 2015 were necessary to address Strategic Business Plan initiatives.

The Maintenance & Operations, Engineering, and Monitoring & Research Departments are referred to as the District’s operating departments. These departments are directly responsible for the daily operations of sewage collection, treatment, environmental monitoring activities, and disposal. The remaining departments are generally termed as support departments. While positions in these departments may be considered indirect or overhead, they are also necessary for technical expertise, statutory compliance, governance, and public accountability.

The exhibit below provides the personal service appropriations for 2020 and 2021, and the actual expenditures for personal services in 2019. The District has introduced a number of initiatives in an effort to control cost increases, including active management of employee health benefit costs.

	2019 Actual Exp.	2020 Adj. Approp.	2021 Budgeted	Increase (Decrease) 2021-2020	
				Dollars	Percent
Salaries of Regular Employees	\$ 187,989,180	\$ 199,926,200	\$ 200,919,000	\$ 992,800	0.5 %
Compensation Plan Adjustments	8,304,332	9,350,900	9,464,100	\$ 113,200	1.2 %
Social Security & Medicare Contributions	2,780,285	3,031,700	3,077,800	\$ 46,100	1.5 %
Employee Claims	3,388,841	10,094,100	10,083,300	\$ (10,800)	(0.1)%
Other Employee Personal Services*	1,473,208	2,381,900	2,349,500	\$ (32,400)	(1.4)%
Health & Life Insurance Premiums**	43,376,945	48,138,400	47,973,000	\$ (165,400)	(0.3)%
Total	\$ 247,312,791	\$ 272,923,200	\$ 273,866,700	\$ 943,500	0.3 %

* Includes Tuition, Training, and Nonbudgeted Salaries
 ** Includes Other Postemployment Benefits Distribution

FIVE-YEAR FINANCIAL FORECAST

2021 - 2025

The District's Five-Year Financial Forecast (FYFF), as defined by generally accepted accounting principles, is an interim financial report. Interim financial reports are designed to provide estimates of future financial operating conditions to policymakers and managers. They reflect no legal obligation of the organization, present or future.

The FYFF is prepared prior to the Executive Director's Budget Recommendations and reflects the best estimates of revenues, fund equity, and appropriation needs available at the time. This forecast is presented to the Executive Director. Subject to his review and approval, it is then included in the Budget.

The FYFF presentation is in the form of a letter from the Budget Officer to the Executive Director, which discusses the assumptions used in making the forecast. It also provides a discussion of the changes and trends in operations, which are expected to occur during the FYFF period. Graphs and tables are provided, detailing the financial projections of all funds.

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

October 13, 2020

SUBJECT: FIVE-YEAR FINANCIAL FORECAST, 2021 - 2025

Dear Sir:

I have reviewed the Five-Year Financial Forecast prepared for the fiscal years 2021 - 2025 and offer the following report and summary. Subject to your review and approval, this will be included in the 2021 Budget. These projections are a tool designed to aid the District in planning and controlling its financial position over a longer range than the 2021 Budget itself. They also contribute to making the Budget a comprehensive financial plan of District operations, present, and future.

This forecast is designed to provide an understanding of how the District's revenues and expenditures are expected to develop during the next five years. The report's value lies in the projected trends rather than the absolute numbers. The current trends require the District to remain diligent in cutting costs and increasing efficiencies.

OVERVIEW

Illinois Property Tax Extension Limitation (PTEL) statute remains the primary limiting factor for the District's long-term financial planning. This law limits increases in property tax levies for our aggregate or operating funds, to an increase of five percent or the change in the national Consumer Price Index (CPI), whichever is less.

The Consumer Price Index (CPI) and the real estate market are primary drivers of the District's revenue. The COVID-19 pandemic and resultant economic shutdown will have an impact on the 2021 Budget, particularly the slow growth projected in the CPI. The 2021 Budget anticipates larger revenue shortfalls than the 2020 revenue shortfall estimate. Economic recovery is projected to continue throughout 2021, but slow recovery will continue to impact allowable revenue growth in 2022.

The forecast projects that the District will utilize Corporate Fund excess reserves over the next 5 years, with particular pressure on 2022 as revenue growth will continue to be limited by a CPI growth forecast of 2.3 percent for 2021 coupled with projected cost increases particularly related to replacement and repair needs at the water reclamation plants. The forecast is a very conservative projection of cost increases and continues the District's history of managing year-over-year growth in the Corporate Fund at an annual average increase of 2.4 percent.

The District's experience during the last recession and strong language regarding collections in the Illinois statute support an anticipated stable collection rate for 2021. Revenue sources for the District are limited by statute and are derived primarily from property taxes. Projections of economic growth in Illinois, reflected in revenues from personal property replacement tax collections, investment income, real estate leases, and user charge collections are anticipated to show slow growth over the projection period.

EXPENDITURES: DEPARTMENTAL GUIDELINES AND METHODOLOGY

The Budget Office asked each department to project its needs for the years 2021 - 2025. The projections were made in current dollars. Salary growth was projected by the Budget Office using conservative growth assumptions and holding staff steady. The Human Resources Department directly projected health and life insurance costs based on current multi-year agreements and industry trends. Electrical energy was adjusted for operating needs and contractual rates.

REVENUE AND FINANCING ASSUMPTIONS

Key assumptions made in the projections of revenues and tax rates are:

- CPI is assumed to be 1.5 percent for 2020, 2.3 percent for 2021, and return to 3.0 percent for 2022-2025. New property is assumed to be 0.3 percent for 2020, and 0.5 percent for 2021-2025. A prolonged recession or slow recovery will create a compounding impact on the District's tax revenue and will create a larger gap between revenues and expenditures in years 2023-2025;
- The Construction Fund levy is projected to be \$7.0 million in 2021 and \$7.5 million from 2022-2025. The Reserve Claim Fund Levy is projected to remain flat. All available increases under the tax cap are planned to be realized in the Corporate Fund. The low Construction Fund levy will also create pressure on small construction projects to move either to the Capital Improvements Bond Fund or be absorbed into the Corporate Fund;
- The expenditure rate is expected to be 92 percent in 2021 and assumes that expenditure controls will be in place throughout the year. The expenditure rate is expected to return to 93 percent for 2022-2025;
- Tax collections will be 96.5 percent of what is levied allowing for loss in collections, Property Tax Appeals Board (PTAB) decisions, circuit court decisions, and other tax refunds;
- The annual Equalized Assessed Valuation (EAV) projection is based on the 2019 amount as provided by the Cook County Clerk, with estimated growth of 3.0 percent annually from 2021 - 2025;
- A Capital Improvements bond sale valued at \$120.0 million is planned for 2021. No other bond sales are planned. Bond Redemption & Interest Fund levy estimates are based on a 5.0 percent interest rate on new bond issuance;
- The District is expecting to receive approximately \$70 million annually from 2021 - 2025 in State Revolving Fund loans;

APPROPRIATION FORECASTS

Total District appropriations are summarized in the exhibit on page 62, and detailed in Table I on page 63. The year-to-year variation is largely due to the schedule of awards for major capital projects.

Key assumptions made in the appropriation forecasts:

- Short-term fluctuations in commodities such as lumber and metals should have little impact over the long term. Over the long term, these costs will be viewed as normal cost increases in tandem with an economy that will continue with modest growth trends for the projection period;
- Health care costs are projected to increase an average of 4.87 percent annually through 2025
- Salaries, wages, and other personal services costs are projected to increase by 2.0 percent annually, which results in an increase of \$16.9 million over 5 years in the Corporate Fund and \$882,400 in the Stormwater Management Fund;

Changes and explanations within the various District funds are as follows:

Corporate Fund

The Corporate Fund, the District's general fund, includes all appropriations for day-to-day operations. Appropriations for the fund are expected to increase an average of 2.4 percent annually from 2021 through 2025. This relative stability of appropriations is attributed to revenue estimates, as well as planned control of growth and stability in staffing levels. However, uncertainty related to the economy will have a significant impact on the District's revenues for 2021 and 2022. From 2021 to 2022, there is a projected \$6.9 million increase in revenue, while the years 2023 to 2025 return to an increase of approximately \$12 million annually. Projected recovery and continued initiatives to control costs will result in the Corporate Fund stabilizing by 2025.

The forecast for 2022 shows an increase in appropriation due primarily to an increase for Distributed Control System replacement or upgrade at Stickney in 2022 at a one-time cost of \$2.6 million.

Energy costs are expected to remain stable, increasing slightly from 2021 through 2025, although shifting weather patterns impact TARP pumping and the associated electrical energy demand. Increase in kilowatt usage is offset by a rate reduction and elimination of the Energy Efficiency Charge. Additionally, the District has completed Phases I and II of the guaranteed energy performance agreements with the Public Building Commission and NORESO, and Phase III is substantially complete. The work completed under the agreements includes replacing lighting, heating, ventilation, and air conditioning controls, and steam blanket insulation throughout the District. The estimated annual cost savings from the energy performance projects is approximately \$807,285, resulting in a simple payback of 14.9 years. The estimated annual electric and natural gas savings are 9,580,186 kWh and 250,570 therms respectively.

Over the next ten years, regulatory permit requirements for phosphorus and nitrogen may impact operational costs including both capital and chemical needs. Chemical costs are projected to increase by an average of 9.79 percent annually as the District will be required to meet stricter regulatory permit limits for phosphorus, with additional increases expected in 2026 and 2027 as requirements are phased in.

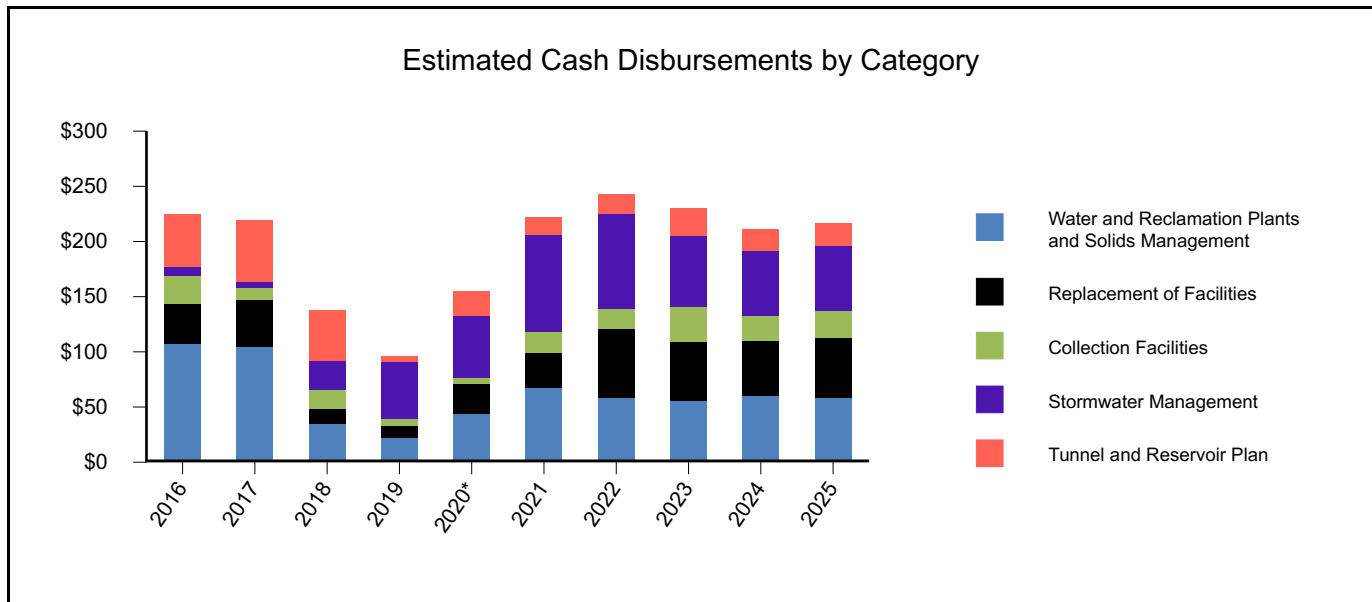
The forecast shows slow growth in computer system and communication costs. While newer systems may allow for cost savings in areas like server replacement, software maintenance costs are projected to continue to increase annually. This is an area where costs may grow faster than the current estimates show.

The District’s long-term benefits strategy continues to focus on rising health care costs. Employee and retiree benefits constitute approximately 10.3 percent of the Corporate Fund budget. While strategies to limit cost increases have resulted in costs remaining flat from 2015 to 2019, benefits are projected to increase an average 4.4 percent annually over the next five years. The District continues to fund the Other Postemployment Benefits Trust Fund to ensure future retiree health care benefits by contributing \$5.0 million annually through 2026. Salaries are projected to increase 2.0 percent from 2022 through 2025, while the number of positions is projected to remain stable.

Capital Improvements Bond and Construction Funds

The Capital Improvements Bond Fund (CIBF) accounts for all resources, principally State Revolving Fund loans, bond proceeds and Build America Bond rebates (categorized as grants), used for the construction of capital projects. Total bond sales to support the CIBF are projected at \$120 million in 2021. The District is also exploring other funding possibilities including Water Infrastructure Finance and Innovation Act (WIFIA) loans to help fund water reclamation plant modernization.

The Construction Fund is a pay-as-you go Capital fund used to finance modernization, rehabilitation, and small capital projects, funded primarily through annual property tax levies. Appropriations for this fund lapse at year-end and uncompleted projects must be reappropriated. Initial estimates and schedules have been analyzed and compared to bond issuance authority and funding availability. The estimated cash balances in the CIBF will accommodate the proposed projects through 2025. The table below shows the Estimated Cash Disbursements by Category for construction projects.



*Estimated 2020 Year-end

Retirement Fund

The 2021 appropriation for the Retirement Fund is \$88 million, a decrease of \$19 million from 2020 to 2021 due to the \$20.0 million advance funding in 2020. The appropriation is expected to be stable from 2022 through 2025, with slight year-over-year increases as the number of employees is expected to remain stable. Due to a change in legislation, beginning in 2013, the tax levy is based on the fund’s actuarially determined contribution requirement, but shall not exceed an amount equal to employee contributions of two years prior, multiplied by 4.19. The previous multiplier was 2.19, and employee contributions for employees who were fund members before January 1, 2011 increased one percent per year from nine percent in 2012 to 12 percent in 2015.

Debt Service Fund

Debt Service Fund appropriations will decrease slightly, an average of 1.4 percent annually over the next five years due primarily to the utilization of low-interest State Revolving Fund loans. Current debt service schedules, additional debt service requirements for new revolving fund loans, and anticipated bond sales will increase due to increased capital expenditures related to major plant expansion and system improvements, a phosphorus removal project, TARP reservoir projects, and Stormwater Management Program projects, including cost sharing projects with local municipalities that address localized flooding issues and the Addison Creek Reservoir.

In 2001, the Illinois Legislature amended the Metropolitan Water Reclamation District Act to allow the issuance of debt for up to 30 years (previously 20 years). The District's overall non-referendum authority was extended by the legislature in 2019 through December 31, 2034, effective January 1, 2020. In 2004, the District received authority to issue \$150 million (previously \$100 million) of non-referendum bonds during any budget year. These legislated changes provide resources for financing the capital program for the immediate five year time period covered by this forecast.

Reserve Claim Fund

The appropriation for the Reserve Claim Fund is expected to grow slowly between 2021 and 2025, from \$39.6 million to \$47.6 million. The Reserve Claim Fund is the District's self-insurance fund, and the annual appropriation equals all available resources in the fund. The projected annual appropriation is based on average annual expenditures of \$5.0 million remaining steady. Expenditures related to Workers' Compensation claims have been decreasing over the past three years and are expected to remain stable. Beginning in 2015, the District purchased insurance coverage for roughly \$10.5 billion in assets.

TAX LEVY FORECASTS

Tax levies are projected to increase by an average rate of 1.6 percent annually over the five-year period. Efforts will be undertaken to adjust annual variability consistent with meeting our objectives. Projections of tax levies and revenue sources for the various District funds are as follows:

Corporate Fund

Tax levy projections for the Corporate Fund are expected to increase by an average of 3.9 percent annually from 2021 through 2025, with a smaller increase of \$6.7 million or 2.6 percent in 2022 and larger increases in 2023 - 2025 as the economy is projected to recover. CPI growth is estimated at 1.5 percent for 2020, increasing to 2.3 percent in 2021, and 3.0 percent for 2022 to 2025. Property tax revenues account for 65.7 percent of 2021 Corporate Fund projected revenue.

Other significant funding sources include industrial user charge fees, investment income, and land rentals. The revenue from the user charge system, which by design recovers costs attributable to industrial users, is expected to stabilize at \$43.0 million after several years of slowly declining projections. Actual revenue collections have been variable, alternating from approximately \$41.0 million to \$50.0 million from 2015 to 2019, while the projection for 2021 is \$37.0 million due to anticipated refunds for low production in 2020 during Illinois' Stay At Home Executive Order.

Construction Fund

The tax levy for the Construction Fund is \$7.0 million in 2021. The levy is projected to increase slightly to \$7.5 million from 2022 - 2025 as the need for funding under the Tax Cap is expected to be most critical in the Corporate Fund. The Construction Fund finances small construction projects and equipment replacement on a pay-as-you-go basis.

Retirement Fund

The average annual increase projected for 2021 through 2025 is 1.6 percent for the Retirement Fund property tax levy. The Fund also receives a portion of the District's Personal Property Replacement Tax (PPRT) distribution from the State of Illinois equal to 20.9 percent of the total Retirement Fund revenues. In 2012, changes to the District's pension laws increased both the employee contributions and the District's contribution to the Retirement Fund. From 2015 to 2017, the Retirement Fund tax levy increased by over \$10 million each year as the legislative changes were phased in. From 2021 through 2025, the property tax levy, PPRT distribution, and the appropriation are expected to be stable.

Reserve Claim

The tax levy for the Reserve Claim Fund is projected to be \$7.5 million in 2021 and remain flat at \$7.5 million from 2022 through 2025.

Stormwater Management Fund

The Stormwater Management Fund levy is projected to remain flat over the next five years as the District continues to address local flooding issues. Regional stormwater management projects are being vetted for funding in 2021 and the following years. In 2020 and 2021 several large capital stormwater reservoirs are being constructed that will bring flood control to communities throughout Cook County.

Bond Redemption and Interest Fund

The 2021 tax levies for the District's Debt Service Fund are based on six refunding bonds, 10 Capital Improvements bonds, and 66 State Revolving Fund (SRF) loans. Additional projected capital improvement and SRF loans sales will be used to finance TARP, water reclamation plant rehabilitation, flood prevention, and other capital projects. Debt service funds account for annual property tax levies and certain other revenues, primarily investment income, that is used to finance the payment of interest and principal on general obligation bond issues. Stormwater Alternate Revenue Bonds are paid from the Stormwater Levy and the same amount is abated from the debt service tax levy. The projected debt for the District during 2021 through 2025 appears on page 66. The District's outstanding bonds and ability to issue additional bonds are presented on pages 522 - 526.

TAX RATE FORECASTS

Forecasts of property tax rates are dependent on projected EAV. The estimated tax rates are calculated using the projected levy and EAV applicable for a particular tax year. Assuming a 3.0 percent annual increase in EAV, the District's tax rate per \$100 of assessed value is projected to decline slightly from \$0.378 per \$100 of assessed value in 2021 to \$0.358 in 2025.

Annual tax rate limits exist for the District's Corporate, Construction, Reserve Claim, and Working Cash Funds. The District's Corporate and Construction Funds annual tax rate limits are 41 and 10 cents per \$100 of assessed value, respectively. Adequate margins exist in both the Corporate and Construction Funds to extend taxes for District operations. A half-cent annual levy is allowed for the Reserve Claim, Corporate, and Construction Working Cash Funds. The Stormwater Management Fund can levy up to five cents and is not limited by the Tax Cap. The rates are expected to decrease primarily due to the projected flat Stormwater Management levy.

SUPPORTING EXHIBITS

The data presented to illustrate the projected financial status of the District is divided into six segments: Summary of All Funds, the Corporate Fund, Capital Improvements Funds, Debt Service, Program Distribution within Fund, and the Combined GAAP-Basis Balance Sheets for the General Corporate Fund.

The graphs on page 62, and the tables on page 63, summarize the projected appropriations, property tax rates, and tax levies for all funds for the years 2021 through 2025. Historical comparisons can be made by reviewing the actual appropriations, tax rates, and levies for the years 2012 through 2021 on page 41.

Table II, on page 64 provides detailed revenue and tax rate projections, as well as appropriations by department and major categories for the Corporate Fund for 2021 through 2025. Corporate Fund appropriations and expenditures for the years 2012 through 2021 can be found on page 105.

Projections for revenues, tax rates, and appropriations for the Construction Fund for the years 2021 through 2025, appear on page 65, and projected appropriable resources and appropriations for the Capital Improvements Bond Fund appear on page 66. The exhibits on page 67 present appropriation projections by major programs. A summary of actual and projected construction expenditures for both funds, for the years 2016 through 2025, can be found in the Capital Improvement Program Section, on page 330.

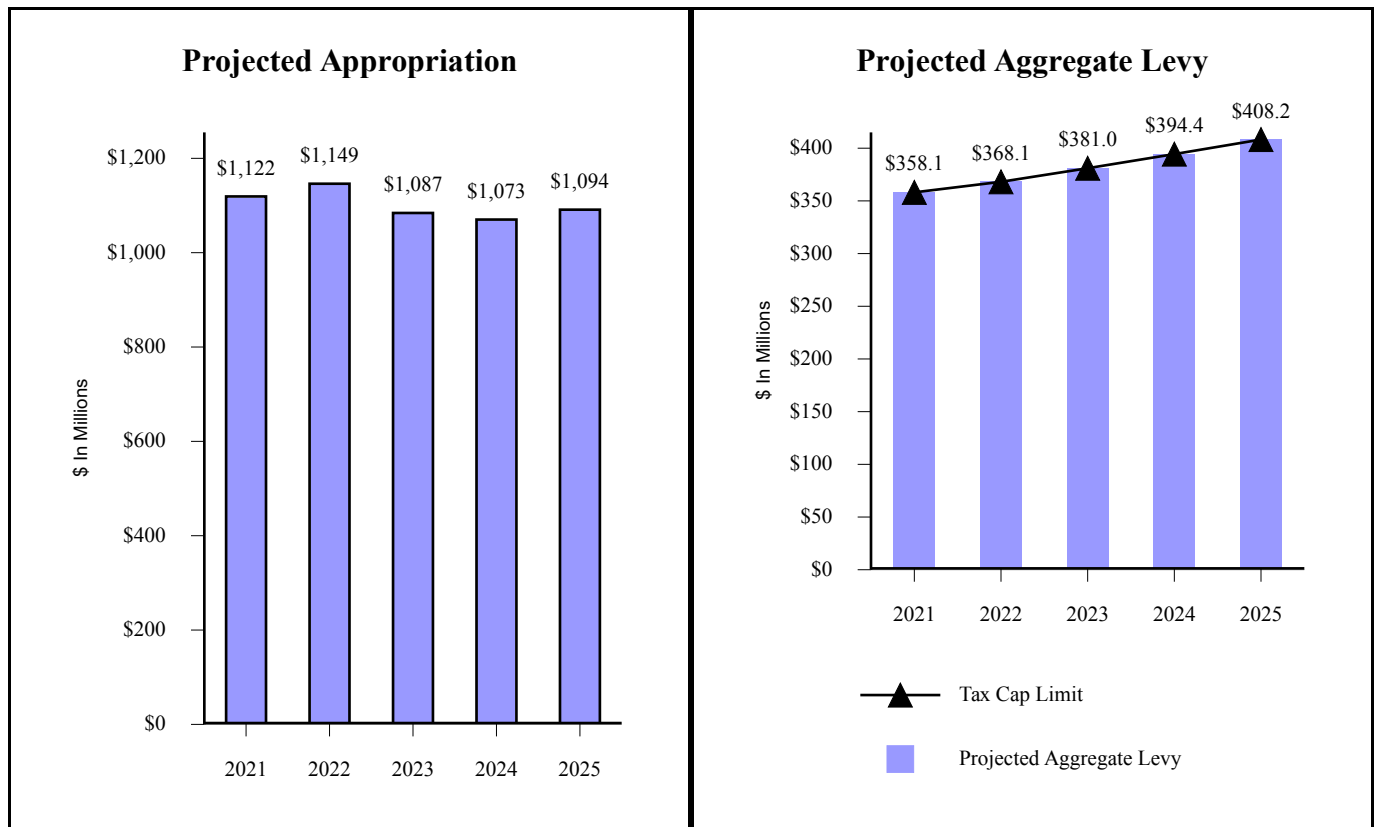
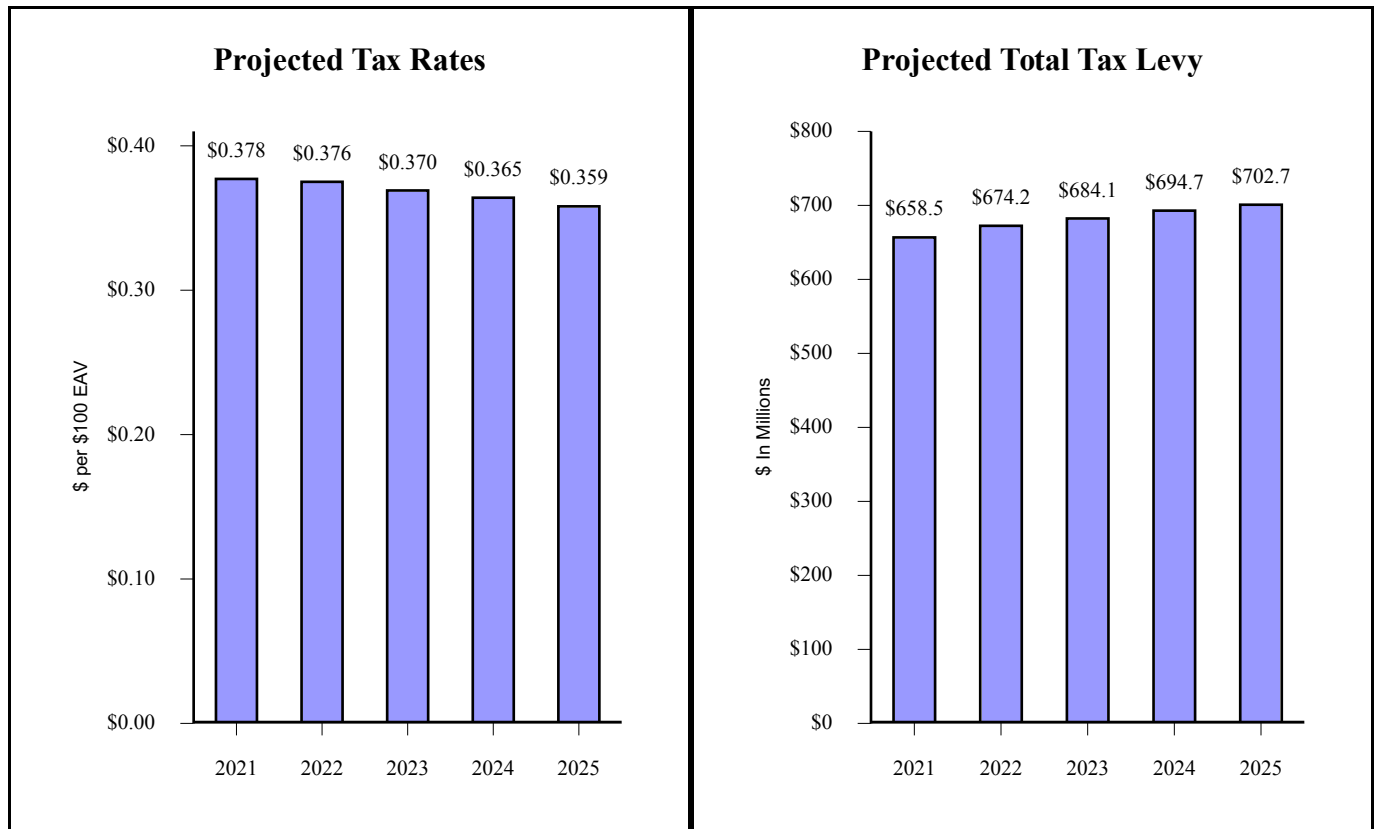
The balance sheet statement on page 78 is prepared on a GAAP-basis of accounting and is included to show the effect on the General Corporate Fund, which is comprised of the Corporate, Corporate Working Cash, and Reserve Claim Funds. The total fund equity projection for 2021 is \$310.6 million.

Respectfully submitted,



Shellie A. Riedle
Budget Officer

FIVE-YEAR FINANCIAL FORECAST, 2021 - 2025



FIVE-YEAR FINANCIAL FORECAST, 2021 - 2025

TABLE I

ALL FUNDS					
Projected Tax Rates	2021	2022	2023	2024	2025
Corporate	\$ 0.1556	\$ 0.1551	\$ 0.1571	\$ 0.1591	\$ 0.1611
Construction	0.0040	0.0042	0.0041	0.0039	0.0038
Stormwater Management	0.0304	0.0295	0.0287	0.0278	0.0270
Debt Service	0.1422	0.1412	0.1355	0.1301	0.1233
Retirement	0.0418	0.0419	0.0411	0.0404	0.0396
Reserve Claim	0.0043	0.0042	0.0041	0.0039	0.0038
Total (\$ in cents)	\$ 0.3782	\$ 0.3761	\$ 0.3705	\$ 0.3653	\$ 0.3587
Percentage Change		(0.57)%	(1.49)%	(1.40)%	(1.79)%
Projected tax rate per \$100 Equalized Assessed Valuation (EAV). Assumes 2020 EAV of \$160.5 billion increasing 3.0% annually from 2021 - 2025.					
Projected Tax Levies	2021	2022	2023	2024	2025
Corporate	\$ 270,881	\$ 277,994	\$ 290,078	\$ 302,614	\$ 315,603
Construction	7,000	7,500	7,500	7,500	7,500
Stormwater Management	52,926	52,926	52,926	52,926	52,926
Debt Service- Existing	247,444	245,303	240,526	236,423	229,225
Debt Service- Proposed	—	7,838	9,582	10,979	12,375
Retirement	72,742	75,152	75,963	76,772	77,596
Reserve Claim	7,500	7,500	7,500	7,500	7,500
Total Levy (\$ in thousands)	\$ 658,492	\$ 674,213	\$ 684,074	\$ 694,714	\$ 702,725
Percentage Change	1.10%	2.39 %	1.46 %	1.56 %	1.15 %
Aggregate Levy (\$ in thousands)	\$ 358,122	\$ 368,146	\$ 381,040	\$ 394,386	\$ 408,199
Percentage Change	2.00%	2.80 %	3.50 %	3.50 %	3.50 %
Projected Annual Appropriations	2021	2022	2023	2024	2025
Corporate	\$ 397,720	\$ 414,446	\$ 420,628	\$ 429,756	\$ 437,398
Capital Improvements Bond	240,277	257,306	203,181	191,156	209,731
Construction	14,103	11,547	10,784	10,570	10,523
Stormwater Management	109,966	99,616	83,174	67,461	63,038
Debt Service- Existing	232,126	229,888	226,352	226,352	219,191
Debt Service- Proposed	—	5,983	7,788	9,807	13,139
Retirement	88,127	88,754	91,695	92,684	93,672
Reserve Claim	39,625	41,125	43,625	45,625	47,625
Total Appropriation (\$ in thousands)	\$ 1,121,944	\$ 1,148,664	\$ 1,087,226	\$ 1,073,411	\$ 1,094,317
Projected Positions	2021	2022	2023	2024	2025
Corporate	1,845	1,843	1,842	1,841	1,841
Stormwater Management	96	95	95	95	95
Total Positions	1,941	1,938	1,937	1,936	1,936

Note: Totals are rounded.

FIVE-YEAR FINANCIAL FORECAST, 2021 - 2025

TABLE II

CORPORATE FUND						% average annual change
Five-Year Revenue and Tax Rate Projections	2021	2022	2023	2024	2025	2021-2025
Property Taxes	\$ 261,400	\$ 268,265	\$ 279,925	\$ 292,022	\$ 304,557	3.90 %
Personal Property Replacement Tax	16,000	17,000	18,250	18,000	18,000	3.06 %
User Charge	37,000	43,000	43,000	43,000	43,000	4.05 %
Investment Income	860	588	633	777	958	5.52 %
Land Rentals	24,500	24,500	25,000	25,250	25,500	1.01 %
Miscellaneous	11,395	11,623	12,030	12,451	12,886	3.13 %
Equity Transfer	4,500	—	—	—	—	
Net Assets Appropriable	131,023	120,776	100,316	87,970	79,797	(11.59)%
Budget Reserve	(88,958)	(71,305)	(58,526)	(49,714)	(47,301)	(14.42)%
Total Appropriable Resources (\$ in thousands)	\$ 397,720	\$ 414,446	\$ 420,628	\$ 429,756	\$ 437,398	2.41 %
Projected Equalized Assessed Valuation (EAV) (Based on 2019 EAV, assumes 3.0% increase for 2020 and then 3.0% annually)	\$ 174.05 billion	\$ 179.27 billion	\$ 184.65 billion	\$ 190.18 billion	\$ 195.89 billion	
Projected Tax Rate Cents per \$100 EAV	15.6¢	15.5¢	15.7¢	15.9¢	16.1¢	
Gross Levy - assumes 3.5% uncollectible.	\$ 270,881	\$ 277,994	\$ 290,078	\$ 302,614	\$ 315,603	
Projected Appropriations by Major Categories	2021	2022	2023	2024	2025	2021-2025
Employee Cost - Salaries	\$ 205,103	\$ 209,205	\$ 213,390	\$ 217,657	\$ 222,011	2.00 %
Employee Cost - Health Care	41,148	43,160	45,260	47,461	49,775	4.87 %
Other Postemployment Benefits Trust	5,000	5,000	5,000	5,000	5,000	— %
Professional Services	6,418	6,482	6,547	6,612	6,678	1.00 %
Energy Cost	41,265	41,677	42,094	42,515	42,940	1.00 %
Chemicals	11,170	12,347	14,097	16,112	16,139	9.79 %
Materials & Supplies	15,038	15,189	15,341	15,494	15,649	1.00 %
Solids Disposal	13,479	13,613	13,750	13,887	14,026	1.00 %
Contracted Solids Disposal	4,500	4,792	4,996	5,205	5,421	4.77 %
Computer Systems & Telecommunications	14,874	15,023	15,173	15,325	15,478	1.00 %
Repairs to Structures & Equipment	16,384	23,178	19,023	18,335	17,990	4.51 %
Contractual Services	19,845	21,174	22,233	22,301	22,301	3.00 %
Machinery & Equipment	2,665	2,692	2,719	2,746	2,774	1.01 %
Real Estate Taxes	831	914	1,005	1,106	1,216	9.98 %
Total (\$ in thousands)	\$ 397,720	\$ 414,446	\$ 420,628	\$ 429,756	\$ 437,398	2.41 %
Projected Appropriations by Department	2021	2022	2023	2024	2025	2021-2025
Board of Commissioners	\$ 5,212	\$ 5,406	\$ 5,497	\$ 5,583	\$ 5,667	2.12 %
General Administration	20,953	20,049	20,241	21,274	21,303	0.47 %
Monitoring & Research	32,724	33,458	33,335	33,854	34,340	1.22 %
Procurement & Materials Management	10,509	10,089	10,159	10,322	10,461	(0.09)%
Human Resources	61,100	64,474	67,426	70,398	73,389	4.69 %
Information Technology	18,987	19,448	20,042	20,474	20,928	2.46 %
Law	7,952	8,259	8,496	8,722	8,926	2.93 %
Finance	3,877	4,023	4,083	4,172	4,195	2.00 %
Engineering	25,926	26,845	27,382	27,856	28,121	2.06 %
Maintenance & Operations	210,480	222,395	223,967	227,101	230,068	2.27 %
Total (\$ in thousands)	\$ 397,720	\$ 414,446	\$ 420,628	\$ 429,756	\$ 437,398	2.41 %
Projected Appropriation Distribution by Program	2021	2022	2023	2024	2025	2021-2025
1000 Collection	\$ 57,752	\$ 60,431	\$ 60,654	\$ 61,038	\$ 61,844	1.7 %
2000 Treatment	89,668	96,447	96,999	98,290	99,527	2.68 %
3000 Solids Processing	46,979	48,807	49,170	50,352	50,987	2.07 %
4000 Flood & Pollution Control	42,414	42,364	42,314	43,104	43,613	0.70 %
5000 Solids Disposal	26,023	28,077	28,991	29,489	30,025	3.67 %
7000 General Support	134,884	138,320	142,500	147,483	151,402	2.9 %
Total (\$ in thousands)	\$ 397,720	\$ 414,446	\$ 420,628	\$ 429,756	\$ 437,398	2.41 %

Note: Totals are rounded.

FIVE-YEAR FINANCIAL FORECAST, 2021 - 2025

TABLE III

CONSTRUCTION FUND					
Five-Year Revenue and Tax Rate Projections	2021	2022	2023	2024	2025
Property Taxes	\$ 6,755	\$ 7,238	\$ 7,238	\$ 7,238	\$ 7,238
Investment Income & Miscellaneous Revenue	48	78	83	97	115
Net Assets Appropriable	7,300	4,231	3,464	3,235	3,171
Total Revenue & Appropriable Resources (\$ in thousands)	\$ 14,103	\$ 11,547	\$ 10,784	\$ 10,570	\$ 10,523
Projected Equalized Assessed Valuation (EAV)	\$ 174.05	\$ 179.27	\$ 184.65	\$ 190.18	\$ 195.89
(Based on 2019 EAV, assumes 3.0% increase for 2020 and then 3.0% annually thereafter)	billion	billion	billion	billion	billion
Projected Tax Rate Cents per \$100 of EAV	0.4¢	0.4¢	0.4¢	0.4¢	0.4¢
Gross Levy - assumes 3.5% uncollectible rate.	7,000	7,500	7,500	7,500	7,500
Projected Appropriations	2021	2022	2023	2024	2025
Capital Projects	\$ 9,619	\$ 9,574	\$ 8,560	\$ 6,580	\$ 5,596
Professional Services	4,484	1,973	2,224	3,990	4,927
Other Charges	—	—	—	—	—
Total (\$ in thousands)	\$ 14,103	\$ 11,547	\$ 10,784	\$ 10,570	\$ 10,523
Projected Appropriation Distribution by Program	2021	2022	2023	2024	2025
1000 Collection	\$ 2,358	\$ 949	\$ 684	\$ 1,060	\$ 1,553
2000 Treatment	3,829	8,418	7,256	4,479	2,285
3000 Solids Processing	150	102	110	186	217
4000 Flood & Pollution Control	4,196	791	1,175	2,497	3,374
5000 Solids Disposal	3,070	47	191	729	1,371
7000 General Support	500	1,240	1,368	1,619	1,723
Total (\$ in thousands)	\$ 14,103	\$ 11,547	\$ 10,784	\$ 10,570	\$ 10,523
STORMWATER MANAGEMENT FUND					
Five-Year Revenue and Tax Rate Projections	2021	2022	2023	2024	2025
Property Taxes	\$ 51,074	\$ 51,074	\$ 51,074	\$ 51,074	\$ 51,074
Investment Income & Miscellaneous Revenue	88	175	189	232	286
Sewer Permit Fees	1,500	1,000	1,000	1,000	1,000
Grants	4,500	4,000	2,000	2,000	2,000
Net Assets Appropriable	58,765	54,189	39,734	24,158	19,498
Equity Transfer (Debt Service for Alternate Revenue Bonds)	(5,961)	(10,822)	(10,822)	(10,823)	(10,820)
Total Revenue & Appropriable Resources (\$ in thousands)	\$ 109,966	\$ 99,616	\$ 83,174	\$ 67,641	\$ 63,038
Projected EAV	\$ 174.05	\$ 179.27	\$ 184.65	\$ 190.18	\$ 195.89
(Based on 2019 EAV, assumes 3.0% increase for 2020 and then 3.0% annually)	billion	billion	billion	billion	billion
Projected Tax Rate Cents per \$100 of EAV	3.0¢	3.0¢	2.9¢	2.8¢	2.7¢
Gross Levy - assumes 3.5% uncollectible rate.	\$ 52,926	\$ 52,926	\$ 52,926	\$ 52,926	\$ 52,926
Projected Appropriations	2021	2022	2023	2024	2025
Employee Cost - Salaries	\$ 10,705	\$ 10,919	\$ 11,138	\$ 11,360	\$ 11,588
Employee Cost - Health Care	914	954	995	1,039	1,085
Contractual Services	48,642	50,696	39,407	15,539	11,502
Capital Projects	2,970	2,822	2,581	3,229	3,234
Other Charges	46,735	34,225	29,053	36,293	35,630
Total (\$ in thousands)	\$ 109,966	\$ 99,616	\$ 83,174	\$ 67,461	\$ 63,038
Projection Appropriation Distribution by Program	2021	2022	2023	2024	2025
4000 Flood & Pollution Control	\$ 109,966	\$ 99,616	\$ 83,174	\$ 67,461	\$ 63,038
Total (\$ in thousands)	\$ 109,966	\$ 99,616	\$ 83,174	\$ 67,461	\$ 63,038

Note: Totals are rounded.

FIVE-YEAR FINANCIAL FORECAST, 2021 - 2025

TABLE IV

CAPITAL IMPROVEMENTS BOND FUND*					
Appropriable Resources (Cash)	2021	2022	2023	2024	2025
Bond Sales - Limited	\$ 100,000	\$ —	\$ —	\$ —	\$ —
Bond Sales - Unlimited	20,000	—	—	—	—
Bond Sales - Unlimited Stormwater Management	—	—	—	—	—
State Revolving Loan Fund Receipts	70,000	70,000	70,000	70,000	70,000
Investment Income & Grant Revenue	15,607	14,433	13,782	14,457	14,760
Beginning Cash	252,025	389,132	273,565	157,347	41,804
Total Assets Appropriable (\$ in thousands)	\$ 457,632	\$ 473,565	\$ 357,347	\$ 241,804	\$ 126,564
Expenditures	\$ 68,500	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Ending Cash (\$ in thousands)	\$ 389,132	\$ 273,565	\$ 157,347	\$ 41,804	\$ (73,436)
Projected Appropriations by Major Categories					
Professional Consulting Services	\$ 4,072	\$ 10,396	\$ 12,386	\$ 10,396	\$ 8,405
Capital Projects	234,502	244,688	188,441	178,538	199,235
Other Charges	1,703	2,222	2,353	2,222	2,091
Total (\$ in thousands)	\$ 240,277	\$ 257,306	\$ 203,181	\$ 191,156	\$ 209,731
Projected Appropriation Distribution by Program					
1000 Collection	\$ 49,473	\$ 66,413	\$ 29,013	\$ 37,515	\$ 17,143
2000 Treatment	94,599	89,709	94,484	100,654	145,412
3000 Solids Processing	6,415	27,454	19,396	9,279	12,811
4000 Flood & Pollution Control	89,040	72,668	56,260	42,645	33,381
5000 Solids Disposal	500	708	3,648	708	656
7000 General Support	250	354	380	354	328
Total (\$ in thousands)	\$ 240,277	\$ 257,306	\$ 203,181	\$ 191,156	\$ 209,731

*The Capital Improvements Bond Fund is appropriated on an obligation basis. Expenditures are expected to be disbursed over the term of the projects funded.

DEBT SERVICE FUNDS					
Projected Debt					
<u>EXISTING DEBT</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
January 1 Debt	\$ 2,694,934	\$ 2,762,188	\$ 2,706,467	\$ 2,646,493	\$ 2,581,006
Annual Current Debt Retirement	(122,746)	(124,356)	(124,791)	(125,562)	(125,693)
Net Debt	\$ 2,572,188	\$ 2,637,832	\$ 2,581,676	\$ 2,520,931	\$ 2,455,312
<u>PROPOSED FUTURE DEBT</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Annual Sale of Bonds:					
Capital Bonds - Limited	\$ 100,000	\$ —	\$ —	\$ —	\$ —
Capital Bonds - Unlimited	20,000	—	—	—	—
Alternate Bonds - Unlimited Stormwater	—	—	—	—	—
State Revolving Fund Bond Issues	70,000	70,000	70,000	70,000	70,000
Future Debt Retirement	—	(1,365)	(5,183)	(9,925)	(12,937)
Proposed New Debt (\$ in thousands)	\$ 190,000	\$ 68,635	\$ 64,817	\$ 60,075	\$ 57,063
PROJECTED DEBT OUTSTANDING	\$ 2,762,188	\$ 2,706,467	\$ 2,646,493	\$ 2,581,006	\$ 2,512,376
Gross Levy for Existing Debt	\$ 247,444	\$ 245,303	\$ 240,526	\$ 236,423	\$ 229,225
Gross Levy for Future Debt	\$ —	\$ 7,838	\$ 9,582	\$ 10,979	\$ 12,375
Total Debt Levy	\$ 247,444	\$ 253,140	\$ 250,108	\$ 247,402	\$ 241,600
Tax Rate (cents)	14.2¢	14.1¢	13.5¢	13.0¢	12.3¢
Projected Stormwater Alternate Revenue Abatement**	\$ (5,961)	\$ (10,822)	\$ (10,822)	\$ (10,823)	\$ (10,820)
Projected Levy After Abatement	\$ 241,483	\$ 242,318	\$ 239,286	\$ 236,579	\$ 230,779
Projected Equalized Assessed Valuation (EAV)***	\$ 174.05	\$ 179.27	\$ 184.65	\$ 190.18	\$ 195.89
	billion	billion	billion	billion	billion

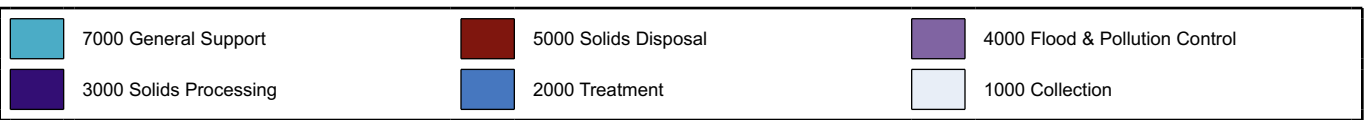
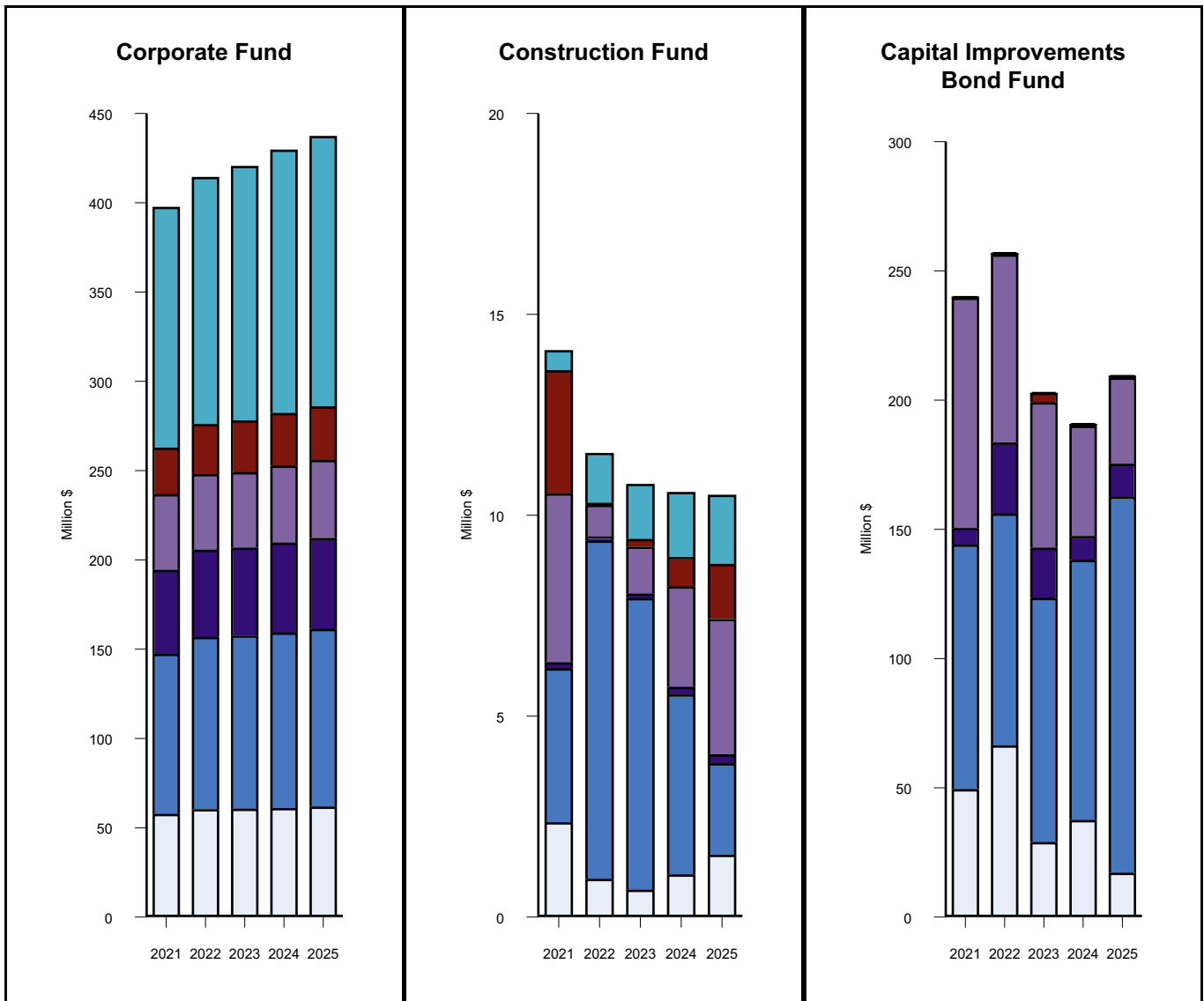
**As part of the plan of financing, it is intended and anticipated that tax revenues deposited in the Stormwater Fund be transferred to the Bond Fund

Note: Totals are rounded.

***Assumes a 3.0% increase in 2020, and a 3.0% increase annually thereafter.

FIVE-YEAR FINANCIAL FORECAST, 2021 - 2025

APPROPRIATIONS



This set of stacked bar charts is a restatement of each fund's appropriation table. The relatively steady proportions across all programs within the Corporate Fund reflect the District's consistent view of its objectives in the near term. The most significant aspect of the Construction Fund involves increasing its use for smaller pay-as-you-go capital projects administered by the Maintenance & Operations Department. The fluctuations in the Capital Improvements Bond Fund's (CIBF) appropriations represent the award of major Master Plan and disinfection projects. The CIBF operates on a full obligation basis and is the only fund where the encumbered appropriations do not lapse at the fiscal year end.

FIVE-YEAR FINANCIAL FORECAST, 2021 - 2025

Combined GAAP Balance Sheets - General Corporate Fund
(in Thousands)

Assets	2021	2022	2023	2024	2025
Cash	\$ 7,750	\$ 7,905	\$ 8,063	\$ 8,224	\$ 8,388
Prepaid Insurance	6,061	6,182	6,306	6,432	6,561
Investments	246,027	250,948	255,967	261,086	266,308
Receivables:					
Property Taxes	278,381	285,494	297,578	310,114	323,103
Less Allowance for Uncollectible Taxes	(9,743)	(9,992)	(10,415)	(10,854)	(11,309)
Net Property Taxes Receivable	268,638	275,502	287,163	299,260	311,794
Personal Property Replacement Tax	16,000	17,000	18,250	18,000	18,000
User Charges	2,333	2,380	2,428	2,477	2,527
Miscellaneous	417	425	434	443	452
Due from Stormwater Management Fund					
Restricted Deposits					
Inventories	36,472	37,201	37,945	38,704	39,478
Total Assets	\$ 567,698	\$ 580,543	\$ 598,306	\$ 616,626	\$ 635,508
Liabilities and Fund Equity					
Liabilities:					
Deferred Tax Revenue	\$ 231,144	\$ 233,455	\$ 235,790	\$ 238,148	\$ 240,529
Accounts Payable and Other Liabilities	25,976	25,456	24,947	24,448	24,937
Unearned Revenue	—	—	—	—	—
Total Liabilities	\$ 257,120	\$ 258,911	\$ 260,737	\$ 262,596	\$ 265,466
Fund Equity:					
Fund Balances					
Prepaid Insurance	\$ 6,061	\$ 6,182	\$ 6,306	\$ 6,432	\$ 6,561
Non-spendable - Inventory	36,472	37,201	37,945	38,704	39,478
Restricted - Working Cash	295,916	301,834	307,871	314,028	320,309
Real Estate Escrow	2,407	2,409	2,412	2,414	2,416
Reserve Claim	30,967	31,586	32,218	32,862	33,519
Deposits	—	—	—	—	—
Unassigned:					
Unassigned	(61,245)	(57,580)	(49,183)	(40,410)	(32,241)
Total Fund Equity	\$ 310,578	\$ 321,632	\$ 337,569	\$ 354,030	\$ 370,042
Total Liabilities and Fund Equity	\$ 567,698	\$ 580,543	\$ 598,306	\$ 616,626	\$ 635,508

Note: Totals are rounded.

SECTION III

FINANCIAL STATEMENTS BY FUND

In this section, the financial structure of the District is presented with an explanation of the funds used, the accounting basis employed, and the relationships among the various funds. All financial statements, which Illinois Compiled Statutes require to be included in the Budget, are presented in this section. These statements and schedules provide full disclosure of assets and liabilities.

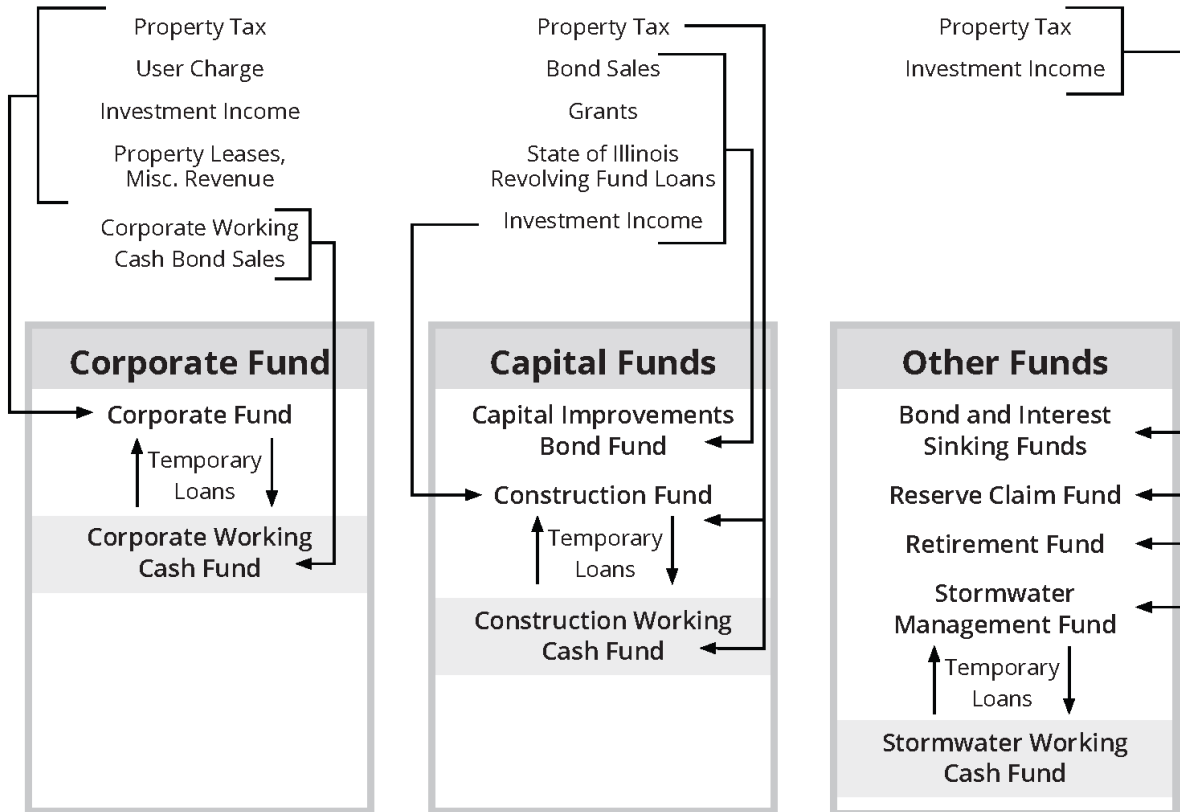
The financial statements are first presented in summary, with an overall financial narrative, then with summary statements of revenue and expenditures for 2019 through the Budget Year 2021. Consolidated statements of taxes receivable, providing historical data on tax levies, are included in this section. A consolidated Appropriation for Liabilities statement is presented, which identifies and provides an appropriation for unpaid bills, contracts, and other liabilities. These liabilities are then subtracted from current assets to determine assets available for appropriation.

Major fund category narratives are presented for the Corporate Fund, Capital Funds, and Other Funds, which discuss revenue sources, trends in revenue and expenditures, fiscal/financial policies, and other elements of these funds. Estimated balance sheets, statements of appropriable revenue, and statements of financial sources are then presented individually for each fund.

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District's Flow of Funds Structure

Revenue Sources



Uses of Funds

General Operational Expenditures

Permanent Facilities
 Environmental Facilities
 Stormwater Management Projects
 Other Capital Expenditures

Principal and Interest on Bond Issues
 Payments for Claims and Damages
 Employee Pension Payments
 Stormwater Management Expenditures

Note: Working Cash can be transferred between other Working Cash Funds.

FINANCIAL NARRATIVE

FUND STRUCTURE, PURPOSE, AND ACCOUNTING BASIS

The financial structure of the Metropolitan Water Reclamation District of Greater Chicago (District) is organized on a fund accounting basis. Each statutorily authorized fund maintains a self-balancing set of accounts that are reported separately in their own financial statements. The District's use of funds ensures that public money is spent appropriately and within the amounts authorized. Established funds account for the different types of activities and legal restrictions that are associated with a particular government function. The use of funds and the budgeting, accounting, and auditing that are associated with this type of structure are governed by Illinois Compiled Statutes and Generally Accepted Accounting Principles (GAAP), as determined by the Governmental Accounting Standards Board (GASB).

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

- Corporate
- Capital Improvements Bond
- Construction
- Stormwater Management
- Reserve Claim
- Corporate Working Cash
- Bond Redemption & Interest (Debt Service)
- Construction Working Cash
- Stormwater Working Cash
- Retirement

BASIS OF BUDGETING AND ACCOUNTING

The budget is prepared using a cash basis of accounting for revenue recognition and an accrual basis for recording expenditures, as prescribed by Illinois Compiled Statutes. Revenues are recognized when received in cash, and expenditures are recorded at the time the liability is incurred, except for principal and interest on long-term debt, compensated absences, claims, judgments, and arbitrage, which are recognized when due and payable.

Encumbrance accounting is used in the budgetary process for all funds. Appropriations lapse at year end for the Corporate, Stormwater Management, Reserve Claim, Construction, Retirement, and Bond Redemption & Interest Funds. Appropriations for the Capital Improvements Bond Fund use a full encumbrance (obligation) method of budgetary accounting, which means that appropriations lapse at year-end only to the extent of the unencumbered balances. The appropriation for the Capital Improvements Bond Fund is adjusted to carry forward the open value of encumbrances from the prior year.

All of the funds in the previous section are defined as governmental-type funds, except for the pension trust fund. For GAAP purposes, the governmental-type funds are accounted for on a spending or "financial flow" measurement focus using the modified accrual basis of accounting, which means that only current assets and liabilities are generally included on the balance sheets. The reported fund balances (net current assets) are considered a measure of "available spendable resources."

The Comprehensive Annual Financial Report of the District is prepared on a GAAP basis. GASB 34 became effective for the 2002 fiscal year, and the District is in compliance with all of its provisions. The District is using the modified approach for assessing infrastructure, except for Tunnel and Reservoir Plan (stormwater) deep tunnels and drop shafts, which will be depreciated. The District uses specific accounts to record the repair or preservation of existing capital assets, in addition to the construction of new assets or enhancements of existing capital assets. Inventory is accounted for on the purchase method for budgetary purposes and on the consumption method for GAAP financial reporting.

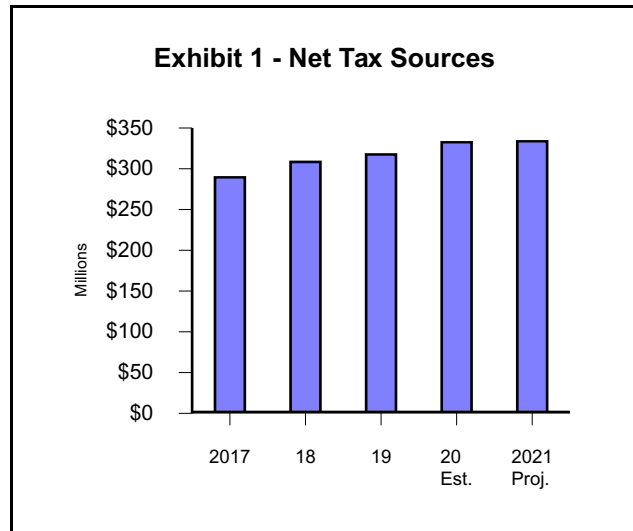
The District is a special district government created by the State of Illinois. Its powers and authority, in regard to revenue sources, are generally restricted to those powers granted by applicable state statutes. The following exhibits, 1 - 5, are derived from the summary of revenue and expenditures found on pages 74 - 76 of the 2021 Budget and similar summaries in prior years' budgets. This section contains a summary of all District funds.

TAX SOURCES

The main source of revenue for the District is ad valorem property taxes. The authority to levy property taxes for the various funds generally specifies a tax rate limit per hundred dollars of property value, which when applied, yields a maximum amount of money which can be levied or collected against property owners. All District funds, with the exception of the District's Capital Improvements Bond Fund, derive their revenues primarily from property taxes. Approximately 71.6 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. Estimated tax collections for 2021 are detailed on page 81. Net Tax Sources displayed in Exhibit 1 reflect only property tax revenue for the Corporate, Construction, and Stormwater Management Funds. The estimate for uncollectible taxes for 2021 is 3.5 percent, based on annual review of prior years' tax collections.

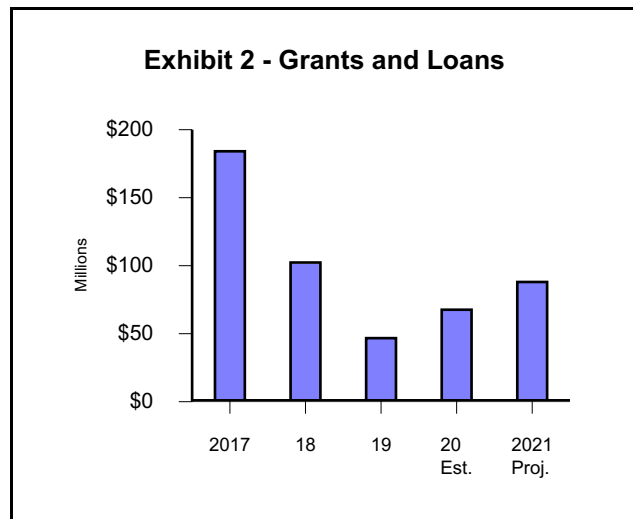
A Personal Property Replacement Tax (PPRT) provides income tax revenue from corporations, partnerships, and the invested capital of public utilities to replace the personal property taxes, which were once received from these sources. These revenues are received directly from the State of Illinois. Revenue from this source is estimated at \$34.6 million for 2021, a decrease of \$2.9 million from the 2020 Original Budget, or 7.7 percent. This revenue source typically trends with the state of the economy.

Exhibit 1 presents revenue from net tax sources for the years 2017 - 2021. Beginning in 1995, the Illinois Tax Cap laws limit increase in property tax levies in the aggregate to the lesser of 5.0 percent or the change in the national Consumer Price Index (CPI). The 2020 CPI increase is projected to be 1.5 percent for the 2021 levies, while a 0.3 percent increase is projected for new development and newly annexed properties. The Stormwater Management Fund and the payment of Bond principal and interest are exempt from the tax cap extension limitations.



GRANTS AND LOANS

Federal and state grants, and state loans contribute to finance the District's capital programs. For 2021, \$70.0 million in Wastewater/Stormwater State Revolving Fund (SRF) loan revenue and \$19.0 million in federal and state grants are budgeted. The District has been successful in obtaining grant funding and will continue to pursue grants for stormwater and other projects. The District submitted an application to the Federal Emergency Management Agency for reimbursement of costs associated with COVID-19 pandemic and expects an allocation of \$212,000 in Coronavirus Aid, Relief, and Economic Security (CARES) Act funding from Cook County to cover expenses related to maintaining operations during the pandemic. Exhibit 2 shows the grants and loans for the years 2017 - 2021. The District anticipates receiving an annual allocation of up to \$70 million in SRF loans in each of the next four years.



BOND SALES

The District's Capital Program is financed primarily with SRF loans and general obligation bond sale proceeds. Bonds are used to provide necessary revenue for capital project cash flows. The District is planning a \$120.0 million bond sale in 2021. The District is also exploring Water Infrastructure Finance and Innovation Act (WIFIA) funding for future projects.

In both 2014 and 2016, General Obligation Unlimited Tax Bonds were issued as “alternate revenue bonds” pursuant to the Debt Reform Act. The 2014 Series B and 2016 Series E bonds are paid by the District from the levy and collection of Stormwater Management tax receipts, which constitute a “revenue source” pledged as security for the payment of principal and interest on the bonds.

The Capital Funds narrative on page 90 provides a more detailed discussion. The statement of outstanding bonds and statutory debt margin on pages 51 and 52 shows the District's strong position. The Five-Year Financial Forecast on pages 58 and 67 details future bond sale projections.

PROPERTY, SERVICES, AND MISCELLANEOUS

Exhibit 3 summarizes revenue from property, services, and miscellaneous items. A major revenue source is the user charge system, which imposes a surcharge above property tax payments for commercial, industrial, and tax-exempt users of the sewage systems. Estimated User Charge revenues in 2021 are \$37.0 million, a decrease of \$6 million from the 2020 budget due to the decreased industrial production during the pandemic.

Land rentals, investment income, sewer permit fees, connection impact fees, and other revenues will provide an estimated \$46.8 million in 2021.

Estimates for land rental revenues are based on existing and renegotiated leases. Investment income is based on projections of cash flow and interest rates for 2021. Interest rates on short-term securities are expected to remain low during 2021. Our investments are predominately short-term in nature.

Sewer permit revenue estimates are based on anticipated projects and 2020 rates. Connection impact fees were established in 1998 to require new service areas to contribute to the past investment in the District’s infrastructure.

NET ASSETS APPROPRIABLE

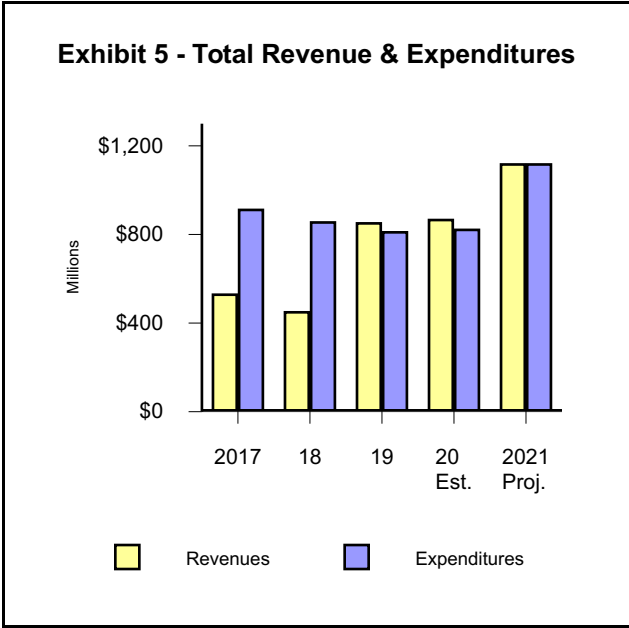
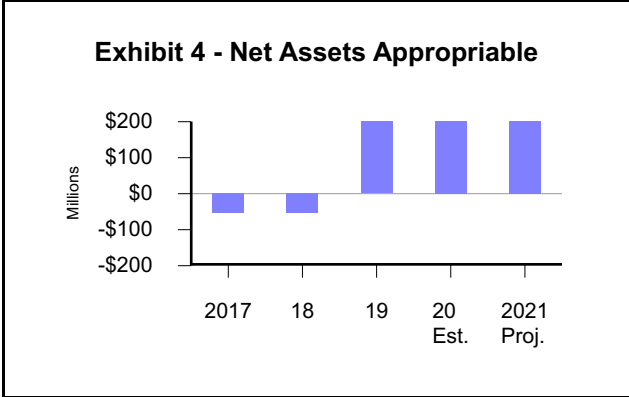
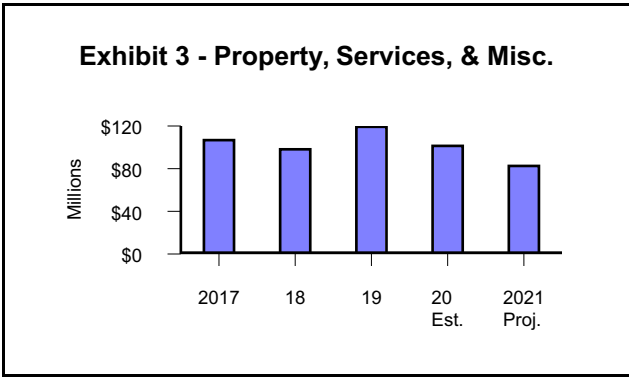
Exhibit 4 shows the trend in net assets appropriable, which is primarily impacted by bond sales, expenditures for capital projects, and the reservation of future years’ principal and interest payments in the debt service funds. Net assets appropriable have been used to reduce future years’ taxes. Beginning in 2005, a portion of the projected Corporate Fund net assets was left unappropriated to maintain a fiscally sound fund balance. The negative amounts in 2017 - 2018 are attributable to use of the obligation basis of budgetary accounting for the Capital Improvements Bond Fund and indicate that future bond sales or SRF loans are necessary to finance projects.

TOTAL REVENUES AND EXPENDITURES

Exhibit 5 displays the relationship between revenues and expenditures. The difference between revenues and expenditures is primarily accounted for by bond sale proceeds to finance future payments for capital projects. In general, the Capital Improvements Bond Fund aside, a balance is maintained between revenues and expenditures to fully utilize net assets appropriable, therefore, limiting property taxes.

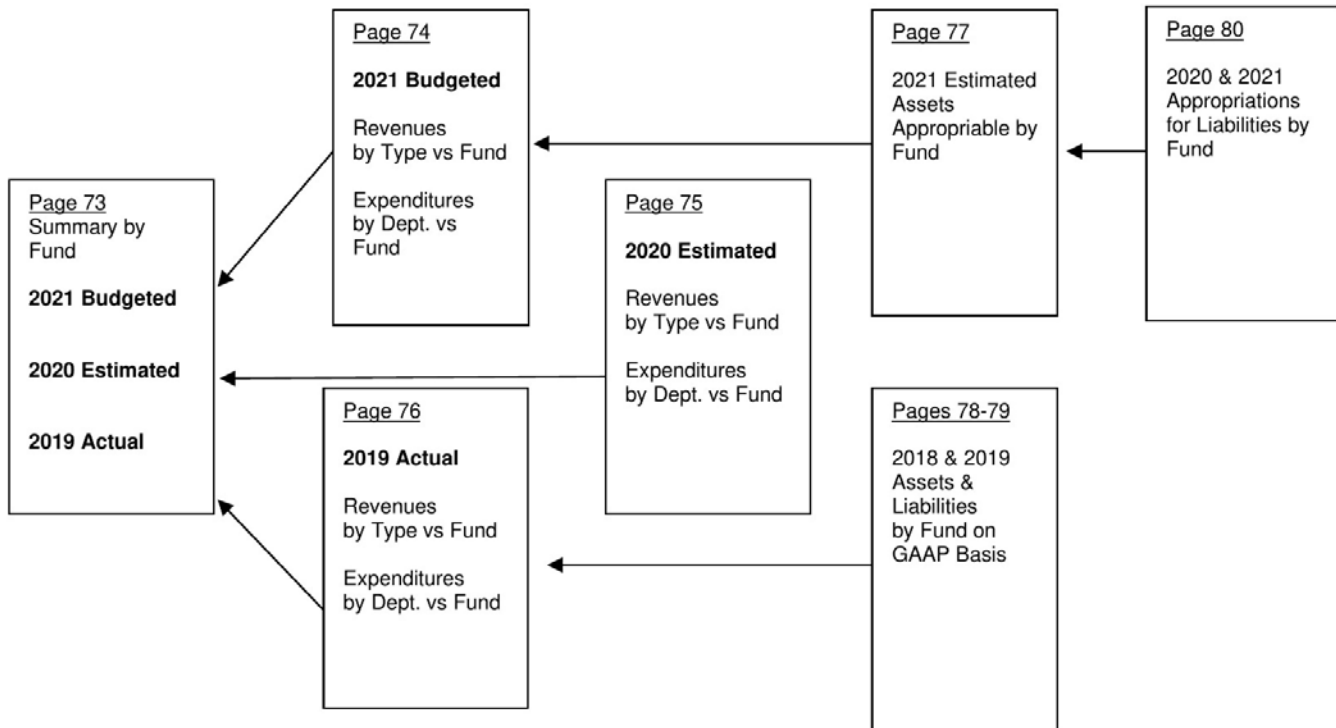
The 2020 Budget included a \$20.0 million equity transfer of accumulated investment income to the Retirement Fund. The 2020 Corporate Fund utilized two non-recurring revenues. An October 2019 PPRT allocation exceeded original expectations by \$5.0 million which contributed to the net assets appropriated. Additionally, the City of Chicago TIF surplus declaration provided an additional \$10.0 million.

For 2021, a portion of the Corporate Fund projected net assets will remain unappropriated to ensure a fiscally responsible fund balance. However, due to limitation on tax growth and declines in economically sensitive revenues, \$10.0 million of excess Corporate Fund balance will be utilized to maintain operations.



SUMMARY FINANCIAL STATEMENTS

Summary financial statements presented on pages 73 - 76 provide comparisons of revenues and expenditures for all funds for the years 2019 - 2021. These statements provide a financial summarization by fund of the 2021 Budget as proposed, the estimated status at 2020 fiscal year-end, and the actual results of operations for fiscal year 2019. The relationships among the pages are diagrammed below.



The table of taxes receivable on page 81 provides detailed data on property tax levies and tax receipts from 2016 to 2020. While 2016 through 2018 show high levels of collection, delayed refunds continue to be processed through the Property Tax Appeals Board and the Circuit Courts. Estimated refunds affecting levy years prior to 2016 are summarized.

Specific details about all revenue sources, assets, liabilities, and appropriable revenue are presented in the various funds' financial narratives and statements on pages 83 - 104.

ALL FUNDS

**SUMMARY OF REVENUE, EXPENDITURES, AND NET ASSETS APPROPRIABLE (b)
2021 BUDGETED, 2020 ESTIMATED, AND 2019 ACTUAL**

(In Thousands)

	FUND							TOTAL
	CORPORATE	CAPITAL IMPROVEMENTS BOND	CONSTRUCTION	STORMWATER MANAGEMENT	RETIREMENT (d)	BOND REDEMPTION & INTEREST (d)	RESERVE CLAIM (d)	
2021 BUDGETED								
Net Assets Appropriable	\$ 131,022.9	\$ (185,574.9)	\$ 7,355.2	\$ 59,539.1	\$ 88,127.0	\$ 225,883.7	\$ 39,437.9	\$ 365,790.9
Net Assets Appropriated	\$ 42,064.0	\$ (185,574.9)	\$ 7,355.2	\$ 59,539.1	\$ 88,127.0	\$ 225,883.7	\$ 39,437.9	\$ 276,832.0
Revenue	355,655.0	425,851.6	6,748.0	50,426.8	—	6,242.2	187.0	845,110.6
Appropriation	\$ 397,719.0	\$ 240,276.7	\$ 14,103.2	\$ 109,965.9	\$ 88,127.0	\$ 232,125.9	\$ 39,624.9	\$ 1,121,942.6
2020 ESTIMATED								
Beginning Net Assets Appropriable as adjusted (c)	\$ 118,906.8	\$ (178,385.9)	\$ 12,474.2	\$ 57,995.0	\$ 87,319.0	\$ 225,249.3	\$ 36,667.5	\$ 360,225.9
Revenue	364,148.6	61,311.0	6,951.7	49,980.4	20,000.0	7,772.6	481.9	510,646.2
Adjustment for 2019 receipts (a)	1,465.4	—	(1,956.5)	700.0	—	—	—	208.9
Expenditures	(353,497.9)	(68,500.0)	(10,114.2)	(49,136.3)	(107,319.0)	(233,021.9)	(5,000.0)	(826,589.3)
Ending Net Assets Appropriable	\$ 131,022.9	\$ (185,574.9)	\$ 7,355.2	\$ 59,539.1	\$ —	\$ —	\$ 32,149.4	\$ 44,491.7
2019 ACTUAL								
Beginning Net Assets Appropriable as adjusted (c)	\$ 102,687.0	\$ (152,365.1)	\$ 14,578.6	\$ 59,291.7	\$ 87,281.0	\$ 229,768.8	\$ 31,856.9	\$ 373,098.9
Revenue	369,282.3	52,449.0	7,361.1	43,156.8	—	8,588.8	2,083.5	482,921.5
Expenditures	(353,062.5)	(78,469.8)	(9,465.5)	(44,453.5)	(87,281.0)	(238,357.5)	(4,546.7)	(815,636.5)
Ending Net Assets Appropriable	\$ 118,906.8	\$ (178,385.9)	\$ 12,474.2	\$ 57,995.0	\$ —	\$ —	\$ 29,393.7	\$ 40,383.8
Adjusted NAA 1/1/2020	\$ 120,372.2		\$ 10,517.7	\$ 58,695.0				
Adjustment (a)	\$ 1,465.4		\$ (1,956.5)	\$ 700.0				

(a) Adjustment to NAA required due to current 2020 estimate on collection of property tax levies and PPRT. See the Balance Sheets and Appropriable Revenue statements 01/01/2020 for the Corporate (pages 86 - 87), Construction (pages 94 - 95), and Stormwater Management (pages 98 - 99) Funds. The adjustment is reflected in the 2020 revenues.

(b) This statement is a summary presentation of pages 74 - 76, separating current revenue and NAA from the revenue category.

(c) Ending NAA for one year are revised for accounting adjustments, equity transfers, and changes in the amount of designations to establish beginning net assets for the next year.

(d) Revenue for the Retirement, Bond Redemption & Interest, and Reserve Claim Funds does not include the current year tax levies, which are reflected in the next year's NAA.

ALL FUNDS
SUMMARY OF REVENUE AND EXPENDITURES
2021 BUDGETED
(In Thousands)

	FUND							
	CORPORATE	CAPITAL IMPROVEMENTS BOND*	CONSTRUCTION	STORMWATER MANAGEMENT	RETIREMENT	BOND REDEMPTION & INTEREST	RESERVE CLAIM	TOTAL
REVENUE								
Net Assets Appropriable	\$ 131,022.9	\$ (185,574.9)	\$ 7,355.2	\$ 59,539.1	\$ 88,127.0	\$ 225,883.7	\$ 39,437.9	\$ 365,790.9
Budget Reserve	(88,958.9)	—	—	—	—	—	—	(88,958.9)
Net Property Taxes	261,400.1	—	6,755.0	51,073.6	—	—	—	319,228.7
Personal Property Replacement Tax	16,000.0	—	—	—	—	—	—	16,000.0
Working Cash Borrowings Adjustment	(4,900.1)	—	(55.0)	(773.6)	—	—	—	(5,728.7)
Bond Sales (Present & Future)	—	342,744.6	—	—	—	—	—	342,744.6
Grants (Federal & State)	75.0	14,472.0	—	4,500.0	—	—	—	19,047.0
Investment Income	860.0	1,135.0	28.0	88.0	—	281.0	187.0	2,579.0
State Revolving Fund Loans	—	70,000.0	—	—	—	—	—	70,000.0
Property & Services	24,500.0	—	—	1,500.0	—	—	—	26,000.0
User Charge	37,000.0	—	—	—	—	—	—	37,000.0
TIF Differential Fee & Impact Fee	10,000.0	—	—	—	—	—	—	10,000.0
Equity Transfer for Stormwater Bond Payment	—	—	—	(5,961.2)	—	5,961.2	—	—
Equity Transfer	4,500.0	(4,500.0)	—	—	—	—	—	—
Resource Recovery	600.0	—	—	—	—	—	—	600.0
Miscellaneous	5,620.0	2,000.0	20.0	—	—	—	—	7,640.0
TOTAL REVENUE	\$ 397,719.0	\$ 240,276.7	\$ 14,103.2	\$ 109,965.9	\$ 88,127.0	\$ 232,125.9	\$ 39,624.9	\$ 1,121,942.6
EXPENDITURES								
Board of Commissioners	\$ 5,212.3	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 5,212.3
General Administration	20,953.1	—	—	—	—	—	—	20,953.1
Monitoring & Research	32,724.2	—	—	—	—	—	—	32,724.2
Procurement & Materials Mgmt.	10,509.2	—	—	—	—	—	—	10,509.2
Human Resources	61,099.7	—	—	—	—	—	—	61,099.7
Information Technology	18,987.2	—	—	—	—	—	—	18,987.2
Law	7,952.2	—	—	—	—	—	—	7,952.2
Finance	3,876.9	—	—	—	—	—	—	3,876.9
Engineering	25,925.6	240,276.7	14,103.2	—	—	—	—	280,305.5
Maintenance & Operations	210,478.6	—	—	—	—	—	—	210,478.6
Stormwater Management Fund	—	—	—	109,965.9	—	—	—	109,965.9
Retirement Fund	—	—	—	—	88,127.0	—	—	88,127.0
Bond Redemption & Interest Fund	—	—	—	—	—	232,125.9	—	232,125.9
Reserve Claim Fund	—	—	—	—	—	—	39,624.9	39,624.9
TOTAL EXPENDITURES	\$ 397,719.0	\$ 240,276.7	\$ 14,103.2	\$ 109,965.9	\$ 88,127.0	\$ 232,125.9	\$ 39,624.9	\$ 1,121,942.6

* The Capital Improvements Bond Fund is budgeted on an "obligation" basis, which records expenditures in the period in which the contracts or grants are awarded.

ALL FUNDS
SUMMARY OF REVENUE AND EXPENDITURES
2020 ESTIMATED
(In Thousands)

	FUND							TOTAL
	CORPORATE	CAPITAL IMPROVEMENTS BOND*	CONSTRUCTION	STORMWATER MANAGEMENT	RETIREMENT	BOND REDEMPTION & INTEREST	RESERVE CLAIM	
REVENUE								
Net Assets Appropriable	\$ 118,906.8	\$ (178,385.9)	\$ 12,474.2	\$ 57,995.0	\$ 87,319.0	\$ 228,249.3	\$ 36,667.5	\$ 363,225.9
Adjustment for Receipts	1,465.4	—	(1,956.5)	700.0	—	—	—	208.9
Net Property Taxes	257,129.4	—	6,755.0	51,073.6	—	—	—	314,958.0
Personal Property Replacement Tax	19,000.0	—	—	—	—	—	—	19,000.0
Working Cash Borrowings Adjustment	(4,929.4)	—	(55.0)	(773.6)	—	—	—	(5,758.0)
Bond Sales (Present & Future)	—	—	—	—	—	—	—	—
Grants (Federal & State)	72.1	15,027.0	—	3,500.0	—	—	—	18,599.1
Investment Income	1,733.5	3,284.0	229.0	642.0	—	1,781.0	481.0	8,150.5
State Revolving Fund Loans	—	50,000.0	—	—	—	—	—	50,000.0
Property & Services	24,052.0	—	—	1,500.0	—	—	—	25,552.0
User Charge	42,000.0	—	—	—	—	—	—	42,000.0
TIF Differential Fee & Impact Fee	19,225.0	—	—	—	—	—	—	19,225.0
Equity Transfer for Stormwater Bond Payment	—	—	—	(5,961.6)	—	5,961.6	—	—
Equity Transfer to Retirement Fund**	—	(9,000.0)	—	—	20,000.0	(3,000.0)	—	8,000.0
Resource Recovery	200.0	—	—	—	—	—	—	200.0
Miscellaneous	5,666.0	2,000.0	22.7	—	—	30.0	0.9	7,719.6
TOTAL REVENUE	\$ 484,520.8	\$ (117,074.9)	\$ 17,469.4	\$ 108,675.4	\$ 107,319.0	\$ 233,021.9	\$ 37,149.4	\$ 871,081.0
EXPENDITURES								
Board of Commissioners	\$ 4,764.2	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 4,764.2
General Administration	18,083.9	—	—	—	—	—	—	18,083.9
Monitoring & Research	29,902.0	—	—	—	—	—	—	29,902.0
Procurement & Materials Mgmt.	9,073.4	—	—	—	—	—	—	9,073.4
Human Resources	51,145.8	—	—	—	—	—	—	51,145.8
Information Technology	16,396.1	—	—	—	—	—	—	16,396.1
Law	6,234.8	—	—	—	—	—	—	6,234.8
Finance	3,600.1	—	—	—	—	—	—	3,600.1
Engineering	22,971.2	68,500.0	10,114.2	—	—	—	—	101,585.4
Maintenance & Operations	191,326.4	—	—	—	—	—	—	191,326.4
Stormwater Management Fund	—	—	—	49,136.3	—	—	—	49,136.3
Retirement Fund	—	—	—	—	107,319.0	—	—	107,319.0
Bond Redemption & Interest Fund	—	—	—	—	—	233,021.9	—	233,021.9
Reserve Claim Fund	—	—	—	—	—	—	5,000.0	5,000.0
TOTAL EXPENDITURES	\$ 353,497.9	\$ 68,500.0	\$ 10,114.2	\$ 49,136.3	\$ 107,319.0	\$ 233,021.9	\$ 5,000.0	\$ 826,589.3

* The Capital Improvements Bond Fund is budgeted on an "obligation" basis, which records expenditures in the period in which the contracts or grants are awarded.

** The Equity Transfer to the Retirement Fund includes \$6.0 million from the Corporate Working Cash Fund, \$1.0 million from the Construction Working Cash Fund, and \$1.0 million from the Stormwater Working Cash Fund. Working Cash Funds are not included in the summary presentation.

ALL FUNDS
SUMMARY OF REVENUE AND EXPENDITURES
2019 ACTUAL
(In Thousands)

	FUND							TOTAL
	CORPORATE	CAPITAL IMPROVEMENTS BOND*	CONSTRUCTION	STORMWATER MANAGEMENT	RETIREMENT	BOND REDEMPTION & INTEREST	RESERVE CLAIM	
REVENUE								
Net Assets Appropriable	\$ 102,687.0	\$ (152,365.1)	\$ 14,578.6	\$ 59,291.7	\$ 87,281.0	\$ 229,768.8	\$ 31,856.9	\$ 373,098.9
Adjustment for Receipts	4,703.5	—	(383.5)	(3,962.8)	—	—	—	357.2
Net Property Taxes	245,664.0	—	7,334.0	51,073.6	—	—	—	304,071.6
Personal Property Replacement Tax	15,000.0	—	—	—	—	—	—	15,000.0
Working Cash Borrowings Adjustment	(4,564.0)	—	(134.0)	(773.6)	—	—	—	(5,471.6)
Bond Sales	—	—	—	—	—	—	—	—
Grants (Federal & State)	—	17,102.0	—	—	—	—	—	17,102.0
Investment Income	3,761.3	6,572.3	468.6	1,165.7	—	2,765.3	648.9	15,382.1
State Revolving Fund Loans	—	30,551.2	—	—	—	—	—	30,551.2
Property & Services	28,833.8	—	—	1,406.8	—	—	—	30,240.6
User Charge	51,783.4	—	—	—	—	—	—	51,783.4
TIF Differential Fee & Impact Fee	10,834.4	—	—	—	—	—	—	10,834.4
Equity Transfer for Stormwater Bond Payment	—	—	—	(5,771.9)	—	5,771.9	—	—
Equity Transfer	4,200.0	(4,200.0)	—	—	—	—	—	—
Resource Recovery	784.6	—	—	—	—	—	—	784.6
Miscellaneous	8,281.2	2,423.5	76.0	19.0	—	51.6	1,434.6	12,285.9
TOTAL REVENUE	\$ 471,969.2	\$ (99,916.1)	\$ 21,939.7	\$ 102,448.5	\$ 87,281.0	\$ 238,357.6	\$ 33,940.4	\$ 856,020.3
EXPENDITURES								
Board of Commissioners	\$ 4,396.2	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 4,396.2
General Administration	16,878.3	—	—	—	—	—	—	16,878.3
Monitoring & Research	29,666.3	—	—	—	—	—	—	29,666.3
Procurement & Materials Mgmt.	9,171.2	—	—	—	—	—	—	9,171.2
Human Resources	54,240.3	—	—	—	—	—	—	54,240.3
Information Technology	15,657.4	—	—	—	—	—	—	15,657.4
Law	6,133.6	—	—	—	—	—	—	6,133.6
Finance	3,589.7	—	—	—	—	—	—	3,589.7
Engineering	23,518.8	78,469.8	9,465.5	—	—	—	—	111,454.1
Maintenance & Operations	189,811.0	—	—	—	—	—	—	189,811.0
Stormwater Management Fund	—	—	—	44,453.5	—	—	—	44,453.5
Retirement Fund	—	—	—	—	87,281.0	—	—	87,281.0
Bond Redemption & Interest Fund	—	—	—	—	—	238,357.5	—	238,357.5
Reserve Claim Fund	—	—	—	—	—	—	4,546.7	4,546.7
Equity Transfer	—	—	—	—	—	—	—	—
TOTAL EXPENDITURES	\$ 353,062.8	\$ 78,469.8	\$ 9,465.5	\$ 44,453.5	\$ 87,281.0	\$ 238,357.5	\$ 4,546.7	\$ 815,636.8

* The Capital Improvements Bond Fund is budgeted on an "obligation" basis which records expenditures in the period in which the contracts or grants are awarded.

SUMMARY OF ESTIMATED ASSETS APPROPRIABLE FOR THE CORPORATE, CAPITAL IMPROVEMENTS BOND, RETIREMENT, CONSTRUCTION, STORMWATER MANAGEMENT, BOND REDEMPTION & INTEREST, AND RESERVE CLAIM FUNDS FOR THE YEAR 2021

DESCRIPTION	FUND							
	CORPORATE	CAPITAL IMPROVEMENTS BOND	CONSTRUCTION	STORMWATER MANAGEMENT	RETIREMENT	BOND REDEMPTION & INTEREST	RESERVE CLAIM	TOTAL
2021 Revenue	\$ 351,155,000	\$ 430,351,615	\$ 6,748,000	\$ 56,388,000	\$ —	\$ 281,000	\$ 187,000	\$ 845,110,615
Resources Available at 01/01/2021	409,847,905	252,025,085	16,555,200	90,671,142	88,127,000	338,750,213	39,712,900	1,235,689,445
Total Resources	\$ 761,002,905	\$ 682,376,700	\$ 23,303,200	\$ 147,059,142	\$ 88,127,000	\$ 339,031,213	\$ 39,899,900	\$ 2,080,800,060
Liabilities:								
Liabilities and Designations at 01/01/2021	(278,825,000)	(437,600,000)	(9,200,000)	(31,132,042)	—	(112,866,563)*	(275,000)	(869,898,605)
Equity Transfer for Stormwater Bond Payment	—	—	—	(5,961,200)	—	5,961,200	—	—
Equity Transfer	4,500,000	(4,500,000)	—	—	—	—	—	—
Budget Reserve	(88,958,905)	—	—	—	—	—	—	(88,958,905)
ASSETS APPROPRIABLE	\$ 397,719,000	\$ 240,276,700	\$ 14,103,200	\$ 109,965,900	\$ 88,127,000	\$ 232,125,850	\$ 39,624,900	\$ 1,121,942,550

* Liabilities for the Bond Redemption & Interest Fund are for future Years' Principal and Interest

GAAP Basis Statement From 2019 CAFR - Exhibit A-1
Governmental Funds Balance Sheets / Statements of Net Assets

December 31, 2019 (with comparative amounts for prior year)

	General Corporate Fund		Debt Service Fund		Capital Improvements Bond Fund	
	2019	2018	2019	2018	2019	2018
<i>(in thousands of dollars)</i>						
Assets and deferred outflows of resources						
Assets:						
Cash	\$ 7,449	\$ 7,624	\$ 1,641	\$ 5,256	\$ 39,914	\$ 11,717
Certificates of deposit	63,984	63,695	15,008	19,037	88,748	109,514
Investments (note 4)	172,490	149,404	70,391	61,587	134,292	169,738
Prepaid expenses	5,825	5,201	—	—	—	—
Taxes receivable, net (note 5)	252,901	237,839	234,517	230,351	—	—
Other receivables, net (note 5)	2,643	8,588	—	—	8,021	9,263
Due from other funds (note 12)	224	132	—	—	—	—
Restricted deposits	436	350	—	—	33,009	—
Inventories	35,056	33,436	—	—	—	—
Capital assets not being depreciated/amortized (note 6)	—	—	—	—	—	—
Capital assets being depreciated/amortized, net (note 6)	—	—	—	—	—	—
Total assets	<u>541,008</u>	<u>506,269</u>	<u>321,557</u>	<u>316,231</u>	<u>303,984</u>	<u>300,232</u>
Deferred outflows of resources:						
Loss on prior debt refunding	—	—	—	—	—	—
Deferred outflows for pension and OPEB related amounts	—	—	—	—	—	—
Total deferred outflows of resources	—	—	—	—	—	—
Total assets and deferred outflows of resources	<u>\$ 541,008</u>	<u>\$ 506,269</u>	<u>\$ 321,557</u>	<u>\$ 316,231</u>	<u>\$ 303,984</u>	<u>\$ 300,232</u>
Liabilities, deferred inflows of resources, and fund balances/net position						
Liabilities:						
Accounts payable and other liabilities (note 5)	\$ 27,047	\$ 25,626	\$ —	\$ —	\$ 25,456	\$ 29,156
Due to Pension Trust Fund (note 12)	—	—	—	—	—	—
Due to other funds (note 12)	—	—	—	—	—	—
Accrued interest payable	—	—	—	—	—	—
Unearned Revenue (note 5)	9,513	8,427	—	—	33,009	—
Long-term liabilities: (note 11)	—	—	—	—	—	—
Due within one year	—	—	—	—	—	—
Due in more than one year	—	—	—	—	—	—
Total liabilities	<u>36,560</u>	<u>34,053</u>	<u>—</u>	<u>—</u>	<u>58,465</u>	<u>29,156</u>
Deferred inflows of resources:						
Unavailable tax revenue (note 5)	226,589	187,674	210,122	181,781	—	—
Other unavailable revenue (note 5)	—	—	—	—	951	948
Deferred inflows for pension and OPEB related amounts	—	—	—	—	—	—
Total deferred inflows of resources	<u>226,589</u>	<u>187,674</u>	<u>210,122</u>	<u>181,781</u>	<u>951</u>	<u>948</u>
Fund balances:						
Nonspendable:						
Prepaid insurance	5,825	5,201	—	—	—	—
Inventories	35,056	33,436	—	—	—	—
Restricted for:						
Deposits	436	350	—	—	—	—
Working cash	284,425	282,055	—	—	—	—
Reserve claims	29,765	28,272	—	—	—	—
Debt service	—	—	111,435	134,450	—	—
Capital projects	—	—	—	—	77,335	111,809
Construction	—	—	—	—	—	—
Assigned	—	—	—	—	167,233	158,319
Unassigned (Deficit)	(77,648)	(64,772)	—	—	—	—
Total fund balances	<u>277,859</u>	<u>284,542</u>	<u>111,435</u>	<u>134,450</u>	<u>244,568</u>	<u>270,128</u>
Total liabilities, deferred inflows, and fund balances	<u>\$ 541,008</u>	<u>\$ 506,269</u>	<u>\$ 321,557</u>	<u>\$ 316,231</u>	<u>\$ 303,984</u>	<u>\$ 300,232</u>
Net position:						
Net investment in capital assets						
Restricted for corporate working cash						
Restricted for reserve claim						
Restricted for debt service						
Restricted for capital projects						
Restricted for construction working cash						
Restricted for stormwater working cash						
Unrestricted (Deficit)						
Total net position						

Metropolitan Water Reclamation District of Greater Chicago

Retirement Fund		Other Governmental / Nonmajor Funds		Total Governmental Funds		Adjustments (Note 2a)		Statements of Net Position	
2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
\$ —	\$ —	\$ 1,959	\$ 1,695	\$ 50,963	\$ 26,292	\$ —	\$ —	\$ 50,963	\$ 26,292
—	—	27,745	45,523	195,485	237,769	—	—	195,485	237,769
—	—	56,049	40,926	433,222	421,655	—	—	433,222	421,655
—	—	74	76	5,899	5,277	—	—	5,899	5,277
75,736	73,515	58,408	57,442	621,562	599,147	—	—	621,562	599,147
—	—	1,061	954	11,725	18,805	—	—	11,725	18,805
—	—	—	—	224	132	(224)	(132)	—	—
—	—	—	—	33,445	350	—	—	33,445	350
—	—	—	—	35,056	33,436	—	—	35,056	33,436
—	—	—	—	—	—	6,039,214	5,979,354	6,039,214	5,979,354
—	—	—	—	—	—	1,660,838	1,672,681	1,660,838	1,672,681
75,736	73,515	145,296	146,616	1,387,581	1,342,863	7,699,828	7,651,903	9,087,409	8,994,766
—	—	—	—	—	—	3,845	4,372	3,845	4,372
—	—	—	—	—	—	369,064	167,580	369,064	167,580
—	—	—	—	—	—	372,909	171,952	372,909	171,952
\$ 75,736	\$ 73,515	\$ 145,296	\$ 146,616	\$ 1,387,581	\$ 1,342,863	\$ 8,072,737	\$ 7,823,855	\$ 9,460,318	\$ 9,166,718
\$ —	\$ —	\$ 8,171	\$ 12,107	\$ 60,674	\$ 66,889	\$ —	\$ —	\$ 60,674	\$ 66,889
13,859	19,034	—	—	13,859	19,034	73,587	68,133	87,446	87,167
—	—	224	132	224	132	(224)	(132)	—	—
—	—	—	—	—	—	17,476	17,129	17,476	17,129
—	—	—	—	42,522	8,427	—	—	42,522	8,427
—	—	—	—	—	—	153,710	148,202	153,710	148,202
—	—	—	—	—	—	4,287,289	4,117,855	4,287,289	4,117,855
13,859	19,034	8,395	12,239	117,279	94,482	4,531,838	4,351,187	4,649,117	4,445,669
61,877	54,481	52,332	45,330	550,920	469,266	(550,920)	(469,266)	—	—
—	—	—	—	951	948	(951)	(948)	—	—
—	—	—	—	—	—	74,641	100,669	74,641	100,669
61,877	54,481	52,332	45,330	551,871	470,214	(477,230)	(369,545)	74,641	100,669
—	—	74	76	5,899	5,277	(5,899)	(5,277)	—	—
—	—	—	—	35,056	33,436	(35,056)	(33,436)	—	—
—	—	—	—	436	350	(436)	(350)	—	—
—	—	60,681	60,093	345,106	342,148	(345,106)	(342,148)	—	—
—	—	—	—	29,765	28,272	(29,765)	(28,272)	—	—
—	—	—	—	111,435	134,450	(111,435)	(134,450)	—	—
—	—	16,136	21,711	93,471	133,520	(93,471)	(133,520)	—	—
—	—	7,753	7,243	7,753	7,243	(7,753)	(7,243)	—	—
—	—	—	—	167,233	158,319	(167,233)	(158,319)	—	—
—	—	(75)	(76)	(77,723)	(64,848)	77,723	64,848	—	—
—	—	84,569	89,047	718,431	778,167	(718,431)	(778,167)	—	—
\$ 75,736	\$ 73,515	\$ 145,296	\$ 146,616	\$ 1,387,581	\$ 1,342,863				
Net position:									
Net investment in capital assets						4,950,141	4,822,531	4,950,141	4,822,531
Restricted for corporate working cash						284,425	282,055	284,425	282,055
Restricted for reserve claim						9,194	11,728	9,194	11,728
Restricted for debt service						304,084	299,106	304,084	299,106
Restricted for capital projects						57,835	53,443	57,835	53,443
Restricted for construction working cash						22,713	22,395	22,713	22,395
Restricted for stormwater working cash						37,967	37,698	37,967	37,698
Unrestricted (Deficit)						(929,799)	(908,577)	(929,799)	(908,577)
Total net position						\$ 4,736,560	\$ 4,620,379	\$ 4,736,560	\$ 4,620,379

Notes reference the 2019 CAFR of the District - Available on the internet at www.mwr.org

**APPROPRIATION FOR LIABILITIES - BY FUND
JANUARY 1, 2021 AND 2020**

CORPORATE FUND	2021	2020
Unpaid Bills:		
Accrued Salaries & Wages	\$ 2,782,000	\$ 3,820,000
Personal Services - Other	3,100,000	3,160,000
Payroll Withholding & Miscellaneous	843,000	2,100,000
Contractual Services	16,000,000	27,715,678
Due to Corporate Working Cash Fund	256,100,000	190,000,000
Designated for Future Claims Liabilities	—	—
Total Liabilities of Corporate Fund	\$ 278,825,000	\$ 226,795,678
CONSTRUCTION FUND		
Unpaid Bills:		
Contracts Payable	\$ 2,500,000	\$ 1,250,000
Contractual Services	—	489,000
Machinery & Equipment	—	—
Due to Construction Working Cash Fund	6,700,000	11,100,000
Total Liabilities of Construction Fund	\$ 9,200,000	\$ 12,839,000
CAPITAL IMPROVEMENTS BOND FUND		
Unpaid Bills:		
Contractual Services	\$ 10,000,000	\$ —
Contracts Payable	259,200,000	276,044,100
Total Liabilities of Capital Improvements Bond Fund	\$ 269,200,000	\$ 276,044,100
RESERVE CLAIM FUND		
Accounts Payable & Other Liabilities	\$ 275,000	\$ 278,800
BOND REDEMPTION & INTEREST FUND		
Future Payment of Principal & Interest	\$ 112,866,563	\$ (103,103,870)
STORMWATER MANAGEMENT FUND		
Accrued Salaries & Wages	\$ 132,042	\$ 300,000
Vouchers Payable	4,500,000	4,301,039
Contracts Payable	—	2,346,379
Due to Stormwater Working Cash Fund	26,500,000	26,500,000
Total Liabilities of Stormwater Management Fund	\$ 31,132,042	\$ 33,447,418
TOTAL LIABILITIES JANUARY 1, 2021 AND 2020	\$ 701,498,605	\$ 446,301,126

**STATEMENT OF TAXES RECEIVABLE FOR 2020 AND PRIOR YEARS AT JANUARY 1, 2021
INCLUDING THE ESTIMATED COLLECTIONS FOR THE YEAR 2021**

YEAR FUND	TAX EXTENSION	COLLECTED THRU 12/31/20	%	UNCOLLECTED AT 12/31/20	RESERVE \$	%	ESTIMATED NET TAXES RECEIVABLE	CASH ESTIMATED IN 2021
2020								
Corporate	\$ 266,455,300	\$ —	—%	\$ 266,455,300	\$ 9,325,936	3.5%	\$ 257,129,365	\$ 259,793,918
Bond Redemption & Interest	247,313,970	—	—%	247,313,970	8,655,989	3.5%	238,657,981	241,131,121
Retirement	72,227,600	—	—%	72,227,600	2,527,966	3.5%	69,699,600	69,699,600
Construction	4,934,300	—	—%	4,934,300	172,701	3.5%	4,761,600	4,810,943
Stormwater Management	52,926,000	—	—%	52,926,000	1,852,410	3.5%	51,073,590	51,602,850
Reserve Claim	7,500,000	—	—%	7,500,000	262,500	3.5%	7,237,500	7,312,500
Total	\$ 651,357,170	\$ —	—%	\$ 651,357,170	\$ 22,797,501	3.5%	\$ 628,559,635	\$ 634,350,931
2019								
Corporate	\$ 255,557,993	\$ 249,169,043	97.5%	\$ 6,388,950	\$ 8,944,530	3.5%	\$ —	\$ 2,811,138
Bond Redemption & Interest	243,048,461	236,972,249	97.5%	6,076,212	8,506,696	3.5%	—	2,673,533
Retirement	71,565,400	69,776,265	97.5%	1,789,135	2,504,789	3.5%	—	—
Construction	7,600,000	7,410,000	97.5%	190,000	266,000	3.5%	—	83,600
Stormwater Management	52,926,000	51,602,850	97.5%	1,323,150	1,852,410	3.5%	—	582,186
Reserve Claim	7,500,000	7,312,500	97.5%	187,500	262,500	3.5%	—	82,500
Total	\$ 638,197,854	\$ 622,242,908	97.5%	\$ 15,954,946	\$ 22,336,925	3.5%	\$ —	\$ 6,232,957
2018								
Corporate	\$ 241,153,834	\$ 237,777,680	98.6%	\$ 3,376,154	\$ 8,440,384	3.5%	\$ —	\$ (1,688,077)
Bond Redemption & Interest	238,732,075	235,389,826	98.6%	3,342,249	8,355,623	3.5%	—	(1,671,125)
Retirement	71,534,197	69,030,500	96.5%	2,503,697	2,503,697	3.5%	—	—
Construction	11,700,000	11,536,200	98.6%	163,800	409,500	3.5%	—	(81,900)
Stormwater Management	47,826,000	47,156,436	98.6%	669,564	1,673,910	3.5%	—	(334,782)
Reserve Claim	6,000,000	5,916,000	98.6%	84,000	210,000	3.5%	—	(42,000)
Total	\$ 616,946,106	\$ 606,806,642	98.4%	\$ 10,139,464	\$ 21,593,114	3.5%	\$ —	\$ (3,817,883)
2017								
Corporate	\$ 224,824,731	\$ 221,902,009	98.7%	\$ 2,922,722	\$ 7,868,866	3.5%	\$ —	\$ (1,573,773)
Bond Redemption & Interest	232,751,026	229,725,263	98.7%	3,025,763	8,146,286	3.5%	—	(1,629,257)
Retirement	73,438,135	70,867,800	96.5%	2,570,335	2,570,335	3.5%	—	—
Construction	17,000,000	16,779,000	98.7%	221,000	595,000	3.5%	—	(119,000)
Stormwater Management	40,856,008	40,324,880	98.7%	531,128	1,429,960	3.5%	—	(285,992)
Reserve Claim	5,900,000	5,823,300	98.7%	76,700	206,500	3.5%	—	(41,300)
Total	\$ 594,769,900	\$ 585,422,252	98.4%	\$ 9,347,648	\$ 20,816,947	3.5%	\$ —	\$ (3,649,322)
2016								
Corporate	\$ 226,742,879	\$ 221,981,279	97.9%	\$ 4,761,600	\$ 7,936,001	3.5%	\$ —	\$ (680,229)
Bond Redemption & Interest	225,714,902	220,974,889	97.9%	4,740,013	7,900,022	3.5%	—	(677,145)
Retirement	65,161,200	63,532,170	97.5%	1,629,030	2,280,642	3.5%	—	—
Construction	13,784,956	13,495,472	97.9%	289,484	482,473	3.5%	—	(41,355)
Stormwater Management	34,250,000	33,530,750	97.9%	719,250	1,198,750	3.5%	—	(102,750)
Reserve Claim	5,800,000	5,678,200	97.9%	121,800	203,000	3.5%	—	(17,400)
Total	\$ 571,453,937	\$ 559,192,760	97.9%	\$ 12,261,177	\$ 20,000,888	3.5%	\$ —	\$ (1,518,878)
Prior Years'								
Corporate								\$ (226,743)
Bond Redemption & Interest								(225,715)
Levies								
Retirement								—
Construction								(13,785)
Stormwater Management								(34,250)
Reserve Claim								(5,800)
Total								\$ (506,293)
RECAPITULATION BY FUND								
Corporate	\$ 1,214,734,737	\$ 930,830,012		\$ 283,904,725	\$ 42,515,716		\$ 257,129,365	\$ 258,436,234
Bond Redemption & Interest	1,187,560,434	923,062,227		264,498,207	41,564,615		238,657,981	239,601,413
Retirement	353,926,532	273,206,735		80,719,797	12,387,429		69,699,600	69,699,600
Construction	55,019,256	49,220,672		5,798,584	1,925,674		4,761,600	4,638,503
Stormwater Management	228,784,008	172,614,916		56,169,092	8,007,440		51,073,590	51,427,262
Reserve Claim	32,700,000	24,730,000		7,970,000	1,144,500		7,237,500	7,288,500
Total	\$ 3,072,724,967	\$ 2,373,664,562		\$ 699,060,405	\$ 107,545,374		\$ 628,559,635	\$ 631,091,511

**STATEMENT OF PERSONAL PROPERTY REPLACEMENT TAXES
RECEIVABLE FOR 2021 AND PRIOR YEARS AT JANUARY 1, 2021
INCLUDING THE ESTIMATED COLLECTIONS FOR THE YEAR 2021**

LEVY YEAR	FUND	BUDGETED RECEIVABLE	ACTUAL/ESTIMATED COLLECTED THROUGH 2020	CASH ESTIMATED IN 2021
2021	Corporate	\$ 16,000,000	\$ —	\$ —
	Retirement	18,558,500	—	—
	Construction	—	—	—
	Total	\$ 34,558,500	\$ —	\$ —
2020	Corporate	\$ 19,000,000	\$ —	\$ 19,000,000
	Retirement	18,427,400	—	18,427,400
	Construction	—	—	—
	Total	\$ 37,427,400	\$ —	\$ 37,427,400
2019	Corporate	\$ 15,000,000	\$ 16,200,000	\$ —
	Retirement	18,258,400	18,258,400	—
	Construction	—	—	—
	Total	\$ 33,258,400	\$ 34,458,400	\$ —
2018	Corporate	\$ 19,849,500	\$ 27,384,717	\$ —
	Retirement	18,250,500	18,250,500	—
	Construction	—	—	—
	Total	\$ 38,100,000	\$ 45,635,217	\$ —
2017	Corporate	\$ 18,164,000	\$ 17,970,367	\$ —
	Retirement	18,736,200	18,736,200	—
	Construction	—	—	—
	Total	\$ 36,900,200	\$ 36,706,567	\$ —
2016	Corporate	\$ 24,676,000	\$ 23,751,730	\$ —
	Retirement	16,624,500	16,624,500	—
	Construction	1,100,000	—	—
	Total	\$ 42,400,500	\$ 40,376,230	\$ —

NOTE: Personal Property Replacement Taxes are recorded as collected against the prior year's tax estimate. For example, collections in 2021 will be recorded against the 2020 budgeted receivable.

CORPORATE FUND FINANCIAL NARRATIVE

The Corporate Fund is the general fund of the District and used to account for the general operations and expenditures. The 2021 Budget is \$397.7 million, a decrease of \$0.5 million, or 0.1 percent, from the 2020 Adjusted Budget. Property taxes are the major source of revenue for the Corporate Fund. In 2021, the net property tax levy will provide 65.7 percent of the fund's revenue. The property tax levy for 2021 is \$270.9 million, an increase of \$4.4 million, or 1.7 percent, from the 2020 Adjusted Levy and is limited by the Property Tax Extension Limitation Law.

The Corporate Fund allocation of Personal Property Replacement Tax (PPRT) revenue is budgeted at \$16.0 million for 2021, a decrease of \$2.9 million compared to the 2020 Budget of \$19.0 million for the Corporate Fund. PPRT revenues are accounted for in arrears and compared against the prior year tax estimate. PPRT receipts have not been stable over the last several years due to changes in the State of Illinois allocations to local governments and changes in tax laws. The District projects revenue received in 2020 to be \$16.2 million, or \$2.8 million under the 2020 Budget. PPRT is allocated first to the Retirement Fund to pay 20.9 percent of the Retirement Fund total levy.

Non-Tax Revenue

Corporate Fund non-tax revenue is projected to be \$78.7 million, a decrease of \$15.3 million or 16.3 percent from the the 2020 Budget. The 2020 Budget included a \$19.0 million budget for TIF Surplus distributions due to a large declaration made by the City of Chicago. The 2021 Budget is \$10.0 million, or a \$9.0 million reduction, which is in line with 2018 and 2019 collections. In 2020, an excess in TIF Revenue was identified as a one-time revenue and was not expected to be recurring. TIF Surplus is primarily from the expiration of TIF districts within the City of Chicago, which is estimated at \$8.5 million. The remaining \$1.5 million is anticipated from suburban Cook County.

In addition to the known reduction in TIF Surplus distributions, User Charge is projected to decrease by \$6.0 million from the 2020 Budget. Investment Income is projected to be \$0.9 million, a decrease of \$1.2 million from 2020. Revenue from the Lockport Powerhouse is projected to decrease by \$0.4 million in 2021, from \$1.2 million in 2020 due to a capital work at the Powerhouse. An Intergovernmental Settlement Agreement with the Village of Glenview regarding payment of a TIF differential fee will be completed in 2020, further reducing 2021 non-tax revenue estimates by \$225,000. To partially offset these decreases, Land Rentals are expected to increase by \$1.5 million over the 2020 Budget and reimbursement for staff time from the Army Corps of Engineers funding for McCook Reservoir is expected to add \$75,000. Additionally, an equity transfer of \$4.5 million in a Build America Bonds subsidy will be transferred to support operations given the projected revenue declines.

The District maintains a strong fund balance to maintain financial stability and sustain the District through economic uncertainties. For 2021, a portion amounting to \$89.0 million of the projected net assets will remain unappropriated to provide for a fiscally responsible fund balance. The District's 2019 financial results were favorable and added to the excess fund balance. In 2019, a Personal Property Replacement Tax (PPRT) allocation of \$27.4 million, or \$7.5 million over budget, was received from the State of Illinois. The favorable PPRT allocation was the result of a one-time \$5.0 million distribution of excess funds and higher than anticipated collections. Corporate Fund non-tax revenue for 2019 included the following: user charge income of \$51.8 million, TIF surplus distributions of \$10.6 million, and rental and easement income of \$25.8 million. Additionally, an unbudgeted land sale of \$3.1 million contributed to the strong revenue results.

The 2021 Budget prepares the District for COVID-19 impacts that will be felt in 2021 and 2022. The combination of a limitation on property tax growth and reduction in economically sensitive revenues will require the District to utilize excess fund balance to maintain operations in 2021. Of the projected \$131.0 million net appropriable assets, the 2021 Budget includes \$42.1 million of the budgeted fund balance, or \$10 million more than is typically appropriated for the following year's expenses.

Overall, 2020 non-tax revenue is projected to end the year under the 2020 Budget by \$1.0 million, or 1.1 percent. This is primarily attributed to a \$1.0 million negative variance for User Charge revenues.

The Corporate Fund receives significant funding from user charge revenue, estimated at \$37.0 million in 2021, a decrease of \$6.0 million from the 2020 Budget. The state economy significantly impacts the food processing and metal finishing industries, two major categories of user charge payers. The Monitoring & Research Department has conducted a survey of commercial & industrial users. The results indicate a reduction in operations by approximately 25 percent during the COVID-19 pandemic. The impact is projected to be realized in 2021 due to projected refunds in February. The refunds are based on the reconciliation of 2020 collections which are based on 2019 usage rates to 2020 actual usage and billing adjustments. Another major segment of user charge payers is government-operated airports and water filtration facilities. The revenues from these sources are more affected by weather conditions than the general economy. The 2020 year-end estimated revenue is \$42.0 million, a \$1 million negative variance from the 2019 Budget.

User charge rates and revenues parallel changes in the District's operations, maintenance, and replacement (OM&R) costs. User charge rates are based on the United States Environmental Protection Agency's approved program that ensures each user pays its proportionate share of costs for the treatment of its wastewater. Large commercial, industrial, and tax-exempt users are charged

fees based on the volume and strength of biochemical oxygen demand and suspended solids in their effluents, with credit given for the OM&R portion of any property taxes paid. Residential and small commercial/industrial classes pay only through their property taxes. This rate method ensures that the costs of providing service to these users are fully recovered. The user charge rate history appears in the Appendix.

In 2021, land rental revenue is budgeted at \$24.5 million, an increase of \$1.5 million from the 2020 Budget. Real estate income for the District has trended upwards in recent years. Expiring leases are reviewed and necessary environmental or other types of property remediation are performed, when possible, well ahead of lease expiration to expedite re-leasing at current market rates.

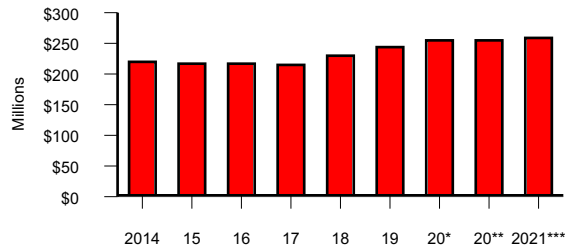
Investment income is budgeted for 2021 at \$0.9 million, a decrease of \$1.2 million from the 2020 Original Budget as short-term interest rates are projected to remain near zero until 2023.

Corporate Working Cash Fund

The Corporate Working Cash Fund is used to provide short-term financing to the Corporate Fund. As the property tax levy for one year is not collected until the next year, short-term financing of the current year tax levy is necessary. The District is authorized to sell Working Cash Bonds and is authorized to extend a property tax levy to meet these needs, but neither a tax levy nor bond sale is planned for 2021. The estimated amount the District will allocate as available for loan in 2021 is \$272.5 million, or 95.0 percent, of the maximum. In 2020, a \$6.0 million equity transfer of accumulated investment income was made to the Retirement Fund.

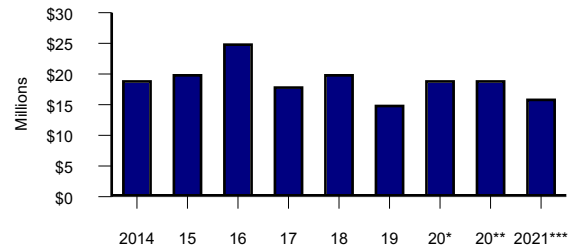
REVENUE - CORPORATE FUND (BUDGETARY BASIS)

Net Property Tax Levy



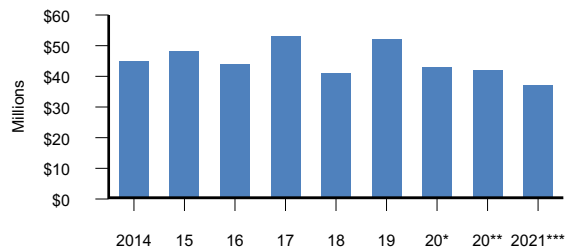
The property tax levy is the primary source of revenue for the Corporate Fund. In 2021, the Tax Cap limits growth to \$4.4 million or 1.7 percent from the 2020 Levy.

Personal Property Replacement Tax



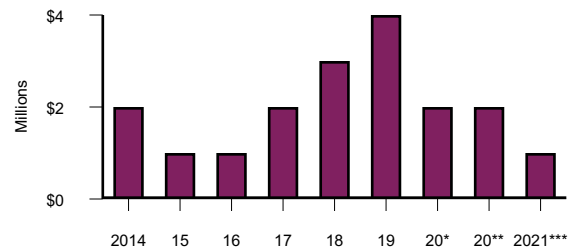
PPRT allocations, received from the State, are economically sensitive. The 2021 estimate is a \$3.0 million reduction from the 2020 budgeted PPRT revenue.

User Charge



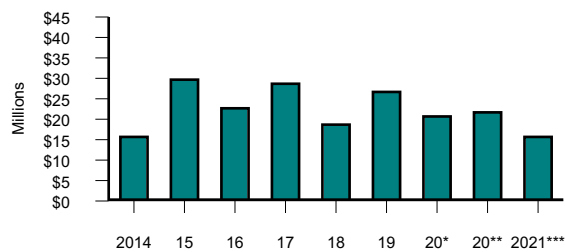
The growth in the food processing and chemical industries has been offset by improvements in processing and reduced discharges. 2021 anticipates refunds from reduced industrial activity during the pandemic.

Investment Income



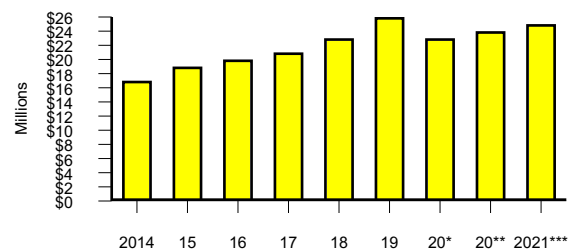
Investment income is expected to decrease due to anticipated rate decreases in 2020. In both 2015 and 2016, low rates and smaller investment balances resulted in lower returns.

Other



In 2015, TIF surplus distribution and land sales were higher than anticipated. In 2017, the Corporate Fund received a \$6.0 million equity transfer from the Capital Improvements Bond Fund and a higher than normal TIF surplus distribution.

Land Rentals



In 2020, land rental revenue is expected to remain stable at \$23.0 million. Land rentals have continued to gradually increase since 2014.

Note: Other includes sewer permit and permit services fees, land sales, agricultural product sales, Tax Increment Finance (TIF) district surplus distribution, and other small revenue sources. Beginning in 2019, sewer permit fees are recorded to the Stormwater Management Fund.

- 2014-2019 actual
- * 2020 as budgeted
- ** 2020 adjusted estimated
- *** 2021 estimate

**CORPORATE FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2021 AND 2020**

	ASSETS			
	2021		2020	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 132,411,671	\$ 132,411,671	\$ 102,572,725	\$ 102,572,725
Taxes Receivable	257,129,365	258,436,234	245,664,007	246,790,827
Replacement Tax	19,000,000	19,000,000	15,000,000	15,000,000
Total Current Assets	\$ 408,541,036	\$ 409,847,905	\$ 363,236,732	\$ 364,363,552
LIABILITIES & FUND EQUITY				
CURRENT LIABILITIES				
Unpaid Bills:				
Accrued Salaries & Wages	\$ 2,782,000	\$ 2,782,000	\$ 3,820,000	\$ 3,820,000
Security & Bid Deposits	3,100,000	3,100,000	3,160,000	3,160,000
Payroll Withholding & Miscellaneous	843,000	843,000	2,100,000	2,100,000
Contractual Services	16,000,000	16,000,000	27,715,678	27,715,678
Due to Corporate Working Cash Fund	256,100,000	256,100,000	190,000,000	190,000,000
Total Current Liabilities	\$ 278,825,000	\$ 278,825,000	\$ 226,795,678	\$ 226,795,678
Total Liabilities		\$ 278,825,000		\$ 226,795,678
ASSETS APPROPRIABLE FOR 2021 & 2020				
Net Assets Appropriable		\$ 131,022,905		\$ 137,567,874
Budget Reserve		(88,958,905)		(104,512,074)
Net Assets Appropriated		\$ 42,064,000		\$ 33,055,800
Estimated Revenue		355,655,000		365,145,000
Total Assets Appropriable		\$ 397,719,000		\$ 398,200,800
FUND EQUITY				
Undesignated	\$ 129,716,036		\$ 136,441,054	
Total Fund Equity	\$ 129,716,036		\$ 136,441,054	
Total Liabilities & Fund Equity	\$ 408,541,036		\$ 363,236,732	

**CORPORATE FUND
APPROPRIABLE REVENUE
2021 - 2018**

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2021 BUDGET	2020 ADJUSTED	2020 BUDGET	2019	2018
Revenue from Property Taxes					
Gross Tax Levy	\$ 270,880,900	\$ 266,455,300	\$ 266,455,300	\$ 254,574,100	\$ 240,465,800
Less Allowance for Uncollectible Taxes	(9,480,832)	(9,325,936)	(9,325,936)	(8,910,094)	(8,416,303)
Net Property Taxes	\$ 261,400,068	\$ 257,129,364	\$ 257,129,364	\$ 245,664,006	\$ 232,049,497
Revenue from Personal Property					
Replacement Tax	\$ 16,000,000	\$ 19,000,000	\$ 19,000,000	\$ 15,000,000	\$ 19,849,500
Net Tax Sources	\$ 277,400,068	\$ 276,129,364	\$ 276,129,364	\$ 260,664,006	\$ 251,898,997
Adjustment to match working cash borrowings	(4,900,069)	(4,929,365)	(4,929,365)	(4,564,007)	(4,598,997)
Working Cash Financing at 95% of Gross Tax Sources	\$ 272,500,000	\$ 271,200,000	\$ 271,200,000	\$ 256,100,000	\$ 247,300,000
Investment Income	\$ 860,000	\$ 1,733,500	\$ 2,100,000	\$ 3,761,348	\$ 3,033,675
Land Rentals	24,500,000	24,000,000	23,000,000	25,760,486	23,036,179
Sewer Permit Fees	—	—	—	—	1,064,300
Federal & State Grants	75,000	72,100	—	—	—
Sewer Service Agreement Revenue	1,750,000	1,500,000	1,750,000	2,874,044	1,448,371
User Charge	37,000,000	42,000,000	43,000,000	51,783,405	41,301,817
Resource Recovery	600,000	200,000	600,000	784,568	559,373
Lockport Electrical Energy Generation	800,000	1,200,000	1,200,000	1,386,344	1,386,344
Miscellaneous (details below)	13,070,000	22,243,000	22,295,000	17,928,574	15,639,376
Subtotal	\$ 78,655,000	\$ 92,948,600	\$ 93,945,000	\$ 104,278,769	\$ 87,469,435
Adjustment to Net Assets Available for Projected Receipts	—	1,465,400	—	4,703,500	(105,600)
Equity Transfer	4,500,000	—	—	4,200,000	4,200,000
GRAND TOTAL	\$ 355,655,000	\$ 365,614,000	\$ 365,145,000	\$ 369,282,269	\$ 338,863,835

TIF Surplus Distribution	\$ 10,000,000	\$ 19,000,000	\$ 19,000,000	\$ 10,609,409	\$ 10,711,878
TIF Differential Fee	—	225,000	225,000	225,000	225,000
Land Sales	—	52,000	—	3,073,329	—
Claims & Damage Settlements	—	401,000	—	22,324	178,781
Scrap Sales	50,000	25,000	50,000	69,389	118,865
Sales of Automobiles	20,000	10,000	20,000	35,669	29,262
Interest on Taxes - Cook County Treasurer	—	30,000	—	52,114	34,321
Other	3,000,000	2,500,000	3,000,000	3,841,340	4,341,269
Total	\$ 13,070,000	\$ 22,243,000	\$ 22,295,000	\$ 17,928,574	\$ 15,639,376

CORPORATE FUND FINANCING
2021 - 2016

	ESTIMATED			ACTUAL			
	2021 (1)	2020 REVISED	2020 ORIGINAL	2019	2018	2017	2016
BORROWINGS							
Working Cash Loans Current Year	\$ 272,500,000	\$ 190,000,000	\$ 271,200,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000
Working Cash Loans Prior Year	—	—	—	—	—	—	—
Total Borrowings	<u>\$ 272,500,000</u>	<u>\$ 190,000,000</u>	<u>\$ 271,200,000</u>	<u>\$ 190,000,000</u>	<u>\$ 190,000,000</u>	<u>\$ 190,000,000</u>	<u>\$ 190,000,000</u>
REPAYMENTS							
Working Cash Loans Repaid							
Current	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000
Working Cash Loans Repaid							
Prior	—	—	—	—	—	—	—
Total Repayments	<u>\$ 190,000,000</u>	<u>\$ 190,000,000</u>	<u>\$ 190,000,000</u>	<u>\$ 190,000,000</u>	<u>\$ 190,000,000</u>	<u>\$ 190,000,000</u>	<u>\$ 190,000,000</u>

(1) FINANCING LIMITATION

		2021
		(In Millions)
Property Tax Levy	\$	270.9
Personal Property Replacement Tax		16.0
Total	\$	286.9
* Borrowing Limitation		95.0%
Total Available for Financing	\$	<u>272.5</u>
* Statutory limitation is 100%		

**CORPORATE WORKING CASH FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2021 AND 2020
AND ESTIMATED AMOUNTS AVAILABLE FOR 2021 AND 2020**

	ASSETS			
	2021		2020	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 94,000,000	\$ 94,000,000	\$ 94,000,000	\$ 94,000,000
Due from Corporate Fund	190,000,000	190,000,000	190,000,000	190,000,000
Total Current Assets	<u>\$ 284,000,000</u>	<u>\$ 284,000,000</u>	<u>\$ 284,000,000</u>	<u>\$ 284,000,000</u>
	FUND EQUITY			
Estimated Revenue & Other Financing Sources		\$ 817,000		\$ (3,600,000)
Equity Transfer to Retirement Fund		\$ —		\$ —
ASSETS AVAILABLE FOR 2021 AND 2020		<u>\$ 284,817,000</u>		<u>\$ 280,400,000</u>
FUND EQUITY				
	<u>\$ 284,000,000</u>		<u>\$ 284,000,000</u>	

**CORPORATE WORKING CASH FUND
REVENUES
2021 - 2018**

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2021 BUDGET	2020 ADJUSTED	2020 BUDGET	2019	2018
Revenue from Money & Property					
Investment Income	\$ 817,000	\$ 1,427,000	\$ 2,400,000	\$ 1,946,312	\$ 1,705,082
Revenue from Miscellaneous Sources	—	—	—	—	—
Equity Transfer to Retirement Fund	—	(6,000,000)	(6,000,000)	—	—
TOTAL	<u>\$ 817,000</u>	<u>\$ (4,573,000)</u>	<u>\$ (3,600,000)</u>	<u>\$ 1,946,312</u>	<u>\$ 1,705,082</u>

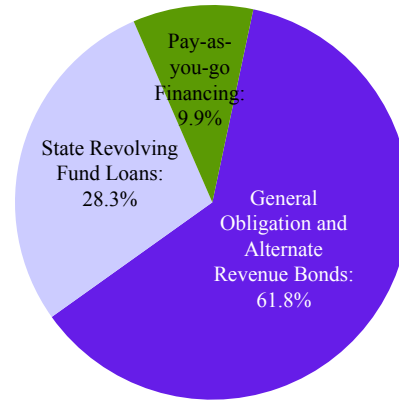
CAPITAL FUNDS FINANCIAL NARRATIVE

The Capital Funds of the District are the Capital Improvements Bond Fund (CIBF) and the Construction Fund. These funds are used to account for the acquisition of capital facilities and other capital assets through the Capital Improvement Program. The District's major functions of sewage collection and treatment, solids processing, solids utilization, flood control, and stormwater management are capital intensive, requiring significant investments in infrastructure. The District's mission of protecting the Lake Michigan drinking water supply from pollution and stormwater management drives the capital program for the District. Funding for the national, state, and local priorities that drive the District's program is provided by bonds, loans, grants, and other financial assistance available to the District.

The District utilizes a combination of funding methods to finance the Capital Improvement Program. The 2021 revenue sources include 9.9 percent from property taxes, grants, investment income or other miscellaneous revenues. Low-interest Wastewater and Stormwater State Revolving Fund (SRF) loans account for 28.3 percent of 2021 revenues, while General Obligation and Alternate Revenue Bonds account for 61.8 percent. Stormwater Alternate Revenue bonds and Stormwater State Revolving Fund loans finance large stormwater projects that address overland flooding throughout Cook County backed by the Stormwater Management Fund Property Tax Levy to pay the principal and interest on the loans.

The Construction Fund is supported primarily by Property Taxes and is used to finance smaller construction projects on a pay-as-you-go basis, while the Capital Improvements Bond Fund is used to budget and account for larger infrastructure and stormwater projects.

2021 Capital Improvement Program Revenue Sources



Capital Improvements Bond Fund

The CIBF is used to provide resources from Wastewater and Stormwater State Revolving Fund loans, grants, bonds, and other sources to design and construct major capital facilities that are structures of permanent duration. The 2021 appropriation is \$240.3 million, a decrease of \$4.3 million from the 2020 Adjusted Budget, or 1.7 percent. The appropriation varies by the scheduled awards of major projects.

The CIBF balance sheet on page 92 estimates the net assets appropriable for 2021 at (\$185.6) million and (\$182.4) million for 2020. The CIBF balance sheet estimated negative net assets appropriable for 2021 and 2020 are a result of accounting for the full value of the contract awards as a liability, without recognizing the bonds to be sold during the course of the projects to meet financial needs. An obligation basis of budgetary accounting is used for this fund. Liabilities are recognized as the total value of all project awards at the time of award, even though cash disbursements are made over several future years. On a cash flow basis, the District has a goal to keep expenditures at a maximum of \$100.0 million for limited bonds, \$50.0 million for unlimited bonds, and \$50.0 million for stormwater unlimited bonds per year.

Since 1969, the District has issued approximately \$6.0 billion in bonds in order to support its capital program. The District is authorized to issue \$150.0 million in non-referendum capital improvement bonds in any one year, plus amounts unissued from the prior three years. Bonds for State Revolving Fund loans are excluded. The District's non-referendum bonding authority was extended to 2034 by state statute, effective January 1, 2020, and the annual debt issuance authorization was increased from \$100.0 million to \$150.0 million in 2003. This level of authority allows the District to proceed with the award of multi-year contracts, then sell bonds as cash flow requirements demand during the course of the project. The Five-Year Financial Forecast on pages 56 - 68 presents detailed projections of the financial aspects of the capital program into the future.

Illinois property tax limitation laws limit the District's authority to issue bonds without a referendum. Projects initiated prior to October 1, 1991, which generally cover only Tunnel and Reservoir Plan (TARP) projects, are excluded from the limitation. The District is authorized to issue "limited tax bonds" without a voter referendum. "Limited bonds" can be issued to the extent that any new debt when combined with existing debt service does not exceed the debt service extension base. The extension base limitation for the 2020 levy year is \$173.1 million and \$175.7 million for the 2021 levy year.

Illinois' Wastewater/Stormwater Revolving Loan Fund (SRF) provides low-interest loans to finance qualifying projects. The current interest rate for new loans to the District is 1.35 percent. The District expects to receive an allocation of \$70.0 million in 2021 and \$70.0 million annually for the following four years. The District continues to plan for the use of SRF loans and other low cost financing options. SRF loans will make up 77.7 percent of construction cost financing for projects currently under construction and those with projected 2021 construction contract award dates. For 2020 and 2021, a Build America Bonds (BABs) subsidy of

\$11.3 million and \$2.0 million in miscellaneous revenue is available for capital projects in the Capital Improvements Bond Fund, while \$4.5 million in accumulated interest income will be transferred to the Retirement Fund.

Construction Fund

The 2021 tax levy for the Construction Fund remains flat to the 2020 levy at \$7.0 million. However, due to the PTEL Tax Cap limits, we anticipate a PTEL reduction of \$2.1 million, or 41.9 percent in the 2020 levy. The fund will also be supported by existing assets appropriable to fund capital projects. The 2021 appropriation is \$14.1 million, a decrease of \$3.9 million, or 21.8 percent, from the 2020 Adjusted Budget. This decreased appropriation level reflects the anticipated expenditures for existing projects and the appropriations required to fund projects with 2021 award dates.

The Construction Fund is a property tax supported fund designed to provide resources for capital projects for which long-term bond funding is not desirable or is not available. This fund is intended for pay-as-you-go capital projects to perform major rehabilitation of facilities, extending their useful life, and to acquire other capital assets. The funding mechanism is a working cash fund that provides loans in anticipation of tax collections. The Construction Working Cash Fund includes appropriable assets of \$18.3 million. In 2020, there was a \$1.0 million equity transfer to the Retirement Fund. The liabilities for contracts not completed during a fiscal year are reappropriated in the next year. Net assets appropriable, therefore, fluctuate based on the value of contract liabilities carried forward to the following year. For 2021, there is \$7.1 million budgeted for projects currently under construction and \$2.5 million for projects scheduled for award in 2021.

**CAPITAL IMPROVEMENTS BOND FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2021 AND 2020**

	ASSETS			
	2021		2020	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 252,025,085	\$ 252,025,085	\$ 251,316,000	\$ 251,316,000
Total Current Assets	\$ 252,025,085	\$ 252,025,085	\$ 251,316,000	\$ 251,316,000
LIABILITIES & FUND EQUITY				
CURRENT LIABILITIES				
Unpaid Bills:				
Contractual Services	\$ 10,000,000	\$ 10,000,000	\$ —	\$ —
Contracts Payable	259,200,000	259,200,000	276,044,100	276,044,100
Total Current Liabilities	\$ 269,200,000	\$ 269,200,000	\$ 276,044,100	\$ 276,044,100
Designated for Future Claims Liabilities	168,400,000	168,400,000	157,700,000	157,700,000
Total Liabilities & Designations	\$ 437,600,000	\$ 437,600,000	\$ 433,744,100	\$ 433,744,100
ASSETS APPROPRIABLE				
Net Assets Appropriable		\$ (185,574,915)		\$ (182,428,100)
Net Assets Appropriated		\$ (185,574,915)		\$ (182,428,100)
Estimated Revenue		430,351,615		84,372,000
Equity Transfer		(4,500,000)		(9,000,000)
Total Assets Appropriable		\$ 240,276,700		\$ (98,056,100)
FUND EQUITY				
	\$ (185,574,915)		\$ (182,428,100)	
Total Liabilities & Fund Equity	\$ 252,025,085		\$ 251,316,000	

CAPITAL IMPROVEMENTS BOND FUND
APPROPRIABLE REVENUE
2021 - 2018

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2021 BUDGET	2020 ADJUSTED	2020 BUDGET	2019	2018
Revenue from Money & Property					
Bond Sales (Present & Future)	\$ 342,744,615	\$ —	\$ —	\$ —	\$ —
Investment Income	1,135,000	3,284,000	6,900,000	6,572,300	5,647,153
Subtotal	\$ 343,879,615	\$ 3,284,000	\$ 6,900,000	\$ 6,572,300	\$ 5,647,153
Revenue from Miscellaneous Sources					
Federal & State Grants	\$ 14,472,000	\$ 15,027,000	\$ 14,472,000	\$ 17,101,994	\$ 15,304,009
State Revolving Fund Loans	70,000,000	50,000,000	70,000,000	30,551,200	87,614,400
Miscellaneous	2,000,000	2,000,000	2,000,000	2,423,521	2,753,981
Subtotal	\$ 86,472,000	\$ 67,027,000	\$ 86,472,000	\$ 50,076,715	\$ 105,672,391
Total Revenue	\$ 430,351,615	\$ 70,311,000	\$ 93,372,000	\$ 56,649,015	\$ 111,319,543
Other Financing Sources (Uses)					
Equity Transfer to Construction Fund	\$ —	\$ —	\$ —	\$ —	\$ —
Equity Transfer to Corporate Fund	\$ (4,500,000)	\$ —	\$ —	\$ (4,200,000)	\$ (4,200,000)
Equity Transfer to Retirement Fund	\$ —	\$ (9,000,000)	\$ (9,000,000)	\$ —	\$ —
GRAND TOTAL	\$ 425,851,615	\$ 61,311,000	\$ 84,372,000	\$ 52,449,015	\$ 107,119,543

**CONSTRUCTION FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2021 AND 2020**

	ASSETS			
	2021		2020	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 11,916,700	\$ 11,916,700	\$ 16,501,000	\$ 16,501,000
Taxes Receivable	4,761,600	4,638,500	7,334,000	7,262,400
Total Current Assets	\$ 16,678,300	\$ 16,555,200	\$ 23,835,000	\$ 23,763,400
LIABILITIES & FUND EQUITY				
CURRENT LIABILITIES				
Unpaid Bills:				
Contracts Payable	\$ 2,500,000	\$ 2,500,000	\$ 1,250,000	\$ 1,250,000
Contractual Services	—	—	489,000	489,000
Due to:				
Construction Working Cash Fund	6,700,000	6,700,000	11,100,000	11,100,000
Total Current Liabilities	\$ 9,200,000	\$ 9,200,000	\$ 12,839,000	\$ 12,839,000
Total Liabilities		\$ 9,200,000		\$ 12,839,000
ASSETS APPROPRIABLE FOR 2021 AND 2020				
Net Assets Appropriable		\$ 7,355,200		\$ 10,924,400
Net Assets Appropriated		\$ 7,355,200		\$ 10,924,400
Estimated Revenue		6,748,000		7,120,000
Total Assets Appropriable		\$ 14,103,200		\$ 18,044,400
FUND EQUITY				
Undesignated		7,478,300		10,996,000
Total Fund Equity		\$ 7,478,300		\$ 10,996,000
Total Liabilities & Fund Equity		\$ 16,678,300		\$ 23,835,000

CONSTRUCTION FUND FINANCING

2021 - 2016

	ESTIMATED			ACTUAL			
	2021 (1)	2020 REVISED	2020 ORIGINAL	2019	2018	2017	2016
BORROWINGS							
Working Cash Loans	\$ 6,700,000	\$ 6,700,000	\$ 6,700,000	\$ 7,200,000	\$ 11,100,000	\$ 12,000,000	\$ 12,000,000
Total Borrowings	\$ 6,700,000	\$ 6,700,000	\$ 6,700,000	\$ 7,200,000	\$ 11,100,000	\$ 12,000,000	\$ 12,000,000
REPAYMENTS							
Working Cash Loans Repaid							
Current	\$ 6,700,000	\$ 7,200,000	\$ 7,200,000	\$ 11,100,000	\$ 12,000,000	\$ 12,000,000	\$ 12,000,000
Prior Year	—	—	—	—	—	—	—
Total Repayments	\$ 6,700,000	\$ 7,200,000	\$ 7,200,000	\$ 11,100,000	\$ 12,000,000	\$ 12,000,000	\$ 12,000,000

(1) FINANCING LIMITATION

2021	
(In Millions)	
Property Tax Levy	\$ 7.0
Personal Property Replacement Tax	—
Total	\$ 7.0
* Borrowing Limitation	95.0%
Total Available for Financing	\$ 6.7
* Statutory limitation is 100%	

CONSTRUCTION FUND

APPROPRIABLE REVENUE

2021 - 2018

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2021 BUDGET	2020 ADJUSTED	2020 BUDGET	2019	2018
Revenue from Property Taxes					
Gross Tax Levy	\$ 7,000,000	\$ 7,000,000	\$ 7,000,000	\$ 7,600,000	\$ 11,700,000
Less: Allowance for Uncollectible Taxes	(245,000)	(245,000)	(245,000)	(134,000)	(409,500)
Net Property Taxes	\$ 6,755,000	\$ 6,755,000	\$ 6,755,000	\$ 7,334,000	\$ 11,290,500
Adjustment to Match Working Cash Borrowings	(55,000)	(55,000)	(55,000)	(134,000)	(190,500)
Working Cash Financing (Maximum 95% of Gross Tax Sources)	\$ 6,700,000	\$ 6,700,000	\$ 6,700,000	\$ 7,200,000	\$ 11,100,000
Connection Impact Fees	—	—	—	—	—
Investment Income	28,000	229,000	400,000	468,587	402,688
Miscellaneous	20,000	22,700	20,000	75,982	38,213
User Charge	—	—	—	—	—
Equity Transfer from Capital Improvements Bond Fund	—	—	—	—	—
Subtotal	\$ 48,000	\$ 251,700	\$ 420,000	\$ 544,569	\$ 440,902
Adjustment to Net Assets Available for Projected Receipts	—	(1,956,500)	—	(383,501)	(461,800)
Total	\$ 6,748,000	\$ 4,995,200	\$ 7,120,000	\$ 7,361,068	\$ 11,079,102

**CONSTRUCTION WORKING CASH FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2021 AND 2020
AND ESTIMATED AMOUNTS AVAILABLE FOR 2021 AND 2020**

	ASSETS			
	2021		2020	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 11,500,000	\$ 11,500,000	\$ 11,500,000	\$ 11,500,000
Due from Construction Fund	6,700,000	6,700,000	7,200,000	7,200,000
Total Current Assets	\$ 18,200,000	\$ 18,200,000	\$ 18,700,000	\$ 18,700,000
FUND EQUITY				
Estimated Revenue & Other Financing Sources		\$ 103,000		\$ 300,000
Equity Transfer to Retirement Fund		—		(1,000,000)
ASSETS APPROPRIABLE FOR 2021 & 2020		\$ 18,303,000		\$ 18,000,000
FUND EQUITY	\$ 18,200,000		\$ 18,700,000	

**CONSTRUCTION WORKING CASH FUND
REVENUES
2021 - 2018**

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2021 BUDGET	2020 ADJUSTED	2020 BUDGET	2019	2018
Revenue from Money & Property					
Investment Income	\$ 103,000	\$ 230,000	\$ 300,000	\$ 273,877	\$ 227,837
Equity Transfer to Retirement Fund	—	(1,000,000)	(1,000,000)	—	—
TOTAL	\$ 103,000	\$ (770,000)	\$ (700,000)	\$ 273,877	\$ 227,837

OTHER FUNDS FINANCIAL NARRATIVE

The Stormwater Management Fund was established in 2005 to fund stormwater management activities throughout all of Cook County, including operational costs and pay-as-you-go capital projects. The 2021 property tax levy for the Stormwater Management Fund is \$52.9 million, unchanged from the 2020 Adjusted Budget. An equity transfer to the Bond Redemption & Interest Fund is planned in the amount of \$6.0 million to pay the principal and interest on two Stormwater Alternative Revenue Bonds and State Revolving Fund loans. No tax levy is recommended for the Stormwater Working Cash Fund, which provides temporary loans to the Stormwater Management Fund in anticipation of tax collections. In 2020, a \$1.0 million equity transfer from the Stormwater Working Cash Fund to the Retirement Fund was completed. Details of this fund's purpose and \$110.0 million appropriation for 2021 are presented in Section VI.

The Bond Redemption & Interest (B&I) Fund is a series of subfunds that account for the property tax levies and other revenues received to pay for the principal and interest of bonds issued by the District and State Revolving Fund loans. The 2021 property tax levy for the B&I Fund is \$247.4 million, an increase of \$0.1 million, or 0.1 percent, from the 2020 Adjusted Budget. Appropriations and tax levies are adjusted for new bond sales or State Revolving Fund loans. The 2021 appropriation for this fund is \$232.1 million, a decrease of \$0.9 million, or 0.4 percent from the 2020 Original Budget.

Property tax levy collections are invested prior to the time when actual principal and interest payments must be made. Investment income earned on tax collections is credited to the specific sub-funds for each bond issue. The amount of estimated investment income for 2020 projected year end is \$1.8 million, while the 2021 estimate is \$0.3 million, a decrease of \$1.3 million from the 2020 Original Budget. An equity transfer from the Stormwater Management Fund of \$6.0 million will be used for the principal and interest on two bonds one one State Revolving Fund loan, and an abatement in a corresponding amount is anticipated. In 2020, a \$3.0 million equity transfer out of excess investment income was transferred to the Retirement Fund. A detailed presentation on the B&I Fund is found on pages 522 - 526.

The Reserve Claim Fund is the District's self-insurance fund, and is financed through an annual property tax levy of no more than one-half cent (0.5¢) per \$100 of the last known equalized assessed valuation (EAV). This one-half cent tax rate is the maximum allowed by state statute. It is Board policy to levy the maximum whenever possible. For 2021, a \$7.5 million levy is budgeted. The available fund balance and amount available for appropriation for the Reserve Claim Fund are based on the net impact of current revenues and current expenditures.

The 2021 appropriation for this fund is \$39.6 million, an increase of \$5.2 million, or 15.2 percent, from the 2020 Adjusted Budget. The maximum fund balance that can be accumulated is 0.05 percent of the last known EAV. For the 2021 Budget, using the last known EAV of 2019, the maximum accumulation is estimated at \$82.0 million. The allowance for accounts payable and estimated liabilities is estimated at \$0.3 million. A detailed presentation of this fund begins on page 519.

The Retirement Fund receives the proceeds of the annual tax levy that the District extends on behalf of the Metropolitan Water Reclamation District Retirement Fund, a pension trust fund. The amounts, as certified by the Retirement Fund Board, are levied by the District and appropriated when received. The property tax levy for 2021 is \$72.7 million, an increase of \$513,900 from the 2020 Adjusted Levy. The levy is calculated based on a statutory multiplier of 4.19 times employee contributions made two years prior, or 2019 and 2018, respectively. Additionally, \$18.6 million from Personal Property Replacement Tax is allocated to the Retirement Fund for 2021.

The appropriable resources and appropriation consist of the collection of the previous year's property tax levy plus personal property replacement tax receipts. The 2020 appropriation included 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 transfer of accumulated investment income to the Retirement Fund is authorized under the District's statute (70 ILCS 2605/5.9) and will required a 2/3 vote. The funding was allocated from accumulated investment income as follows: \$9.0 million from the Capital Improvements Bond Fund, \$3.0 million from the Bond Redemption & Interest Fund, \$6.0 million from the Corporate Working Cash Fund, \$1.0 million from the Construction Working Cash Fund, \$1.0 million from the Stormwater Working Cash Fund.

The 2021 appropriation is \$88.1 million, a decrease of \$19.19 million, or 17.88 percent, from the 2020 Adjusted Budget. An expanded presentation on the Retirement Fund is shown on pages 527 - 529.

**STORMWATER MANAGEMENT FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2021 AND 2020**

	ASSETS			
	2021		2020	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 39,243,880	\$ 39,243,880	\$ 50,500,000	\$ 50,500,000
Taxes Receivable	51,073,590	51,427,262	51,073,590	51,506,994
Total Current Assets	\$ 90,317,470	\$ 90,671,142	\$ 101,573,590	\$ 102,006,994
LIABILITIES & FUND EQUITY				
CURRENT LIABILITIES				
Unpaid Bills:				
Accrued Salaries & Wages	\$ 132,042	\$ 132,042	\$ 300,000	\$ 300,000
Contracts Payable	—	—	2,346,379	2,346,379
Vouchers Payable	4,500,000	4,500,000	4,301,039	4,301,039
Due to:				
Stormwater Working Cash Fund	26,500,000	26,500,000	26,500,000	26,500,000
Total Current Liabilities	\$ 31,132,042	\$ 31,132,042	\$ 33,447,418	\$ 33,447,418
Designated for Future Claims Liabilities		\$ —		\$ —
Total Current Liabilities and Designations		\$ 31,132,042		\$ 33,447,418
ASSETS APPROPRIABLE FOR 2021 & 2020				
Net Assets Appropriable		\$ 59,539,100		\$ 68,559,576
Net Assets Appropriated		\$ 59,539,100		\$ 68,559,576
Equity Transfer to Bond and Interest Fund		(5,961,200)		(5,961,600)
Estimated Revenue		56,388,000		53,660,024
Total Assets Appropriable		\$ 109,965,900		\$ 116,258,000
FUND EQUITY				
	\$ 59,185,428		\$ 68,126,172	
Total Liabilities & Fund Equity	\$ 90,317,470		\$ 101,573,590	

STORMWATER MANAGEMENT FUND FINANCING
2021 - 2016

	ESTIMATED			ACTUAL			
	2021 (1)	2020 REVISED	2020 ORIGINAL	2019	2018	2017	2016
BORROWINGS							
Working Cash Loans	\$ 50,300,000	\$ 26,500,000	\$ 50,300,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000
Total Borrowings	\$ 50,300,000	\$ 26,500,000	\$ 50,300,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000
REPAYMENTS							
Working Cash Loans Repaid							
Current	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 12,400,000
Prior Year	—	—	—	—	—	—	—
Total Repayments	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 12,400,000

(1) FINANCING LIMITATION

2021	
(In Millions)	
Property Tax Levy	\$ 52.9
Personal Property Replacement Tax	—
Total	\$ 52.9
* Borrowing Limitation	95.0%
Total Available for Financing	\$ 50.3
* Statutory limitation is 100%	

STORMWATER MANAGEMENT FUND
APPROPRIABLE REVENUE
2021 - 2018

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2021 BUDGET	2020 ADJUSTED	2020 BUDGET	2019	2018
Revenue from Property Taxes					
Gross Tax Levy	\$ 52,926,000	\$ 52,926,000	\$ 52,926,000	\$ 52,926,000	\$ 47,826,000
Less: Allowance for Uncollectible Taxes	(1,852,410)	(1,852,410)	(1,852,410)	(1,852,410)	(1,673,910)
Net Property Taxes	\$ 51,073,590	\$ 51,073,590	\$ 51,073,590	\$ 51,073,590	\$ 46,152,090
Adjustment to Match Working Cash Borrowings	(773,590)	(773,590)	(773,590)	(773,590)	(752,090)
Working Cash Financing at 95% of Gross Tax Sources	\$ 50,300,000	\$ 50,300,000	\$ 50,300,000	\$ 50,300,000	\$ 45,400,000
Revenue from Money & Property					
Investment Income	\$ 88,000	\$ 642,000	\$ 1,000,000	\$ 1,165,729	\$ 688,837
Sewer Permit Fees	1,500,000	1,500,000	1,000,000	1,406,810	—
Miscellaneous	—	—	—	18,976	7,429
Grants	4,500,000	3,500,000	1,360,024	—	347,406
Subtotal	\$ 6,088,000	\$ 5,642,000	\$ 3,360,024	\$ 2,591,515	\$ 1,043,672
Adjustment to Net Assets Available for Projected Receipts	\$ —	\$ 700,000	\$ —	\$ (3,962,813)	\$ (369,200)
Equity Transfer to Bond Redemption & Interest Fund	(5,961,200)	(5,961,600)	(5,961,600)	(5,771,900)	(5,770,550)
Total	\$ 50,426,800	\$ 50,680,400	\$ 47,698,424	\$ 43,156,802	\$ 40,303,922

**STORMWATER WORKING CASH FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2021 AND 2020**

	ASSETS			
	2021		2020	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 11,600,000	\$ 11,600,000	\$ 11,128,000	\$ 11,128,000
Due from Stormwater Management Fund	26,500,000	26,500,000	26,500,000	26,500,000
Total Current Assets	\$ 38,100,000	\$ 38,100,000	\$ 37,628,000	\$ 37,628,000
FUND EQUITY				
Investment Income		\$ 74,000		\$ 200,000
Equity Transfer to Retirement Fund		\$ —		\$ (1,000,000)
ASSETS APPROPRIABLE FOR 2021 AND 2020		\$ 38,174,000		\$ 36,828,000
FUND EQUITY	\$ 38,100,000		\$ 37,628,000	

**STORMWATER WORKING CASH FUND
APPROPRIABLE REVENUE
2021 - 2018**

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2021 BUDGET	2020 ADJUSTED	2020 BUDGET	2019	2018
Investment Income	\$ 74,000	\$ 138,000	\$ 300,000	\$ 240,578	\$ 186,430
Other Financing Sources (Uses)					
Equity Transfer to Retirement Fund	—	(1,000,000)	(1,000,000)	—	—
GRAND TOTAL	\$ 74,000	\$ (862,000)	\$ (700,000)	\$ 240,578	\$ 186,430

BOND REDEMPTION & INTEREST FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2021 AND 2020

	ASSETS			
	2021		2020	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 99,148,800	\$ 99,148,800	\$ 90,067,000	\$ 90,067,000
Restricted Cash	—	—	—	—
Deposits with Escrow Agent	—	—	—	—
Taxes Receivable	238,657,981	239,601,413	240,486,212	241,497,138
Total Current Assets	\$ 337,806,781	\$ 338,750,213	\$ 330,553,212	\$ 331,564,138
LIABILITIES & FUND EQUITY				
CURRENT LIABILITIES				
Bonds Payable	\$ 122,745,890		\$ 120,079,531	
Interest Payable	109,379,960		112,942,336	
Program Expense Payable	—		—	
Equity Transfer	—		—	
Total Current Liabilities	\$ 232,125,850		\$ 233,021,867	
ASSETS APPROPRIABLE FOR 2021 AND 2020				
Net Assets Appropriable		\$ 338,750,213		\$ 331,564,138
Equity Transfer from Stormwater Management Fund		5,961,200		5,961,600
Equity Transfer to Retirement Fund		—		(3,000,000)
Estimated Revenue		281,000		1,600,000
Total Assets Available		\$ 344,992,413		\$ 336,125,738
Liabilities Payable from Restricted Assets		—		—
Less: Assets Available for Future Years (Principal & Interest Payments)		(112,866,563)		(103,103,871)
Total Assets Appropriable		\$ 232,125,850		\$ 233,021,867
FUND EQUITY				
Undesignated	\$ 105,680,931		\$ 97,531,345	
TOTAL FUND EQUITY	\$ 105,680,931		\$ 97,531,345	
Total Liabilities & Fund Equity	\$ 337,806,781		\$ 330,553,212	

**BOND REDEMPTION & INTEREST FUND
 APPROPRIABLE REVENUE
 2021 - 2018**

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2021 BUDGET	2020 ADJUSTED	2020 BUDGET	2019	2018
Revenue from Taxes					
Real Estate					
Current	\$ 241,131,121	\$ 242,978,297	\$ 242,978,297	\$ 237,696,807	\$ 228,039,945
Prior	(1,529,708)	(1,481,160)	(1,481,160)	(1,451,937)	(1,422,340)
Total	\$ 239,601,413	\$ 241,497,137	\$ 241,497,137	\$ 236,244,870	\$ 226,617,605
Revenue from Money & Property					
Investment Income	\$ 281,000	\$ 1,781,000	\$ 1,600,000	\$ 2,765,277	\$ 2,471,557
Revenue from Miscellaneous Sources					
Cash Available	99,148,800	90,067,000	90,067,000	112,000,000	112,917,005
Other	—	30,000	—	51,590	35,531
Other Financing Sources (Uses)					
Bond Premium	—	—	—	—	—
Sale of Capital Improvements Bonds (CIB)	—	—	—	—	—
Bond Redemption	—	—	—	—	—
Refunding Transaction Costs	—	—	—	—	—
Equity Transfer to Stormwater Management Fund	5,961,200	5,961,600	5,961,600	5,771,900	5,770,550
Equity Transfer to Retirement Fund	—	(3,000,000)	(3,000,000)	—	—
Less: Amount to Be Expended After Budget Year	(112,866,563)	(103,314,870)	(103,103,870)	(118,476,096)	(91,508,062)
GRAND TOTAL	\$ 232,125,850	\$ 233,021,867	\$ 233,021,867	\$ 238,357,541	\$ 256,304,186

**RESERVE CLAIM FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2021 AND 2020**

	ASSETS			
	2021		2020	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 32,424,400	\$ 32,424,400	\$ 26,700,000	\$ 26,700,000
Taxes Receivable	7,237,500	7,288,500	7,237,500	7,273,800
Total Current Assets	\$ 39,661,900	\$ 39,712,900	\$ 33,937,500	\$ 33,973,800
LIABILITIES & FUND EQUITY				
ACCOUNTS PAYABLE & OTHER LIABILITIES	\$ 275,000	\$ 275,000	\$ 278,800	\$ 278,800
ASSETS APPROPRIABLE FOR 2021 AND 2020				
Net Assets Appropriable		\$ 39,437,900		\$ 33,695,000
Equity Transfer to Bond and Interest Fund		—		—
Estimated Revenue		187,000		700,000
Total Assets Appropriable		\$ 39,624,900		\$ 34,395,000
FUND EQUITY				
Total Liabilities & Fund Equity	\$ 39,386,900		\$ 33,658,700	
	\$ 39,661,900		\$ 33,937,500	

**RESERVE CLAIM FUND
APPROPRIABLE REVENUE
2021 - 2018**

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2021 BUDGET	2020 ADJUSTED	2020 BUDGET	2019	2018
Revenue from Taxes					
Real Estate - Current	\$ 7,312,500	\$ 7,312,500	\$ 7,312,500	\$ 5,850,000	\$ 5,752,500
Real Estate - Prior	(24,000)	(38,700)	(38,700)	(27,600)	(21,784)
Replacement Tax	—	—	—	—	—
SUBTOTAL	\$ 7,288,500	\$ 7,273,800	\$ 7,273,800	\$ 5,822,400	\$ 5,730,716
Investment Income	187,000	481,000	700,000	648,878	465,514
Miscellaneous	—	870	—	1,434,630	901
GRAND TOTAL	\$ 7,475,500	\$ 7,755,670	\$ 7,973,800	\$ 7,905,908	\$ 6,197,131

**RETIREMENT FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2021 AND 2020**

CURRENT ASSETS	ASSETS			
	2021		2020	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
Taxes Receivable	\$ 69,699,600	\$ 69,699,600	\$ 69,060,600	\$ 69,060,600
Replacement Tax	18,427,400	18,427,400	18,258,400	18,258,400
Total Current Assets	\$ 88,127,000	\$ 88,127,000	\$ 87,319,000	\$ 87,319,000
LIABILITIES & FUND EQUITY				
ASSETS APPROPRIABLE FOR 2021 AND 2020				
Net Assets Appropriable		\$ 88,127,000		\$ 87,319,000
Equity Transfer from Corporate Working Cash Fund		—		6,000,000
Equity Transfer from Stormwater Working Cash Fund		—		1,000,000
Equity Transfer from Construction Working Cash Fund		—		1,000,000
Equity Transfer from Capital Improvements Bond Fund		—		9,000,000
Equity Transfer from Bond Redemption & Interest Fund		—		3,000,000
Total Assets Appropriable Due to Retirement Fund		\$ 88,127,000		\$ 107,319,000
FUND EQUITY				
Total Fund Equity	\$ 88,127,000		\$ 87,319,000	

**RETIREMENT FUND
APPROPRIABLE REVENUE
2021 - 2018**

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2021 BUDGET	2020 ADJUSTED	2020 BUDGET	2019	2018
Revenue from Taxes					
Real Estate - Current	\$ 69,699,600	\$ 69,060,600	\$ 69,060,600	\$ 69,030,500	\$ 70,867,800
Replacement Tax	18,427,400	18,258,400	18,258,400	18,250,500	18,736,200
TOTAL TAX REVENUE	\$ 88,127,000	\$ 87,319,000	\$ 87,319,000	\$ 87,281,000	\$ 89,604,000
Other Financing Sources (Uses)					
Equity Transfer from Corporate Working Cash Fund	\$ —	\$ 6,000,000	\$ 6,000,000	\$ —	\$ —
Equity Transfer from Stormwater Working Cash Fund	—	1,000,000	1,000,000	—	—
Equity Transfer from Construction Working Cash Fund	—	1,000,000	1,000,000	—	—
Equity Transfer from Capital Improvements Bond Fund	—	9,000,000	9,000,000	—	—
Equity Transfer from Bond Redemption & Interest Fund	—	3,000,000	3,000,000	—	—
Total Other Financing Sources	\$ —	\$ 20,000,000	\$ 20,000,000	\$ —	\$ —
GRAND TOTAL	\$ 88,127,000	\$ 107,319,000	\$ 107,319,000	\$ 87,281,000	\$ 89,604,000

SECTION IV

CORPORATE FUND

The Corporate Fund provides for day-to-day staff services as well as the operations and maintenance of water reclamation plants, pumping stations, collection sewers, tunnels, and related facilities. This section provides appropriation detail for the operations and support departments.

Graphs indicate staffing, appropriations, and expenditures budgeted from 2012 through 2021. The structure of sub-units and sections, the number of actual 2019 full-time equivalent (FTE) positions, as well as FTE positions budgeted for 2020 and 2021 are shown in the organization chart. In this section, and throughout the Budget, actual expenditures are used for 2019 with estimated costs for 2020 and budgeted costs for 2021. Additional information for each department includes:

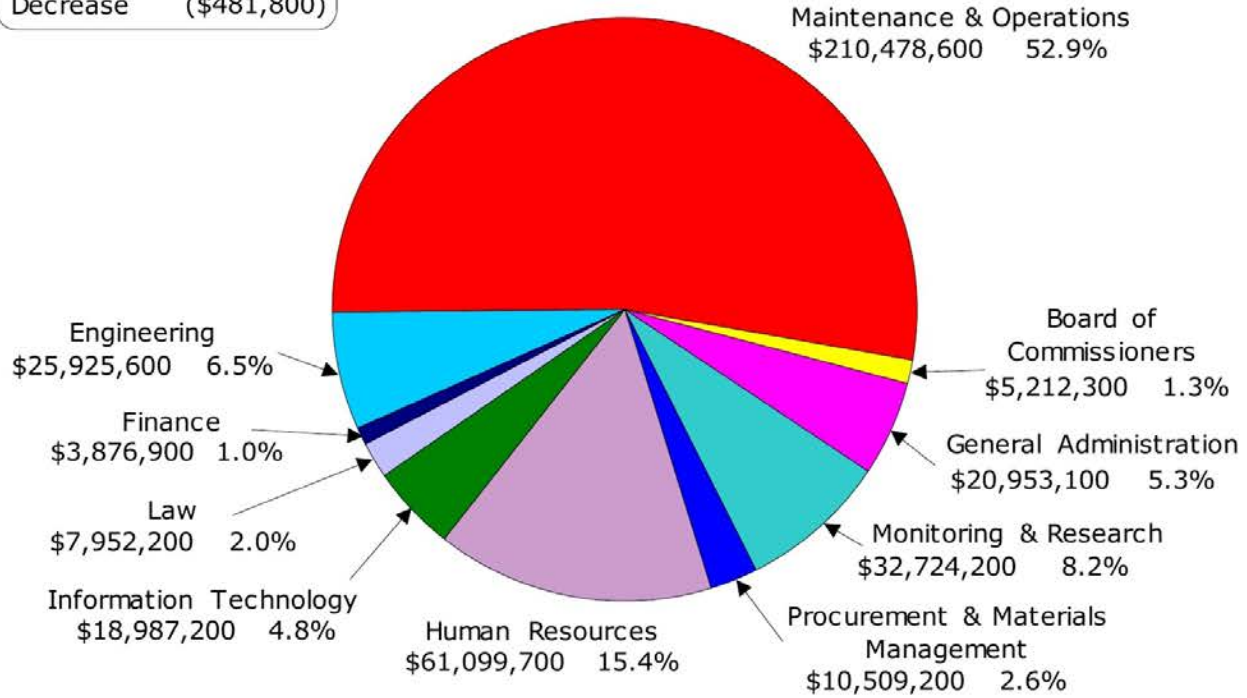
- A *Department Head Transmittal Letter* provides an outline of department plans for the 2021 budget year.
- A *Narrative* explanation of the responsibilities of the department, changes in appropriation from the 2020 Budget, accomplishments during 2020, and significant features for the 2021 Budget. The mission statement, major goals, and initiatives are also provided.
- A list of *Objectives by Priority* describes each objective, assigns the costs associated with it, and indicates its percentage of the total department budget.
- *Programs by Priority* includes major department functions, projected costs, and staffing levels with comparison to budgeted 2020. Actual costs are shown for 2019.
- *Performance Data* measures specific department activities by cost and, where possible, measurable units, and compares budgeted costs for 2021 and 2020 with actual costs for 2019.
- The *Line Item Analysis* provides detailed line item appropriations over a three-year period. Appropriations for 2021 are shown as proposed by the Executive Director. Original and adjusted appropriations and estimated expenditures are shown for 2020. Actual 2019 expenditures are provided.
- The *Position Analysis* provides comparative departmental personnel position information for the previous, current, and budget years. Position counts and appropriations for the current and budget years are provided as totals by section or unit, division, and department. The pay plan and grade for each class title is provided and can be used to reference the salary schedules contained in the appendix to determine the applicable salary range. The 2021 salary appropriation is adjusted for vacancies in the Line Item Analysis.

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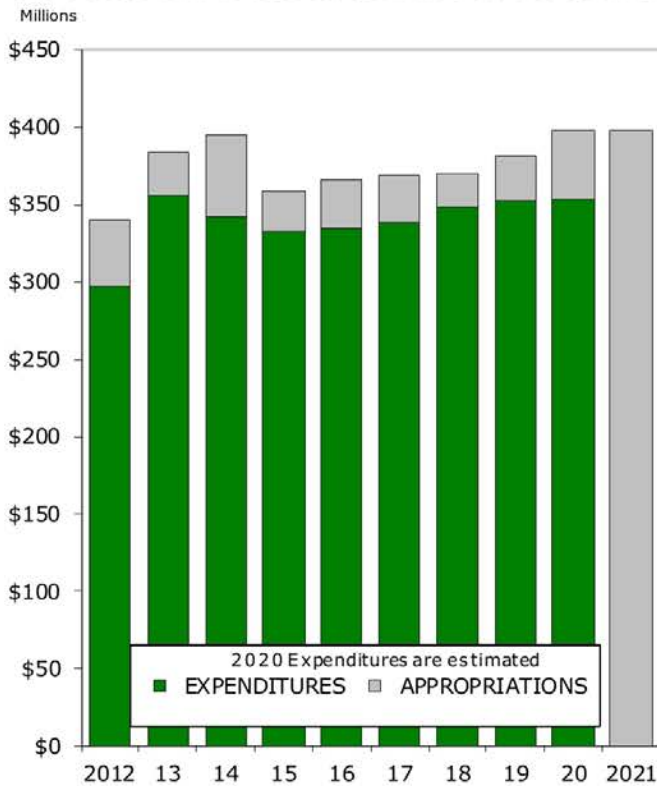
CORPORATE FUND

FUNCTIONS

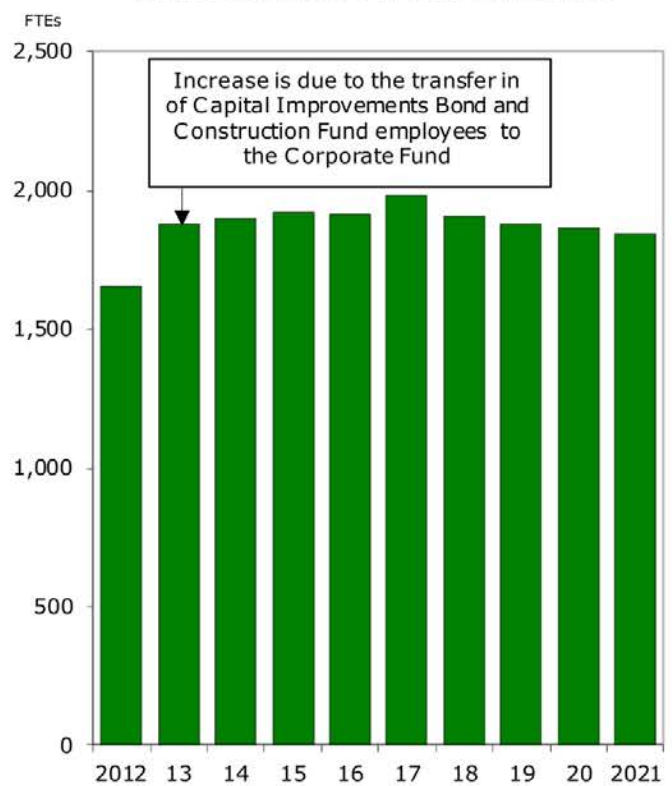
2021	\$397,719,000
2020	\$398,200,800
Decrease	(\$481,800)



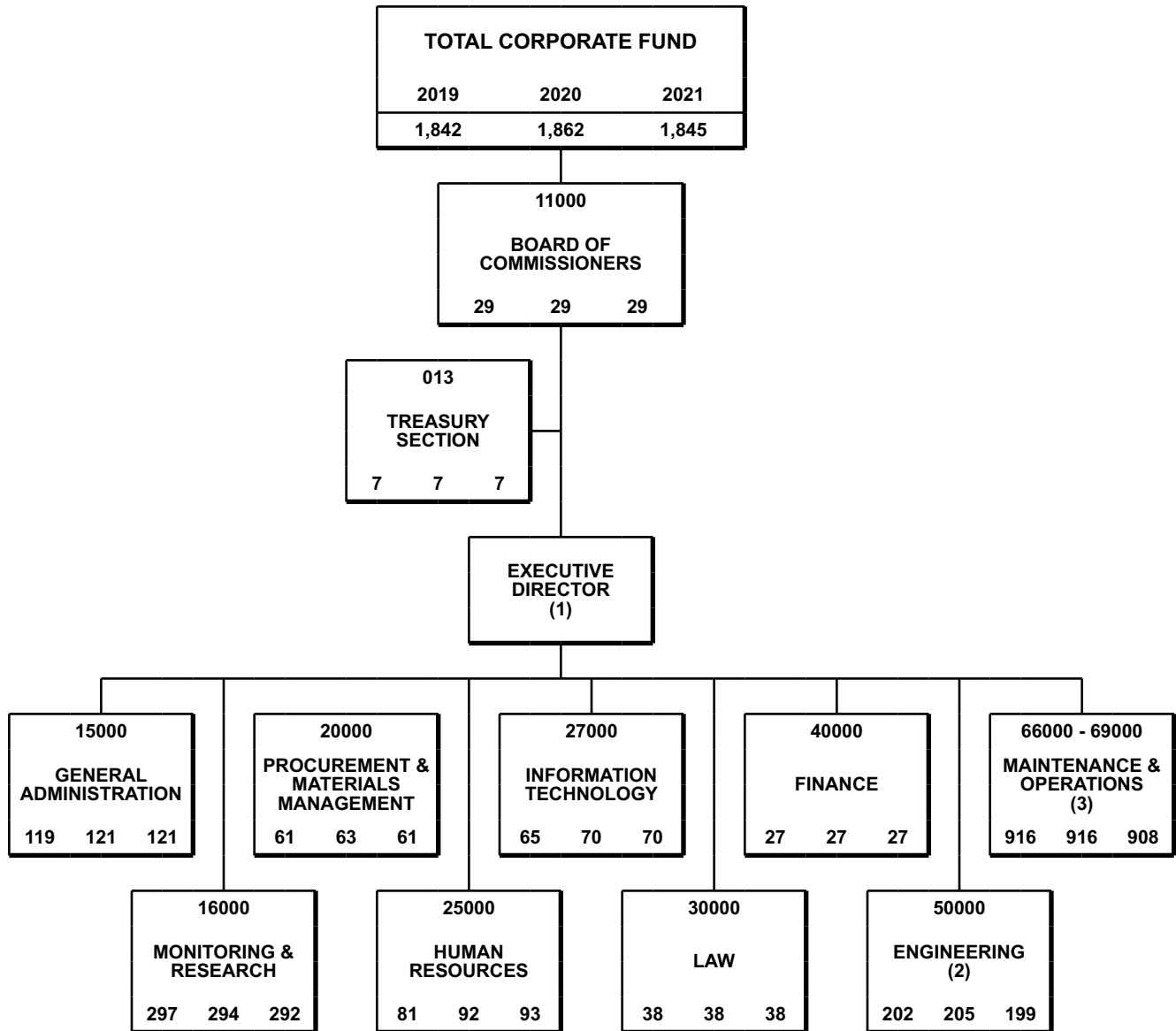
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



CORPORATE FUND



- (1) Personnel count for the Executive Director's Office is reflected in General Administration.
- (2) 69 positions are funded by the Stormwater Management Fund, the management of which remains in the Engineering Department.
- (3) 27 positions are funded by the Stormwater Management Fund, the management of which remains in the Maintenance & Operations Department.

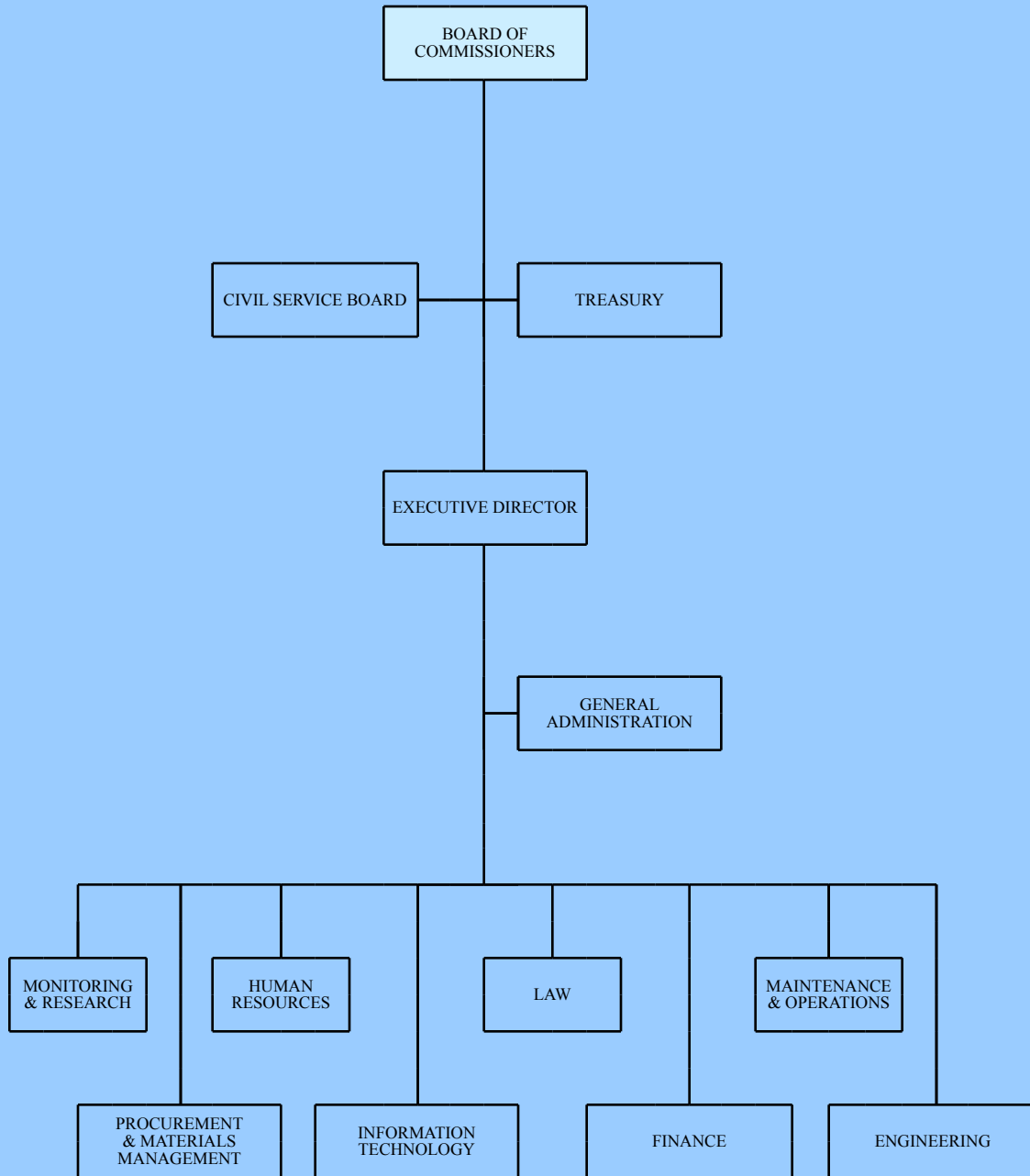
101 11000 - 69000	Fund: Corporate Department: All	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$179,558,649	\$ 190,564,800	\$ 190,517,800	\$ 133,765,173	\$181,994,100	\$189,585,600	\$ —
601060	Compensation Plan Adjustments	7,935,603	8,930,200	8,930,200	6,101,920	8,506,800	9,027,800	—
601070	Social Security and Medicare Contributions	2,656,935	2,900,500	2,900,500	2,036,378	2,620,400	2,936,500	—
601080	Salaries of Nonbudgeted Employees	102,315	5,300	52,300	14,979	55,500	107,000	—
601090	Employee Claims	72,411	94,100	94,100	63,646	94,100	83,300	—
601100	Tuition and Training Payments	803,654	1,388,700	1,290,000	325,487	862,000	1,198,000	—
601250	Health and Life Insurance Premiums	42,606,920	47,509,500	47,259,500	27,430,375	39,022,500	47,059,000	—
601300	Personal Services, N.O.C. (Not Otherwise Classified)	557,233	977,000	977,000	140,981	200,600	977,000	—
100	TOTAL PERSONAL SERVICES	234,293,720	252,370,100	252,021,400	169,878,939	233,356,000	252,174,200	—
612010	Travel	65,184	107,100	105,000	5,494	36,500	95,300	—
612030	Meals and Lodging	166,602	223,400	214,500	30,319	91,600	192,200	—
612040	Postage, Freight, and Delivery Charges	119,438	119,800	120,800	68,755	109,100	123,100	—
612050	Compensation for Personally-Owned Automobiles	169,759	155,000	155,000	73,930	111,200	170,000	—
612080	Motor Vehicle Operating Services	67,641	65,400	65,400	53,437	49,700	71,000	—
612090	Reprographic Services	111,105	78,300	78,300	33,622	48,100	78,800	—
612150	Electrical Energy	39,075,929	38,686,900	38,686,900	23,058,222	38,268,400	37,764,000	—
612160	Natural Gas	2,742,168	3,416,200	3,416,200	1,310,451	3,352,900	3,500,600	—
612170	Water and Water Services	2,096,386	2,195,300	2,195,300	1,238,139	2,037,400	2,343,700	—
612210	Communication Services	1,616,456	1,531,800	1,630,000	1,558,158	1,520,000	1,850,300	—
612240	Testing and Inspection Services	111,192	440,500	440,500	417,213	314,300	1,244,500	—
612250	Court Reporting Services	79,508	106,000	106,000	85,336	83,700	91,000	—
612260	Medical Services	88,728	127,600	127,600	125,946	119,200	170,800	—
612280	Subscriptions and Membership Dues	894,334	993,300	950,300	622,961	803,600	998,300	—
612290	Insurance Premiums	3,572,542	3,463,400	3,463,400	1,552,474	3,688,400	3,870,800	—
612330	Rental Charges	601,427	357,600	358,100	305,172	328,000	325,600	—
612340	Discount Lost	2,331	3,000	3,000	2,026	3,000	3,000	—
612360	Advertising	96,824	145,000	143,200	104,655	120,500	143,000	—
612370	Administration Building Operation	1,212,850	1,316,200	1,317,200	1,315,506	1,293,000	1,369,900	—
612390	Administration Building McMillan Pavilion Operation	714,511	784,900	792,500	787,519	703,100	823,800	—
612400	Intergovernmental Agreements	49,547	49,600	49,600	49,547	49,600	99,100	—
612410	Governmental Service Charges	3,786,147	3,921,200	3,921,200	2,483,480	3,754,900	4,432,800	—

101 11000 - 69000	Fund: Corporate Department: All	LINE ITEM ANALYSIS						
		2019	2020				2021	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
612420	Maintenance of Grounds and Pavements	460,060	1,375,800	1,357,800	1,350,279	1,120,000	1,436,800	—
612430	Payments for Professional Services	2,338,856	8,449,800	8,283,400	6,887,137	4,022,600	5,764,700	—
612490	Contractual Services, N.O.C.	1,161,087	1,441,400	1,437,600	1,159,836	1,014,800	1,413,800	—
612520	Waste Material Disposal Charges	10,550,805	12,045,600	12,740,600	12,733,833	11,342,400	12,270,600	—
612530	Farming Services	18,200	60,000	40,000	40,000	40,000	90,000	—
612590	Sludge Disposal	3,388,793	4,100,000	4,100,000	4,100,000	3,878,100	4,500,000	—
612600	Repairs to Collection Facilities	3,343,900	3,847,800	3,448,900	3,374,850	2,316,100	4,097,400	—
612620	Repairs to Waterway Facilities	112,701	120,300	143,800	139,860	136,500	148,600	—
612650	Repairs to Process Facilities	5,986,662	9,700,300	9,024,200	8,410,292	4,677,800	12,064,100	—
612670	Repairs to Railroads	398,984	396,700	396,700	371,014	376,900	642,800	—
612680	Repairs to Buildings	883,028	1,845,500	1,811,900	1,369,552	1,416,400	1,464,300	—
612760	Repairs to Material Handling and Farming Equipment	274,418	310,200	760,200	725,641	690,000	725,500	—
612780	Safety Repairs and Services	413,468	446,100	446,100	441,052	433,900	539,000	—
612790	Repairs to Marine Equipment	69,739	100,100	100,100	99,676	91,800	31,500	—
612800	Repairs to Office Furniture and Equipment	66,958	67,400	67,400	64,481	59,500	79,800	—
612810	Computer Equipment Maintenance	163,741	318,500	318,500	243,997	197,700	375,000	—
612820	Computer Software Maintenance	4,005,412	4,290,800	4,422,300	3,746,743	4,206,200	5,259,600	—
612840	Communications Equipment Maintenance (Includes Software)	621,173	699,800	637,800	606,859	611,100	766,500	—
612860	Repairs to Vehicle Equipment	511,780	569,500	569,500	567,022	477,900	576,900	—
612970	Repairs to Testing and Laboratory Equipment	361,140	318,300	320,600	311,223	310,700	376,300	—
612990	Repairs, N.O.C.	12,633	36,300	37,500	24,812	29,900	28,000	—
200	TOTAL CONTRACTUAL SERVICES	92,584,147	108,827,700	108,804,900	82,050,521	94,336,500	112,432,800	—
623030	Metals	167,338	126,100	126,100	78,444	119,400	126,100	—
623070	Electrical Parts and Supplies	2,848,897	2,701,400	2,591,400	2,201,064	2,235,000	3,435,400	—
623090	Plumbing Accessories and Supplies	1,053,217	1,123,400	1,029,400	808,179	808,900	1,141,600	—
623110	Hardware	99,498	108,300	98,300	51,980	83,900	104,300	—
623130	Buildings, Grounds, Paving Materials, and Supplies	316,407	425,900	335,900	210,061	297,700	424,900	—
623170	Fiber, Paper, and Insulation Materials	61,829	76,300	66,300	32,549	58,900	76,300	—
623190	Paints, Solvents, and Related Materials	53,581	56,900	69,400	36,906	43,800	56,900	—
623250	Vehicle Parts and Supplies	183,768	180,300	180,300	177,851	167,900	212,300	—
623270	Mechanical Repair Parts	3,412,312	4,099,800	4,164,800	3,868,580	3,746,000	4,972,700	—

101 11000 - 69000	Fund: Corporate Department: All	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623300	Manhole Materials	18,608	5,000	5,000	3,990	4,500	70,000	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	291,075	376,700	375,100	283,460	288,600	351,300	—
623530	Farming Supplies	14,406	19,000	19,000	13,900	17,000	16,000	—
623560	Processing Chemicals	9,935,750	10,967,300	10,942,300	9,545,870	9,427,000	11,604,500	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	1,038,736	1,022,000	1,072,000	905,384	1,019,000	1,145,100	—
623660	Cleaning Supplies	287,631	269,500	644,500	551,602	644,200	643,300	—
623680	Tools and Supplies	360,118	333,900	333,900	289,125	289,900	356,800	—
623700	Wearing Apparel	220,236	225,500	355,500	285,018	340,700	353,100	—
623720	Books, Maps, and Charts	16,638	20,400	22,500	17,537	16,200	21,400	—
623780	Safety and Medical Supplies	260,047	364,600	354,600	272,033	333,600	381,700	—
623800	Computer Software	83,926	477,000	477,000	332,746	358,800	310,900	—
623810	Computer Supplies	661,892	896,700	1,231,700	1,168,306	800,600	896,900	—
623820	Fuel	505,313	685,100	600,100	466,076	493,200	618,800	—
623840	Gases	86,824	84,700	84,700	83,363	78,500	84,700	—
623850	Communications Supplies	178,776	324,200	367,200	290,312	311,200	87,200	—
623860	Lubricants	233,038	208,600	214,700	157,904	162,100	216,600	—
623990	Materials and Supplies, N.O.C.	202,943	278,300	296,700	221,021	268,300	289,400	—
300	TOTAL MATERIALS AND SUPPLIES	22,592,803	25,456,900	26,058,400	22,353,261	22,414,900	27,998,200	—
634600	Equipment for Collection Facilities	50,476	40,000	1,000	—	—	90,000	—
634650	Equipment for Process Facilities	271,846	274,000	224,400	216,471	214,600	484,400	—
634670	Railroad Equipment	20,779	—	—	—	—	25,000	—
634760	Material Handling and Farming Equipment	373,612	44,500	60,500	60,216	44,300	333,000	—
634780	Safety and Medical Equipment	—	—	150,000	12,166	20,000	6,000	—
634790	Marine Equipment	78,500	—	—	—	—	—	—
634810	Computer Equipment	145,166	115,500	139,500	137,920	199,500	205,000	—
634820	Computer Software	—	8,227,000	8,070,400	7,894,688	192,000	950,000	—
634840	Communications Equipment (Includes Software)	—	24,000	—	—	—	—	—
634860	Vehicle Equipment	1,485,845	1,562,600	1,625,700	1,575,706	1,737,600	1,470,200	—
634970	Testing and Laboratory Equipment	438,506	91,000	117,600	116,343	102,600	279,700	—
634990	Machinery and Equipment, N.O.C.	44,217	337,500	97,000	92,796	81,900	440,000	—
400	TOTAL MACHINERY AND EQUIPMENT	2,908,947	10,716,100	10,486,100	10,106,306	2,592,500	4,283,300	—
645680	Buildings	—	75,000	75,000	64,510	74,000	—	—

101 11000 - 69000	Fund: Corporate Department: All	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
500	TOTAL CAPITAL PROJECTS	—	75,000	75,000	64,510	74,000	—	—
667130	Taxes on Real Estate	682,846	755,000	755,000	683,599	724,000	830,500	—
700	TOTAL FIXED AND OTHER CHARGES	682,846	755,000	755,000	683,599	724,000	830,500	—
TOTAL CORPORATE FUND		\$353,062,463	\$ 398,200,800	\$ 398,200,800	\$ 285,137,136	\$353,497,900	\$397,719,000	\$ —

NOTES: 1. Amounts may not add up due to rounding.
 2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.
 Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.



Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 8, 2020

Mr. Brian A. Perkovich
Executive Director
OFFICE

Dear Sir:

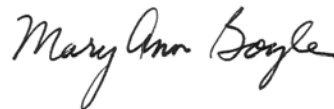
Subject: 2021 Program for the Board of Commissioners

The Board of Commissioners' program for 2021, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the department's 2021 initiatives in alignment with and in support of the Strategic Business Plan. The budget requests include all amendments as directed by you during the Executive Director Budget Hearings in August of this year.

The narrative provides a summary of the department, 2021 major initiatives and challenges, and 2020 accomplishments. Supporting schedules of objectives, performance, and staffing levels present three years of detailed budgetary information.

Thank you for the opportunity to present the proposed Board of Commissioners budget for 2021.

Respectfully submitted,

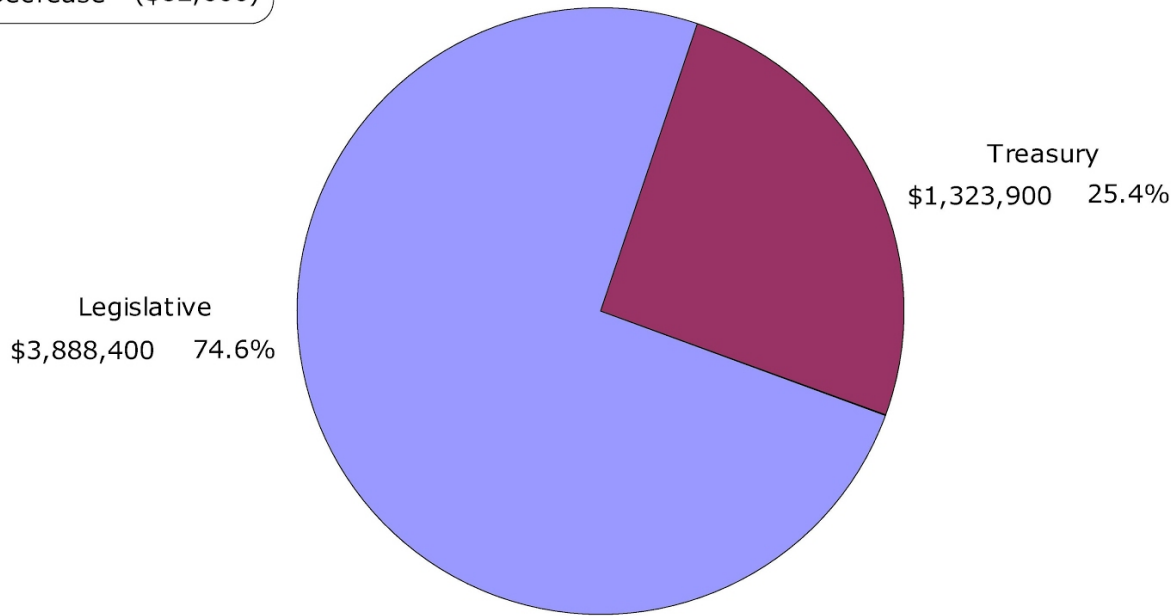


Mary Ann Boyle
Treasurer

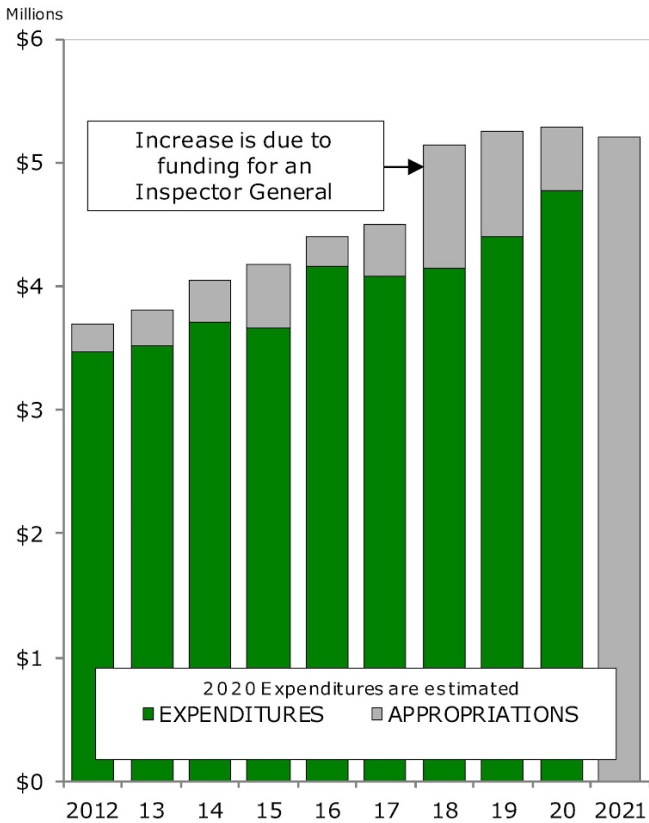
BOARD OF COMMISSIONERS

2021 \$5,212,300
 2020 \$5,294,300
 Decrease (\$82,000)

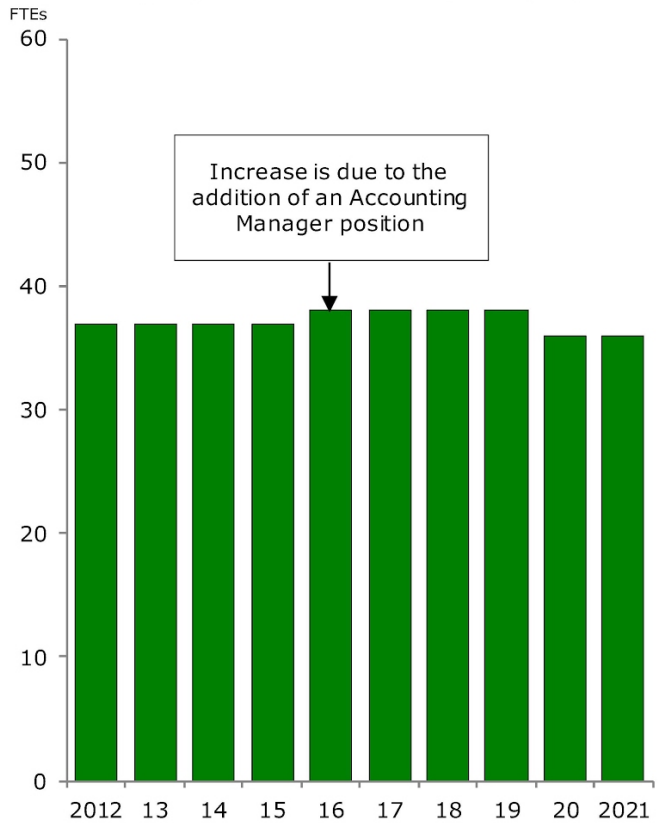
FUNCTIONS



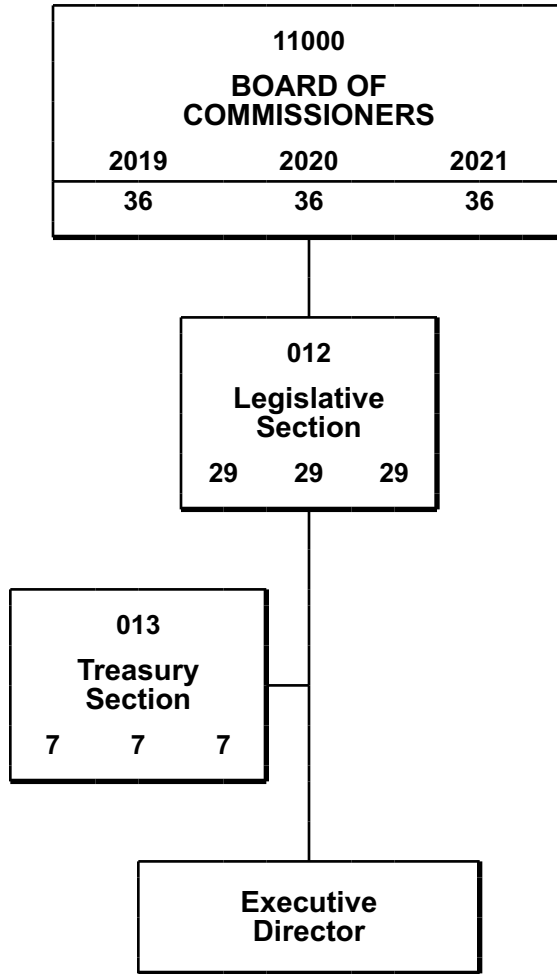
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



BOARD OF COMMISSIONERS



BOARD OF COMMISSIONERS

The mission of the Board of Commissioners is the mission of the District: to protect the health and safety of the public in its service area, protect the quality of the water supply source (Lake Michigan), improve the quality of waterways in its service area, protect businesses and homes from flood damages, and manage water as a vital resource for its service area.

The mission of the Treasury Section is to provide quality management of the District's financial resources by maximizing income on investments with minimal risk, issuing bonds to finance the wastewater collection, treatment, and flood control facilities' capital needs, cost-effectively meeting the cash requirements of the District's operations through the utilization of appropriate technology and efficient banking practices, and maintaining the District's outstanding bond rating.

Departmental Summary

The Board of Commissioners comprises two sections: Legislative and Treasury. The Legislative Section is the policy-making entity of the District, responsible for establishing policies and procedures consistent with the District's mission of protecting the water environment for the citizens of Cook County and providing a forum to facilitate community involvement. The Treasury Section is responsible for the collection and investment of District revenues, the issuance of bonds to meet District capital requirements, the payment of principal and interest on outstanding bonds as required, and the maintenance of the District's bond ratings.

Summary of 2020 Accomplishments

- Work progressed according to the Intergovernmental Agreement with Cook County providing the Office of the Independent Inspector General Services to the District. The Office of the Independent Inspector General provided quarterly reports to the Board of Commissioners which are available on the District's website;
- Investment interest income earned for the year was approximately \$9.9 million reflecting lower yields on interest-bearing investments due to two interest rate decreases by the Federal Reserve during 2020. The economic downturn in the financial markets created significant new challenges for investing in short-term interest-bearing investments. As of year-end, the District experienced no loss on investments;
- Treasury staff adapted quickly to leverage remote-access software for collaboration during the COVID-19 pandemic, allowing both routine processes and special projects to proceed as planned;
- The District continued toward the funding policy goals for the Retirement Fund and the Other Postemployment Benefits (OPEB) Trust Fund. As of December 31, 2019, the Retirement Fund's funded ratio was 55.9 percent and the OPEB Trust Fund's funded ratio was 76.3 percent;
- The District completed an equity transfer of \$20.0 million to the Retirement Fund to provide advance funding to maintain growth in the Retirement Fund's funded ratio;
- Investment activities incorporated sustainability considerations according to the revised Investment Policy and guidelines implemented in December 2019. As of August 31, 2020, 93 percent of the District's commercial paper holdings are in the upper half of Sustainalytics rankings for environmental, social, and governance factors and 64 percent of the District's approved commercial paper issuers acknowledge at least four out of 17 United Nations Sustainable Development Goals. Additionally, all government agency and municipal bond investments in the District's inventory directly or indirectly support environmental, social, and governance practices.

Budget Highlights

The 2021 appropriation for the Board of Commissioners is \$5,212,300, a decrease of \$82,000, or 1.5 percent, from 2020. The staffing level remains unchanged at 36 positions.

The significant feature of the Treasury Section 2021 Budget is:

- Investment Interest Income Estimate: \$3.6 million or less - The Federal Reserve forecasts interest rates staying near zero through 2022;
- The District will complete a bond sale to fund its Capital Improvement Program. A variety of low cost funding options will be evaluated including subsidized loans from the Illinois Environmental Protection Agency State Revolving Fund loan program and loans from the U.S. Treasury under the Water Infrastructure Finance and Innovation Act.

2021 Initiatives in Support of the Strategic Business Plan Include the Following:

• **Add Value**

The Treasury Section will explore innovative ideas on investment and debt management to maximize returns and cost efficiency for District taxpayers while adhering to District policies.

• **Develop Employees**

Treasury Section employees will continue to attend seminars and conferences in 2021 to develop knowledge and skills in the areas of investment, treasury, and debt management. Employees will also continue to cross-train to ensure business continuity at all times.

• **Excellence**

The Legislative Section will continue an agreement with the Cook County Office of the Independent Inspector General in 2021. Inspectors General are accountable to the taxpayers. Their role is to detect and prevent waste, fraud, and abuse, thereby building trust in government. The Inspector General investigates complaints or allegations of wrongdoing or misconduct within the programs or operations of the District.

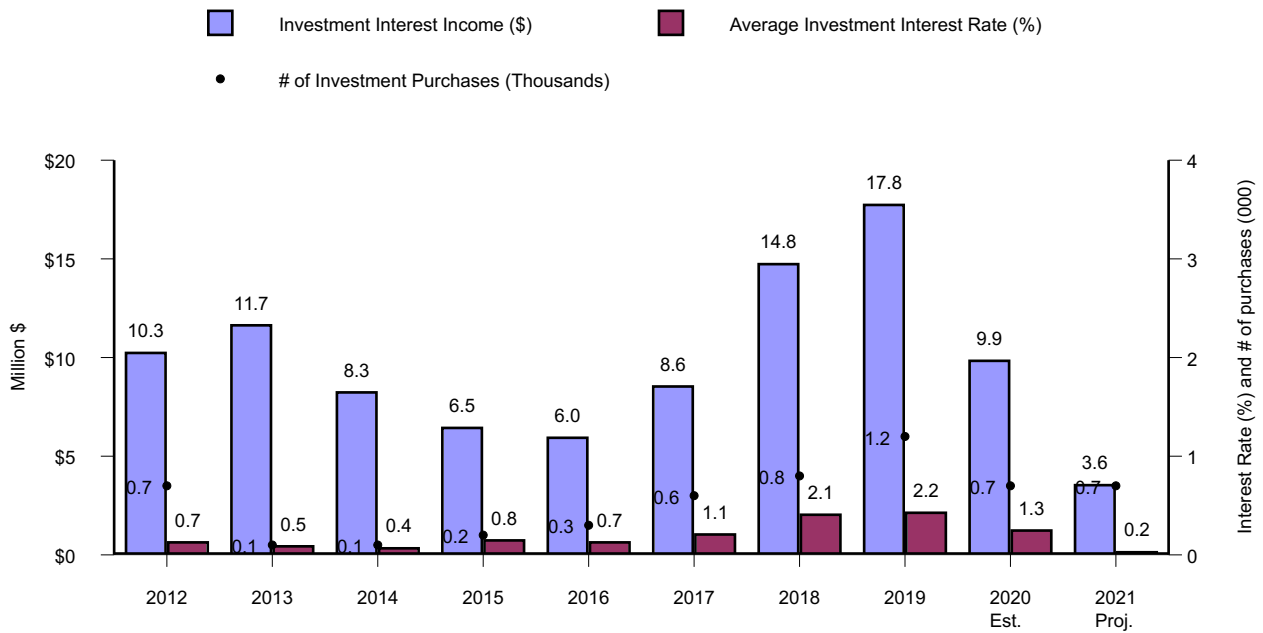
The Treasury Section will maintain sufficient liquidity to meet the District’s payment requirements for operations, payroll, and capital expenditures, fund all expenditures in compliance with federal law and state statute, and maintain pension and OPEB funding strategies to ensure the long-term health of the retirement programs.

The Treasury Section will continue to focus the Capital Finance Program on the prudent use of debt financing for capital needs and debt service savings, while issuing debt financings in compliance with federal securities laws and state statutory authorization.

The Treasury Section will continue to strive to maintain AAA/AA+ bond credit ratings with stable outlooks despite the financial effects of the COVID-19 pandemic.

The Treasury Section will maximize investment yield on District investments while safeguarding the principal by investing excess cash to maximize investment returns within the statutory and investment policy guidelines.

**Average Investment Interest Rate on Purchases
All Funds 2012-2021**



Ending Investment Inventory (Par Value) (Dollars in Millions)	2012	2013	2014	2015	2016	2017	2018	2019	2020 Est.	2021 Proj.
	\$975.0	\$717.0	\$547.2	\$715.2	\$711.3	\$736.7	\$684.0	\$670.5	\$702.6	\$672.6

11000 BOARD OF COMMISSIONERS

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:	Cost	Percent
1. Establish policies and priorities to guide the Executive Director in meeting the District's responsibilities: ensuring the protection of the environment and the health and welfare of people in the community in the most responsive, efficient, and economical manner.	\$ 3,888,400	74.6%
2. Provide cash management services to maximize investment interest return without sacrifice of principal or required liquidity, measured by exceeding the benchmark 90-day Treasury bill rate and investment on average of over 99 percent of available funds.	\$ 766,900	14.7%
3. Enhance the District's image in national financial markets through the prudent use of debt financing for capital needs and debt service savings.	\$ 398,500	7.7%
4. Administer the Other Post Employment Benefit Trust investment and reporting activities.	\$ 158,500	3.0%
Totals	\$ 5,212,300	100.0%

MEASURABLE GOALS:	2019 Actual	2020 Estimated	2021 Proposed
1. Maximize investment earnings by exceeding the interest rate benchmark monthly.	100%	100%	100%
2. Invest 99 percent of available funds on a daily basis.	100%	100%	100%
3. Achieve AAA bond rating with all three major rating agencies.	33%	33%	33%
4. Maintain minority/women/veteran broker/dealer investment participation at 33 percent or more of applicable investment purchases.	60%	33%	33%

PROGRAMS BY PRIORITY: Number Name	2019 Actual	Budgeted		Change		
		FTEs	Dollars	Dollars	Percent	
7110 Legislative	\$ 3,134,694	2021	29	\$ 3,800,400	\$ (61,400)	(1.6)
		2020	29	\$ 3,861,800		
7210 Treasury Activities	\$ 728,319	2021	4	\$ 766,900	\$ (2,600)	(0.3)
		2020	4	\$ 769,500		
7316 Other Postemployment Benefits Trust Management and Report Preparation	\$ 157,304	2021	1	\$ 158,500	\$ —	—
		2020	1	\$ 158,500		
7601 Capital Financing Program and Other Related Costs	\$ 299,784	2021	2	\$ 398,500	\$ (18,000)	(4.3)
		2020	2	\$ 416,500		
7604 Social Security and Medicare Contributions	\$ 76,065	2021	—	\$ 88,000	\$ —	—
		2020	—	\$ 88,000		
Totals	\$ 4,396,166	2021	36	\$ 5,212,300	\$ (82,000)	(1.5)%
		2020	36	\$ 5,294,300		

11000 BOARD OF COMMISSIONERS

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated
7110	Legislative	Cost	\$ 3,134,694	\$ 3,861,800	\$ 3,800,400
7210	Treasury Activities	Cost	\$ 728,319	\$ 769,500	\$ 766,900
7316	Other Postemployment Benefits Trust Management and Report Preparation	Cost	\$ 157,304	\$ 158,500	\$ 158,500
7601	Capital Financing Program and Other Related Costs	Cost	\$ 299,784	\$ 416,500	\$ 398,500
7604	Social Security and Medicare Contributions	Cost	\$ 76,065	\$ 88,000	\$ 88,000
		Totals	\$ 4,396,166	\$ 5,294,300	\$ 5,212,300

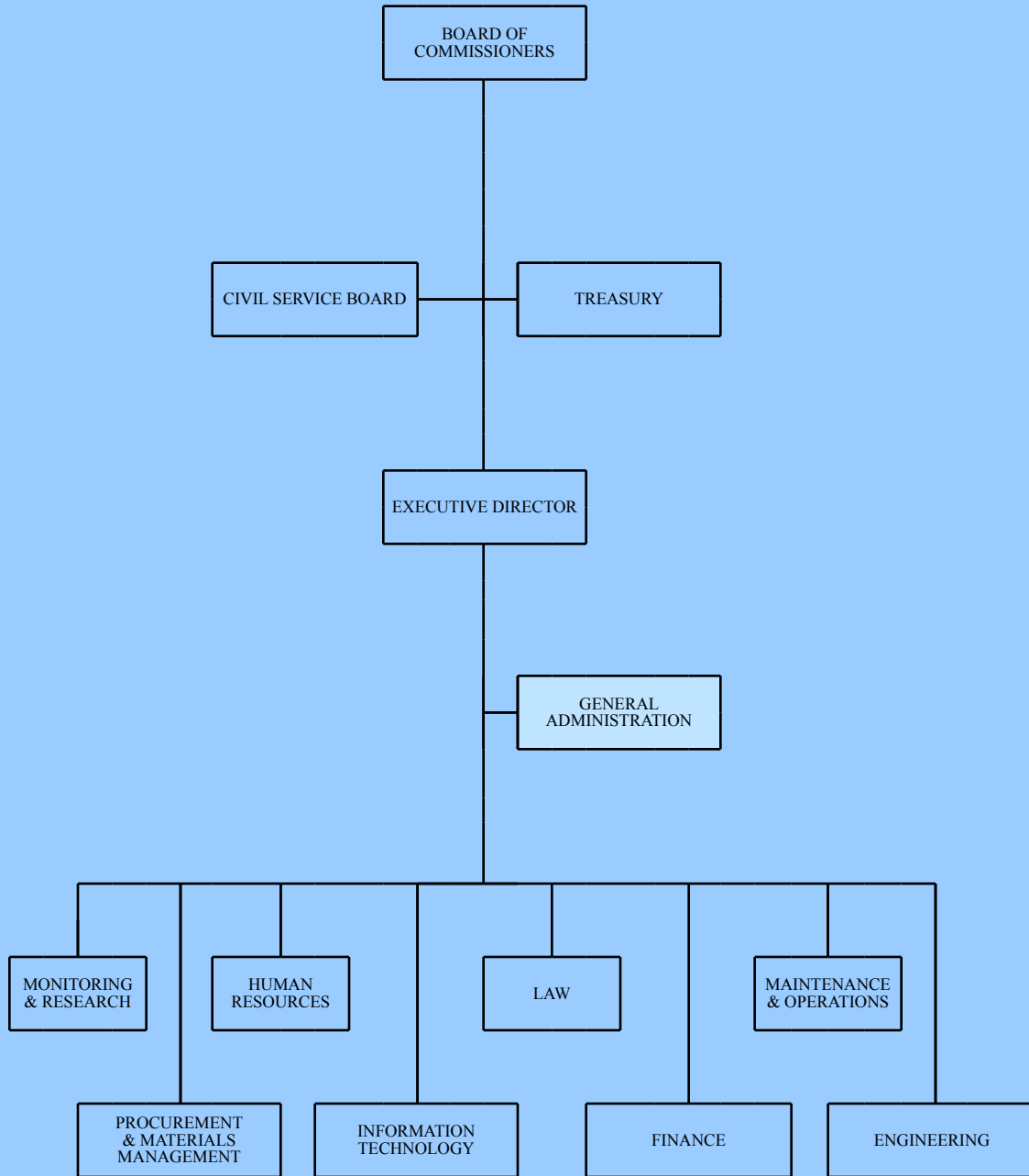
101 11000	Fund: Corporate Department: Board of Commissioners	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 3,490,254	\$ 3,630,900	\$ 3,630,900	\$ 2,587,724	\$ 3,560,000	\$ 3,626,900	\$ —
601060	Compensation Plan Adjustments	6,581	45,900	45,900	36,224	45,900	42,200	—
601070	Social Security and Medicare Contributions	76,065	88,000	88,000	48,860	64,900	88,000	—
601100	Tuition and Training Payments	16,085	32,900	32,900	2,589	18,000	20,700	—
601300	Personal Services, N.O.C. (Not Otherwise Classified)	347,868	517,000	517,000	140,390	200,000	517,000	—
100	TOTAL PERSONAL SERVICES	3,936,853	4,314,700	4,314,700	2,815,787	3,888,800	4,294,800	—
612010	Travel	7,121	26,000	26,000	61	17,400	17,000	—
612030	Meals and Lodging	13,547	32,500	32,500	—	24,500	20,500	—
612280	Subscriptions and Membership Dues	26,325	27,700	27,700	27,700	27,700	29,700	—
612430	Payments for Professional Services	405,750	867,100	867,100	839,007	780,000	824,100	—
612490	Contractual Services, N.O.C.	563	800	800	674	800	700	—
200	TOTAL CONTRACTUAL SERVICES	453,306	954,100	954,100	867,442	850,400	892,000	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	6,008	25,500	25,500	4,992	25,000	25,500	—
300	TOTAL MATERIALS AND SUPPLIES	6,008	25,500	25,500	4,992	25,000	25,500	—
TOTAL BOARD OF COMMISSIONERS		\$ 4,396,167	\$ 5,294,300	\$ 5,294,300	\$ 3,688,221	\$ 4,764,200	\$ 5,212,300	\$ —

NOTES: 1. Amounts may not add up due to rounding.
 2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.
 Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.

Fund: Corporate Dept: Board of Commissioners		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
012	Legislative Section					
EX22	President	1	1		1	
EX21	Vice President	1	1		1	
EX01	Commissioner (Chairman, Committee on Finance)	1	1		1	
EX02	Commissioner	6	6		6	
EX03	Administrative Aide to President	1	1		1	
EX04	Administrative Assistant to Commissioner (Secretary)	19	19		19	
TOTAL 012	Legislative Section	29	29	2,588,317	29	2,578,850
013	Treasury Section					
EX05	Treasurer	1	1		1	
HP20	Assistant Treasurer	1	1		1	
HP18	Accounting Manager	1	1		1	
HP16	Financial Analyst	3	3		3	
EX06	Secretary to Officer	1	1		1	
TOTAL 013	Treasury Section	7	7	1,060,727	7	1,066,252
TOTAL	Board of Commissioners	36	36	3,649,044	36	3,645,102

NOTE: Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.

NOTE PAGE



Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 8, 2020

Mr. Brian A. Perkovich
Executive Director
OFFICE

Dear Sir:

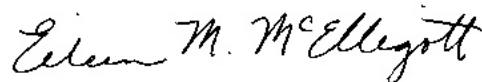
Subject: 2021 Program for General Administration

General Administration's program for 2021, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of 2021 initiatives in alignment with and in support of the Strategic Business Plan. The budget requests include all amendments as directed by you during the Executive Director Budget Hearings in August of this year.

The narrative provides a summary of General Administration's organization, 2021 major initiatives and challenges, and 2020 accomplishments. Supporting schedules of objectives, performance, and staffing levels present three years of detailed budgetary information.

Thank you for the opportunity to present the proposed General Administration budget for 2021.

Respectfully submitted,

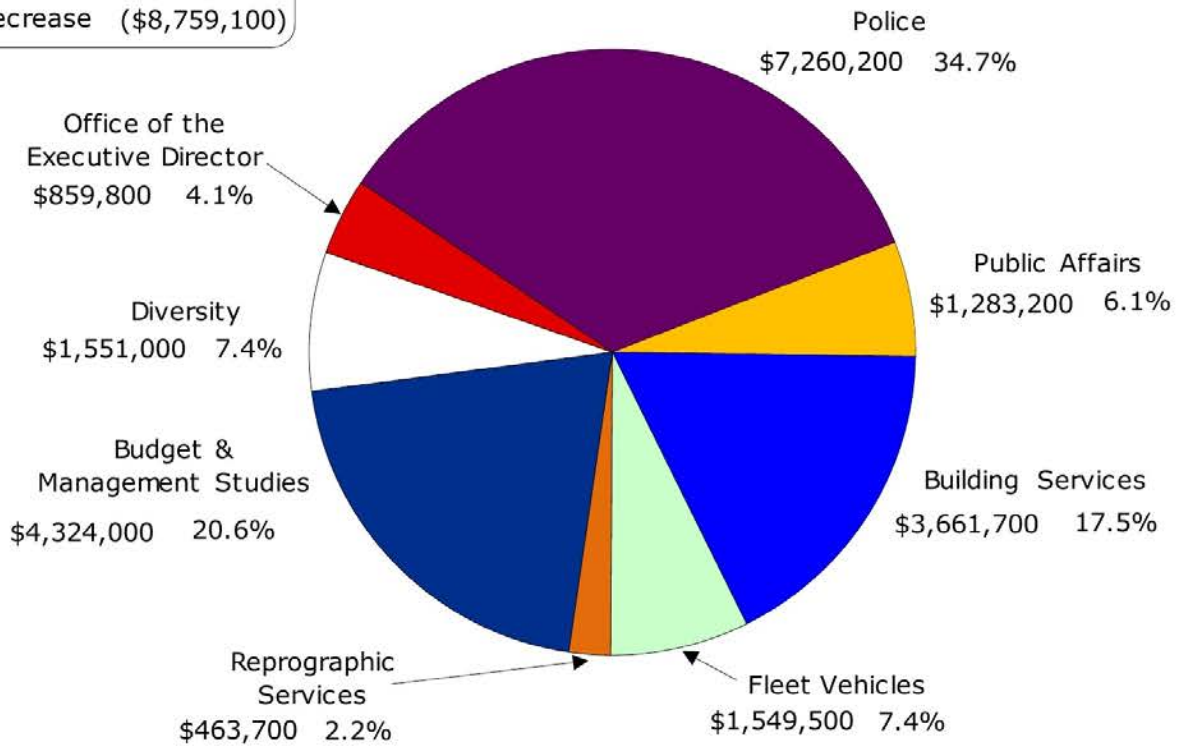


Eileen M. McElligott
Administrative Services Officer

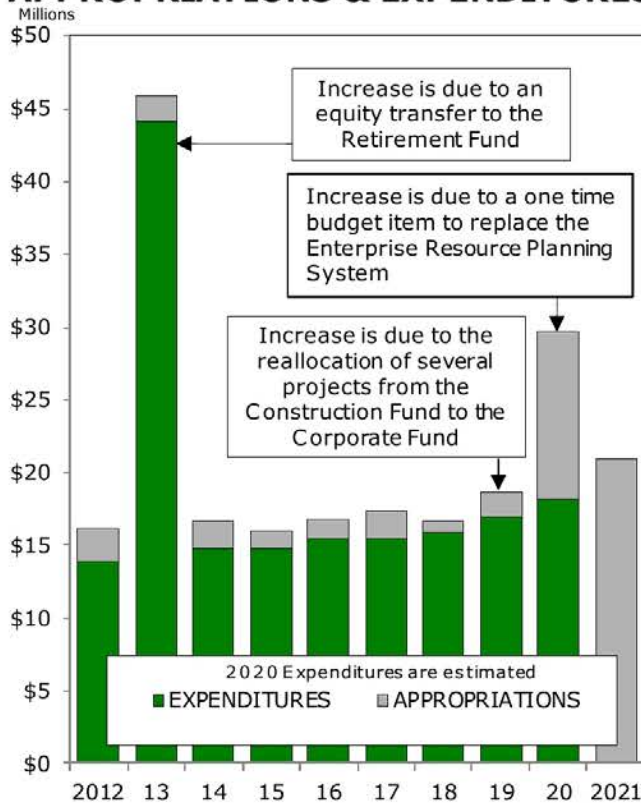
GENERAL ADMINISTRATION

2021	\$20,953,100
2020	\$29,712,200
Decrease	(\$8,759,100)

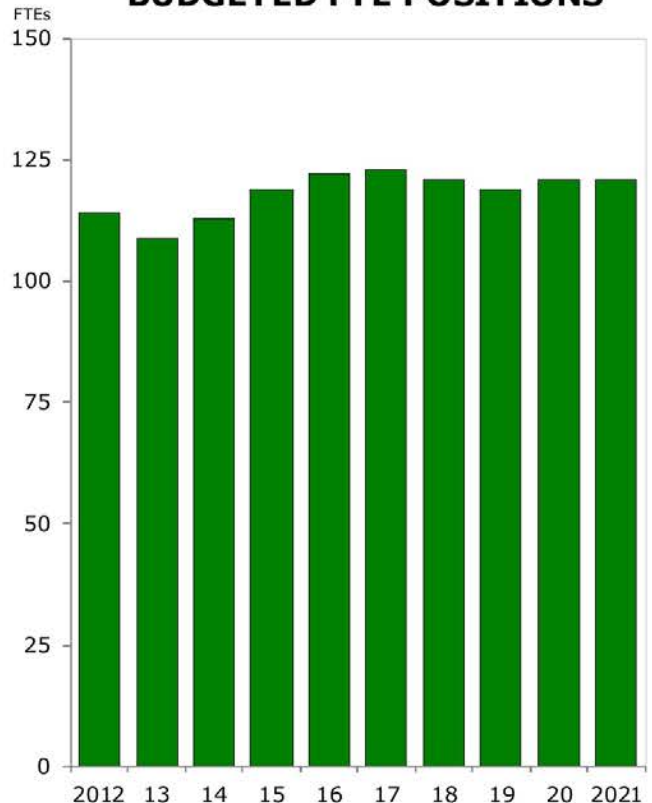
FUNCTIONS



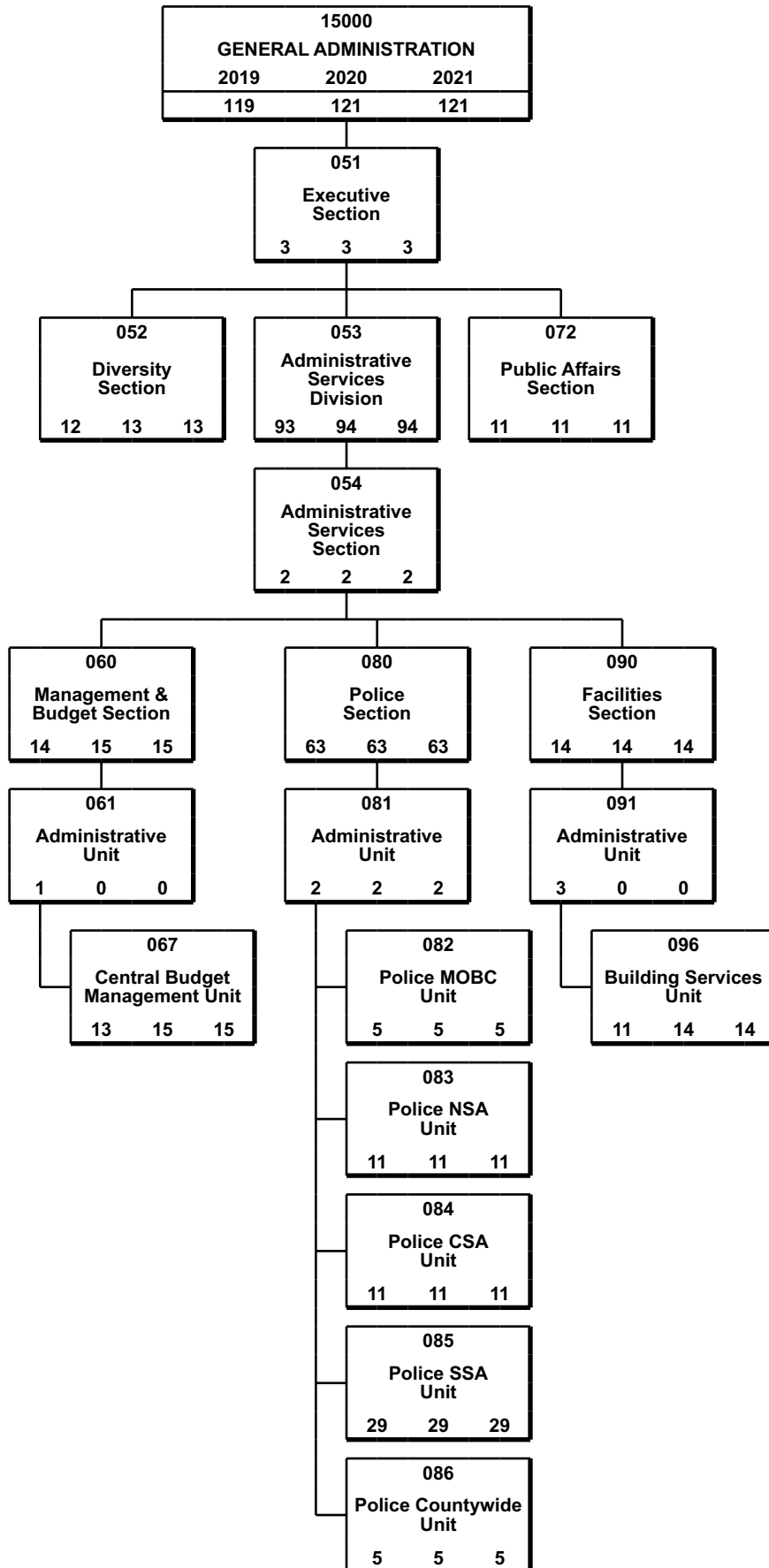
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



GENERAL ADMINISTRATION



GENERAL ADMINISTRATION

The mission of the Administrative Services Division is to prepare and administer the annual budget, provide a secure work environment for all employees, visitors, contractors, and citizens, and provide support services to maintain the Main Office Building Complex (MOBC).

The mission of the Diversity Section is to ensure that minority owned (MBE), women owned (WBE), small (SBE), and veteran owned (VBE) business enterprises are given equal opportunities to participate in the performance of the District's construction program and professional service contracts in excess of \$100,000, in accordance with case law and the District's policies.

The mission of the Public Affairs Section is to promote a broader understanding and appreciation of the District and the valuable services it provides, present clear and accurate information about the work of the District and its areas of responsibility, cultivate relationships and facilitate communication with all stakeholders, and plan and implement targeted promotional efforts and social marketing campaigns.

Departmental Summary

General Administration supports the Office of the Executive Director in implementing Board policies. General Administration includes the Office of the Executive Director, the Administrative Services Division, the Diversity Section, and the Public Affairs Section.

Summary of 2020 Accomplishments

- It is anticipated that the District will be presented with the Distinguished Budget Presentation Award from the Government Finance Officers Association (GFOA) for the 36th consecutive year;
- Continued to train in-house staff on several topics intended to increase the efficiency of the budgeting process by using additional features available in the financial reporting tool implemented in 2018;
- Completed a construction project to replace two chiller systems at MOBA with higher efficiency models;
- Rolled out a new electronic print shop job submittal program to improve visibility;
- Continued to increase the number of Socially and Economically Disadvantaged vendors included on the District's vendor list;
- Received the Government Service Award from the Hispanic American Construction Industry Association;
- Participated in the Chicago Urban League Virtual Summit on the State of Black America;
- Participated in 2 lesbian, gay, bisexual, transgender and queer (LGBT) virtual networking events;
- Completed the installation and pilot for the PRISM electronic data system;
- Maintained Critical Infrastructure posture during pandemic and social change;
- Continued to manage the District's Prescription Drug Take Back Program at four District locations;
- Replaced aging Police equipment including STARCOM radios and Livescan systems;
- Celebrated African American history makers beginning with raising the Pan-African flag for the first time and recognizing the notable contributions of many African American icons, including past and present elected leaders, the Montford Point Marines, Harriet Tubman, as well as the first African American District leaders. Five events were held throughout February;
- Received the Water Environment Federation's Public Communication and Outreach Program Award during the Water Environment Federation Technical Exhibition and Conference for work dedicated to the Space to Grow partnership;
- Co-hosted a showing of the "Brave Blue World" documentary and hosted the 8th Annual Sustainability Summit virtually to honor individuals and organizations promoting a sustainable environment;
- Implemented the monthly MWRD "Flow" (For the Love Of Water) electronic newsletter to share news and notes;
- Before the pandemic forced the cancellations of all outreach activities, staff had participated in nine outreach events impacting more than 16,162 people, visited over 18 schools and other organizations to educate more than 1,583 people, and hosted 33 tours welcoming 610 people. During the pandemic from mid-March to July 31, the District participated in 10 virtual outreach events reaching approximately 300 students and teachers;
- Completed the "Where Does It Go" Storybook;
- Grew social media exponentially by adding a historical photo of the day and highlighting work in progress postings;
- Launched our Save the Monarchs campaign promoting the District's partnership with the Illinois Monarch Project, which works to save Monarch butterflies from extinction. The campaign educates the public about the plight of the monarch and encourages engagement with our followers on social media. Public Affairs has received nearly 100 online pledges to help save Monarchs, with 85 received within the first two months of the campaign's launch in May of 2020. The campaign, as of July 9, 2020, has reached a combined total of 22,696 people on Facebook, Twitter and Instagram and generated a combined total of 1,280 engagements that include likes, shares, and click-throughs;

- Introduced the Green Neighbor Guide with social media and web support to help educate the public about ways to manage the flow of stormwater on their properties while also encouraging the use of sustainable resources to meet their goals. As of July 9, 2020, our posts have reached a combined total of 17,084 people on Facebook, Twitter and Instagram, generating a combined total of 739 engagements that include likes, shares, and click-throughs. The campaign was launched in late May of 2020 and is performing well;
- Developed and maintained a COVID-19 pandemic web page to inform the public about our efforts to help minimize the spread of the disease while also ensuring that the District's work continues. The page is well received and continues to provide tips for the public, using the Center for Disease Control and Prevention guidelines and linking to authorities in the field that include local, state and federal information as information becomes available;
- Scanned, researched and posted more than 200 historical photos on social media generating thousands of views, shares and likes;
- Developed the "No Wipes Down the Pipes" video which reached more than 4,000 views on YouTube;
- Utilized drone, photography and videography to document events or projects such as flooding throughout Cook County on May 18 and May 19, the Space to Grow school construction, milkweed seed growth to help stimulate the monarch butterfly population, the Tunnel and Reservoir Plan reservoirs, documentation of Lake Michigan Shoreline erosion and ongoing construction at various locations for stormwater like Addison Creek, Melvina Ditch, and streambank improvements, as well as the WRPs for new facilities like the primary tanks at Stickney and the biofiltration odor system;
- Created a virtual tour of the Stickney WRP;
- Researched and wrote 60 press releases and media advisories;
- Managed content for an ever-evolving website that attracts more than 500,000 site visits each year.

Budget Highlights

The 2021 appropriation for General Administration is \$20,953,100, a decrease of \$8,759,100, or 29.5 percent, from 2020. The staffing level remains unchanged at 121 positions.

Significant features of the 2021 Budget include:

- Select and implement a replacement of the existing District-wide budgeting system;
- Select and implement a single District-wide replacement system of the multiple existing key card access systems at various locations;
- Replacement of two original construction boiler systems at the MOB;
- Expand the Genetec camera system, with the help of the Information Technology Department, to include employee parking lots;
- Pursue the replacement of vehicles, with hybrid or electric vehicles when possible, at 10 years or 100,000 miles. Vehicles not meeting the minimum usage criteria may be designated as pool vehicles for better utilization. General Administration will pursue the installation of electric charging stations for hybrid and electric vehicles.

2021 Administrative Services Division Initiatives in Support of the Strategic Business Plan Include the Following:

The Administrative Services Division is comprised of three distinct support service functions, consisting of the Management & Budget, Police, and Facilities Sections. It is focused on the goals established in the Strategic Business Plan and is committed to using the established strategies for continuous improvement in 2021.

The substantial reduction in total budget of \$8,792,899 from the 2020 Final Budget is mainly due to the removal of a one-time budget item to evaluate and replace the District's Enterprise Resource Planning system. In 2021, the Administrative Services Division will work on evaluating and replacing the District's budgeting system.

• Add Value

The Management & Budget Section will continue to develop time saving methods for developing the budget. In 2018, a new financial reporting tool was implemented that increased efficiencies in the data consolidation and publication of the budget document. We continue to transition other documents into the tool to further increase efficiencies.

• Excellence

The Management & Budget Section will provide capital budget analyses to assist in the prioritization of projects to ensure best use of current spending.

The Management & Budget Section continually strives to produce a budget document that provides transparency to the public. The section's goals include earning Special Capital Recognition and Special Performance Measures Recognition from the GFOA.

The Police Section will protect employees, contractors, visitors, and the District's assets through access control and patrolling and monitoring District land and facilities in a professional and service oriented manner.

The Facilities Section manages the maintenance and operations of the MOBC, which includes building operations, automotive fleet services, mailroom, and print services. It is committed to providing a functional office environment for staff and delivering efficient and cost-effective automotive fleet services, mailroom, and print services. The Facilities Section will continue to maintain the MOBC through the careful management of our physical assets and support staff services. The COVID-19 pandemic has had a significant impact on MOBC operations in 2020, and is expected to continue into 2021. Mail room and print shop volume and related variable costs have dropped significantly due to the push for electronic documents necessitated by the pandemic. This has been partially offset by increasing costs to keep employees safe and healthy while working at the MOBC. Examples of this include installing physical Plexiglas barriers and signage, installing hands-free devices in all restrooms, and installing new air filtration systems. More of these types of expenses are expected in 2021.

The Facilities Section will continue to explore a future project to add automation capability for various heating, ventilation, and air conditioning systems at the MOB. The Facilities Section will also continue to research and implement best practices recommended to reduce the chances of employees contracting the SARS-CoV-2 virus while working at the MOBC.

- **Recover Resources**

The Police Section operates the District's Prescription Drug Take Back Program at four locations. The program prevents and reduces the accidental contamination of streams, rivers, and lakes by disposing of pharmaceuticals in an environmentally-friendly manner.

The Facilities Section will continue the MOB cafeteria food waste compost recycling program.

- **Develop Employees**

The Administrative Services Division will continue to develop employees through participation in training seminars and conferences to increase professional knowledge and skills. In-house training, webinars, and eLearning opportunities are utilized whenever possible to extend training to multiple employees in a cost-effective manner.

- **Leading Partnerships**

The Management & Budget Section works with all departments to develop and execute the District's program of subscriptions and memberships. The names of employees in leadership roles in a variety of organizations will continue to be published in the budget.

The Management & Budget Section works with the GFOA, the Civic Federation, and other agencies to promote best practices and continuous improvement in our budget document.

The Police Section participates as a member of the Law Enforcement Mutual Aid Agreement and works with other agencies and municipalities to protect people and assets.

- **Information Technology**

The District will conduct a comprehensive assessment of the current budgeting system (PBF) in 2021, including current state processes and a budget system marketplace options analysis. The current budgeting system was implemented in 2009. The District seeks to ensure that its core budgeting system utilizes current technologies and maximizes long-term taxpayer value.

2021 Diversity Section Initiatives in Support of the Strategic Business Plan Include the Following:

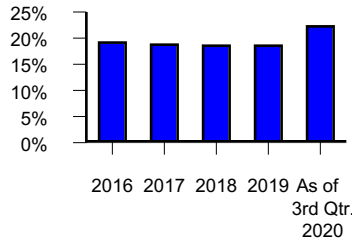
The Diversity Section is focused on the goals established in the Strategic Business Plan and is committed to using the established strategies for continuous improvement in 2021.

- **Add Value**

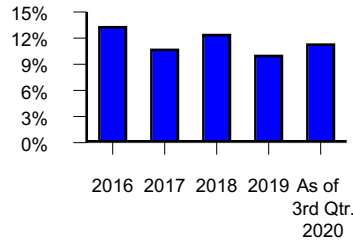
To add value, the Diversity Section implemented LGBT Business Enterprises and Business Enterprises Owned by People with Disabilities policies, which allot for outreach opportunities and data collection regarding both communities. Additionally, the Diversity Section will continue to fulfill its community leadership role regarding contract and employment diversity in the District's service communities by establishing and monitoring goals for construction-related and professional projects, as well as participating in outreach activities, including trade shows, conferences, and contractor training sessions covering District business practices. These activities directly impact the development of Minority-owned Business Enterprise (MBE), Women-owned Business Enterprise (WBE), Small Business Enterprise (SBE), and Veteran-owned Business Enterprise (VBE) vendors and the community at large. The Diversity Section will continue to be a part of the discussions for pending legislation, agreements, and programs that could adversely affect goal attainment. The Diversity Section will strive to increase the District's MBE, WBE, SBE, and VBE or list in 2021.

Construction & Consulting Contracts	2016	2017	2018	2019	As of 2020 3rd Quarter
Minority-owned Business Enterprises	\$39,402,363	\$9,800,078	\$16,469,827	\$31,923,438	\$14,013,374
Women-owned Business Enterprises	\$27,298,129	\$5,565,425	\$10,931,146	\$17,096,986	\$7,094,623
Small Business Enterprises	\$307,759	\$1,364,898	\$2,287,186	\$1,302,827	\$71,500
Veteran-owned Business Enterprises	\$—	\$—	\$—	\$730,458	\$1,126,911
Total Contracts Awarded	\$202,973,188	\$51,475,204	\$87,762,251	\$169,620,574	\$62,176,390

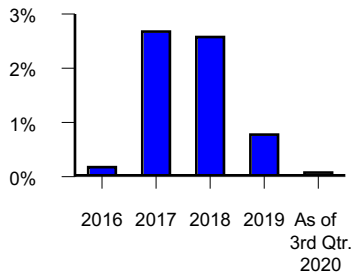
Minority-owned Business Enterprises



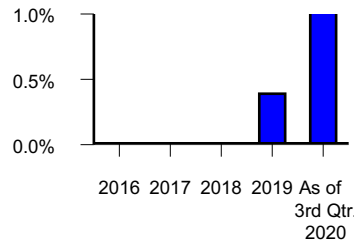
Women-owned Business Enterprises



Small Business Enterprises



Veteran-owned Business Enterprises



• Excellence

The Diversity Section will begin implementation of the Disparity Study recommendation to develop a small business program that provides tangible participation opportunities on a race- and gender-neutral basis. By meeting or exceeding the participation targets, the small business program will ensure that bona fide MBEs, WBEs, SBEs, and VBEs are given an equal and increasing opportunity to participate in the performance of District construction and consulting contracts. The Diversity Section will work with the Engineering Department in a contract unbundling process to increase race and gender-neutral small business participation to reach a two percent goal.

• Develop Employees

The Diversity Section will continue the development of performance management metrics to better measure the performance of staff. In 2020, the Diversity Section's staff was trained in contract compliance through the American Contract Compliance Association, which highlights new and pending rules and legislation regarding Affirmative Action. In 2021, the Diversity Section's staff will continue to be trained in team building, interviewing, and investigative techniques.

• Leading Partnerships

The Diversity Section will host two vendor outreach events, providing prospective vendors access to District officers and commissioners. The Diversity Section will continue to partner with the District's sister government agencies to discover more efficient methods to help vendors become successful government contractors and develop sustainable relationships with prime contractors and financial institutions. Staff will continue to co-host workshops and other meetings with sister agencies to train their members on how to do business with the District and provide information on new District contract opportunities. Additionally, the Diversity Section will continue working internally with user departments to provide MBE, WBE, SBE, and VBE opportunities on District contracts.

2021 Public Affairs Section Initiatives in Support of the Strategic Business Plan Include the Following:

The Public Affairs Section is committed to using established and new strategies to maintain the District's positive public image in 2021.

- **Add Value**

The Public Affairs Section will work with subject matter experts to develop materials and videos that educate the public on how to manage stormwater and prevent water pollution. The Water Wellness Campaign strives to encourage residents to make modest to extreme lifestyle modifications that will result in fewer contaminants entering the waterways. The Public Affairs Section will also continue to oversee the distribution of tree saplings and compost while promoting the District's stormwater management mission.

- **Excellence**

The Public Affairs Section is determined to achieve excellence in all work products and through interactions with colleagues, stakeholders, reporters, and the public. Communications will continue to feature professionally written and designed materials that reflect the organization's role and history of excellence. The Public Affairs Section will work to inform the public about the District's work by continuing to produce fact sheets, talking points, photos, videos, press releases, and other materials that will help educate the public. The Public Affairs Section will continue to work with subject matter experts to research and prepare press releases and social media postings while continuing to participate in and support community events by scheduling presenters, hosting tours and special events, and providing visual aids to targeted audiences.

- **Recover Resources**

The Public Affairs Section will educate and inform the public about the District's work to recover resources by producing targeted, audience appropriate materials that clearly explain this subject. The Public Affairs Section will also continue to support compost marketing efforts.

- **Develop Employees**

The Public Affairs Section will continue to keep abreast of new developments within the District and current trends in the water industry reported throughout the world. Staff are encouraged to pursue classroom and online training, webinars, and to read publications and books. Since all employees influence the District's public image, the Public Affairs Section will continue to prepare fact sheets and talking points for staff. The Public Affairs Section will continue to produce an employee newsletter quarterly, and a monthly wall calendar annually, that feature photos taken by the Public Affairs Section. Public Affairs will also maintain electronic message signs at the Calumet, Egan, O'Brien and Stickney Water Reclamation Plants to provide timely notifications to staff.

- **Leading Partnerships**

The Public Affairs Section will foster partnerships and engagement with organizations, communities, and individuals who share in the commitment to the water environment, and an interest in District work and areas of responsibility. The Public Affairs Section will continue to develop strategic relationships with the public through participation in local events by developing communication materials and by providing requested resources, such as photos and brochures.

- **Information Technology**

The Public Affairs Section will continue to use technology to efficiently and effectively educate the public and the District's stakeholders about the value and importance of our work. Our two Federal Aviation Administration licensed drone pilots will continue to record videos and photograph District facilities and processes. The Public Affairs Section will continue to use technology both as a tool for creating communications by using appropriate and up-to-date software, hardware, and technical processes, and as a medium of communication using social media, e-mail, and databases. The Public Affairs Section will update the District's website with fresh, current information, utilize social media as an interactive communication tool, continue to send e-mail blasts and mailings to targeted officials, stakeholders, and the media, and generate online photo archives which will include both current photos and scanned historical imagery.

15000 GENERAL ADMINISTRATION

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:	Cost	Percent
1. Physically protect and secure District personnel, facilities, and outlying properties through access control, police patrol, and proactive crime prevention.	\$ 7,260,200	34.7%
2. Carry out policies established by the elected Board of Commissioners for the protection of the water environment of the District.	\$ 859,800	4.1%
3. Reach participation goals established by the Board of Commissioners for Minority-owned Business Enterprises, Women-owned Business Enterprises, Small Business Enterprises, and Veteran-owned Business Enterprises for construction and professional services contracts.	\$ 1,551,000	7.4%
4. Prepare and administer the District's annual budget to be used as a policy, financial, operations, and communications plan in the furtherance of the District's mission and statutory requirements.	\$ 3,946,600	18.8%
5. Operate and maintain the Main Office Building Complex to provide a functional and cost-effective office environment for staff, contractors, and visitors.	\$ 3,661,700	17.5%
6. Provide public understanding of District functions and activities through media, publications, and tours.	\$ 1,283,200	6.1%
7. Provide fleet management services by administering the operation, maintenance, repair, and procurement of the District's fleet.	\$ 1,549,500	7.4%
8. Reproduce and distribute materials used for the District's internal and external communications and records purposes in a timely, efficient, and cost-effective manner.	\$ 463,700	2.2%
9. Perform organization and management research studies and compliance audits to evaluate the District's various business activities for cost-saving opportunities, compliance with legal mandates, and policies established by the Board of Commissioners.	\$ 377,400	1.8%
Totals	\$ 20,953,100	100.0%

MEASURABLE GOALS:	2019 Actual	2020 Actual	2021 Proposed
1. Receive the Government Finance Officers Association Distinguished Budget Presentation Award annually.	Yes	Yes	Yes
2. Increase public awareness of the District and its mission through growth in social media followers of at least 10 percent per year among the principal social media sites including Facebook, Twitter, LinkedIn, YouTube, and Instagram.			

Year	Facebook		Twitter		LinkedIn		YouTube		Instagram	
	Number of Followers	Percent Increase from Previous Year	Number of Followers	Percent Increase from Previous Year	Number of Followers	Percent Increase from Previous Year	Number of Impressions	Percent Increase from Previous Year	Number of Followers	Percent Increase from Previous Year
2021 - Proposed	7,122	10%	4,643	10%	4,444	10%	203,720	10%	1,127	10%
2020 - Estimated	6,475	37%	4,213	18%	4,040	48%	185,200	4%	1,025	156%
2019 - Actual	4,729	41%	3,579	30%	2,731	30%	178,600	100%	400	100%

15000 GENERAL ADMINISTRATION

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change			
Number	Name	Actual	FTEs	Dollars	Dollars	Percent		
7100	Office of the Executive Director	\$ 481,745	2021	3	\$ 517,800	\$ 15,900	3.2	
			2020	3	\$ 501,900			
7110	Legislative	\$ 251,496	2021	—	\$ 342,000	\$ —	—	
			2020	—	\$ 342,000			
7220	Reprographic Services	\$ 497,367	2021	2	\$ 463,700	\$ 7,300	1.6	
			2020	2	\$ 456,400			
7240	Public Affairs	\$ 1,247,789	2021	11	\$ 1,283,200	\$ 5,100	0.4	
			2020	11	\$ 1,278,100			
7251	Corporate Budget Preparation, Monitoring, and Administration	\$ 1,693,420	2021	7	\$ 3,304,700	\$ 1,407,200	74.2	a)
			2020	7	\$ 1,897,500			
7252	Management and Organization Studies	\$ 290,273	2021	3	\$ 377,400	\$ 4,800	1.3	
			2020	3	\$ 372,600			
7253	Support Department Budget Preparation, Monitoring, and Administration	\$ 274,673	2021	5	\$ 555,600	\$ 18,000	3.3	
			2020	5	\$ 537,600			
7254	Enterprise System	\$ 90,630	2021	1	\$ 86,300	\$(10,005,700)	(99.1)	b)
			2020	1	\$ 10,092,000			
7340	Security of Plants and Properties	\$ 6,391,356	2021	63	\$ 7,089,000	\$ 310,400	4.6	c)
			2020	63	\$ 6,778,600			
7460	Main Office Building Complex Services	\$ 3,298,843	2021	11	\$ 3,661,700	\$ (222,600)	(5.7)	d)
			2020	11	\$ 3,884,300			
7470	Contract Diversity	\$ 980,204	2021	13	\$ 1,551,000	\$ 81,200	5.5	
			2020	13	\$ 1,469,800			
7490	Automotive Fleet Operations	\$ 1,221,858	2021	2	\$ 1,549,500	\$ (386,900)	(20.0)	e)
			2020	2	\$ 1,936,400			
7604	Social Security and Medicare Contributions	\$ 158,622	2021	—	\$ 171,200	\$ 6,200	3.8	
			2020	—	\$ 165,000			
Totals		\$16,878,276	2021	121	\$ 20,953,100	\$ (8,759,100)	(29.5)%	
			2020	121	\$ 29,712,200			

- a) Increase is due to the contingency for District-wide Corporate Fund general salary adjustments (\$1,200,000) and the addition of a project to evaluate and replace the District's budgeting system (\$150,000).
- b) Decrease is due to the removal of a one-time expense to upgrade the District's Enterprise Resource Planning system (\$10,000,000).
- c) Increase is due to the addition of a project to evaluate and replace District-wide access control systems (\$450,000) and the addition of a project to add additional security cameras at District parking lots (\$71,200), offset by the completion of two Police equipment upgrades, the STARCOM portable Police radio upgrade (\$150,000) and the Police Livescan system upgrade (\$46,600).
- d) Decrease is due to the completion of a paint and carpet replacement project at the Main Office Building (\$378,100), offset by an increase in the Building Engineer contract at the Main Office Building (\$44,700) and Main Office Building Annex (\$21,100), as well as an increase in JOC projects at the Main Office Building Complex (\$29,100).
- e) Decrease is due to a deferral of starting the in-plant fueling system upgrade project (\$250,000) and the return to a normal vehicle replacement schedule of about 26 vehicles per year (\$149,000).

15000 GENERAL ADMINISTRATION

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
7100	Office of the Executive Director	Cost	\$ 481,745	\$ 501,900	\$ 517,800	
7110	Legislative	Cost	\$ 251,496	\$ 342,000	\$ 342,000	
7220	Reprographic Services					
7221	Duplication Services	# of Impressions	2,753,919	3,111,438	1,689,618	a)
		Cost	\$ 483,304	\$ 440,100	\$ 447,400	
		Cost/Impression	\$ 0.18	\$ 0.14	\$ 0.26	
7224	Design Services	Cost	\$ 14,063	\$ 16,300	\$ 16,300	
7240	Public Affairs					
7247	Internal Public Affairs					
	Interdepartmental Support	Cost	\$ 354,155	\$ 331,300	\$ 336,000	
7248	External Public Affairs					
	Respond to Public Inquiries and Furnish Public Information Pamphlets	# of Responses	47,000	48,000	48,000	
		Cost	\$ 298,337	\$ 316,087	\$ 316,220	
		Cost/Response	\$ 6.35	\$ 6.59	\$ 6.59	
	Coordinate District Communications with Public, Civic, and Social Groups	# of Contacts	24,000	25,000	25,000	
		Cost	\$ 163,013	\$ 172,711	\$ 172,784	
		Cost/Contact	\$ 6.79	\$ 6.91	\$ 6.91	
	Monitor Public Hearings, Board Meetings, Internet, and Media and Issue Press Releases	Cost	\$ 210,482	\$ 223,005	\$ 223,099	
	Special Public Events	Cost	\$ 221,802	\$ 234,997	\$ 235,097	
7250	Budget Preparation and Management Studies					
7251	Corporate Budget Preparation, Monitoring, and Administration	Cost	\$ 1,693,420	\$ 1,897,500	\$ 3,304,700	b)
7252	Management and Organization Studies	Cost	\$ 290,273	\$ 372,600	\$ 377,400	
7253	Support Department Budget Preparation, Monitoring, and Administration	Cost	\$ 274,673	\$ 537,600	\$ 555,600	
7254	Enterprise Systems	Cost	\$ 90,630	\$ 10,092,000	\$ 86,300	c)
	a) Decrease in the estimated number of printed impressions of about 1,400,000 is due to new procedures allowing the electronic advertisement of contracts, and the COVID-19 pandemic limiting the amount of Public Affairs events allowed to take place, which use a significant amount of printed materials.					
	b) Increase is due to the contingency for District-wide Corporate Fund general salary adjustments (\$1,200,000) and the addition of a project to evaluate and replace the District's budgeting system (\$150,000).					
	c) Decrease is due to the removal of a one-time expense to upgrade the District's Enterprise Resource Planning system (\$10,000,000).					

15000 GENERAL ADMINISTRATION

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
7340	Security of Plants and Properties					
	Patrol of District Facilities	# of Miles	113,527	136,610	113,527	
		Cost	\$ 1,237,283	\$ 1,312,248	\$ 1,372,337	d)
		Cost/Mile	\$ 10.90	\$ 9.61	\$ 12.09	
	Patrol of District Real Estate	# of Miles	220,377	265,182	220,377	
		Cost	\$ 3,498,822	\$ 3,710,811	\$ 3,880,734	d)
		Cost/Mile	\$ 15.88	\$ 13.99	\$ 17.61	
	Access Control to Facilities	# of Hours	45,132	46,121	45,132	
		Cost	\$ 1,655,251	\$ 1,755,541	\$ 1,835,929	d)
		Cost/Hour	\$ 36.68	\$ 38.06	\$ 40.68	
7460	Main Office Building Complex Services					
7461	Main Office Building Complex Operations	Area (Sq. Ft.)	198,901	198,901	198,901	
		Cost	\$ 2,898,608	\$ 3,517,200	\$ 3,291,000	e)
		Cost/Sq. Ft.	\$ 14.57	\$ 17.68	\$ 16.55	
7463	Collect and Distribute Mail	# of Pieces	491,733	600,000	600,000	
		Cost	\$ 312,990	\$ 290,800	\$ 293,800	
		Cost/Piece	\$ 0.64	\$ 0.48	\$ 0.49	
7464	Telephone Switchboard Operations at Main Office Building Complex	Cost	\$ 87,245	\$ 76,300	\$ 76,900	
7470	Contract Diversity					
7471	Contract Compliance	Cost	\$ 460,160	\$ 575,300	\$ 578,200	
7472	Community Activity	Cost	\$ 322,994	\$ 616,000	\$ 692,300	
7473	Contract Diversity Support	Cost	\$ 197,050	\$ 278,500	\$ 280,500	
7490	Automotive Fleet Operations					
7491	Automotive Fleet Procurement	Cost	\$ 613,432	\$ 1,051,600	\$ 902,200	f)
7499	Automotive Fleet Operations	Cost	\$ 608,426	\$ 884,800	\$ 647,300	g)
7604	Social Security and Medicare Contributions	Cost	\$ 158,622	\$ 165,000	\$ 171,200	
	Totals		\$ 16,878,276	\$ 29,712,200	\$ 20,953,100	

d) Increase is due to the addition of a project to evaluate and replace District-wide access control systems (\$450,000) and the addition of a project to add additional security cameras at District parking lots (\$71,200), offset by the completion of two Police equipment upgrades, the STARCOM portable Police radio upgrade (\$150,000) and the Police Livescan system upgrade (\$46,600).

e) Decrease is due to the completion of a paint and carpet replacement project at the Main Office Building (\$378,100), offset by an increase in the Building Engineer contract at the Main Office Building (\$44,700) and Main Office Building Annex (\$21,100), as well as an increase in JOC projects at the Main Office Building Complex (\$29,100).

f) Decrease is due to the return to a normal vehicle replacement schedule of about 26 vehicles per year (\$149,000).

g) Decrease is due to a deferral of starting the in-plant fueling system upgrade project (\$250,000).

101 15000	Fund: Corporate Department: General Administration	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 10,616,664	\$ 11,411,600	\$ 11,411,600	\$ 7,816,821	\$ 10,658,300	\$ 11,425,500	\$ —
601060	Compensation Plan Adjustments	745,506	782,100	782,100	622,610	872,200	834,900	—
601070	Social Security and Medicare Contributions	158,622	165,000	165,000	122,619	158,400	171,200	—
601100	Tuition and Training Payments	19,647	44,500	44,500	7,909	20,300	50,500	—
601270	General Salary Adjustments	—	—	—	—	—	1,200,000	—
100	TOTAL PERSONAL SERVICES	11,540,439	12,403,200	12,403,200	8,569,959	11,709,200	13,682,100	—
612010	Travel	6,661	9,000	9,000	629	1,000	9,000	—
612030	Meals and Lodging	12,292	18,100	18,100	1,589	3,800	18,100	—
612040	Postage, Freight, and Delivery Charges	109,757	109,700	109,700	59,572	99,100	110,800	—
612050	Compensation for Personally-Owned Automobiles	4,002	4,100	4,100	649	700	4,300	—
612080	Motor Vehicle Operating Services	66,393	63,100	63,100	53,286	48,900	68,500	—
612090	Reprographic Services	104,971	55,300	55,300	16,893	34,600	55,800	—
612150	Electrical Energy	311,856	325,200	325,200	172,768	313,600	340,300	—
612160	Natural Gas	22,137	24,900	24,900	14,392	24,500	24,000	—
612170	Water and Water Services	6,242	6,500	6,500	3,519	6,300	6,700	—
612210	Communication Services	3,000	—	—	—	—	—	—
612280	Subscriptions and Membership Dues	868,009	965,600	922,600	595,261	775,900	968,600	—
612330	Rental Charges	46,610	71,000	71,000	69,753	70,000	72,100	—
612360	Advertising	6,461	15,000	15,000	—	13,000	15,000	—
612370	Administration Building Operation	1,212,850	1,316,200	1,317,200	1,315,506	1,293,000	1,369,900	—
612390	Administration Building McMillan Pavilion Operation	714,511	784,900	792,500	787,519	703,100	823,800	—
612430	Payments for Professional Services	252,416	3,024,000	2,990,500	2,938,095	298,600	695,800	—
612490	Contractual Services, N.O.C.	279,541	337,000	337,000	251,317	186,100	342,100	—
612680	Repairs to Buildings	26,373	452,000	443,400	395,085	462,600	121,500	—
612800	Repairs to Office Furniture and Equipment	65,451	60,800	60,800	57,881	53,500	64,200	—
612820	Computer Software Maintenance	—	—	—	—	—	150,000	—
612840	Communications Equipment Maintenance (Includes Software)	22,495	22,800	22,800	22,784	21,900	22,800	—
612860	Repairs to Vehicle Equipment	354,910	417,000	417,000	414,572	334,800	421,000	—
200	TOTAL CONTRACTUAL SERVICES	4,496,938	8,082,200	8,005,700	7,171,070	4,745,000	5,704,300	—
623070	Electrical Parts and Supplies	6,854	8,600	8,600	7,600	7,400	8,600	—

101 15000	Fund: Corporate Department: General Administration	LINE ITEM ANALYSIS						
		2019	2020				2021	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623090	Plumbing Accessories and Supplies	6,984	8,500	37,000	29,724	34,700	8,500	—
623110	Hardware	14,807	16,000	16,000	14,500	14,500	16,000	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	112,356	155,100	155,100	136,480	106,900	118,000	—
623660	Cleaning Supplies	859	1,300	6,300	4,200	6,200	1,300	—
623700	Wearing Apparel	35,355	37,500	37,500	36,568	28,500	38,900	—
623720	Books, Maps, and Charts	354	1,000	1,000	112	900	1,000	—
623810	Computer Supplies	—	—	—	—	—	71,200	—
623850	Communications Supplies	21,861	150,000	193,000	191,434	193,000	—	—
623990	Materials and Supplies, N.O.C.	28,036	47,200	47,200	36,299	37,000	51,000	—
300	TOTAL MATERIALS AND SUPPLIES	227,467	425,200	501,700	456,917	429,100	314,500	—
634820	Computer Software	—	7,500,000	7,500,000	7,500,000	—	—	—
634860	Vehicle Equipment	613,432	1,051,600	1,051,600	1,051,600	1,200,600	902,200	—
634990	Machinery and Equipment, N.O.C.	—	250,000	—	—	—	350,000	—
400	TOTAL MACHINERY AND EQUIPMENT	613,432	8,801,600	8,551,600	8,551,600	1,200,600	1,252,200	—
TOTAL GENERAL ADMINISTRATION		\$ 16,878,276	\$ 29,712,200	\$ 29,462,200	\$ 24,749,546	\$ 18,083,900	\$ 20,953,100	\$ —

NOTES: 1. Amounts may not add up due to rounding.
 2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.
 Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.

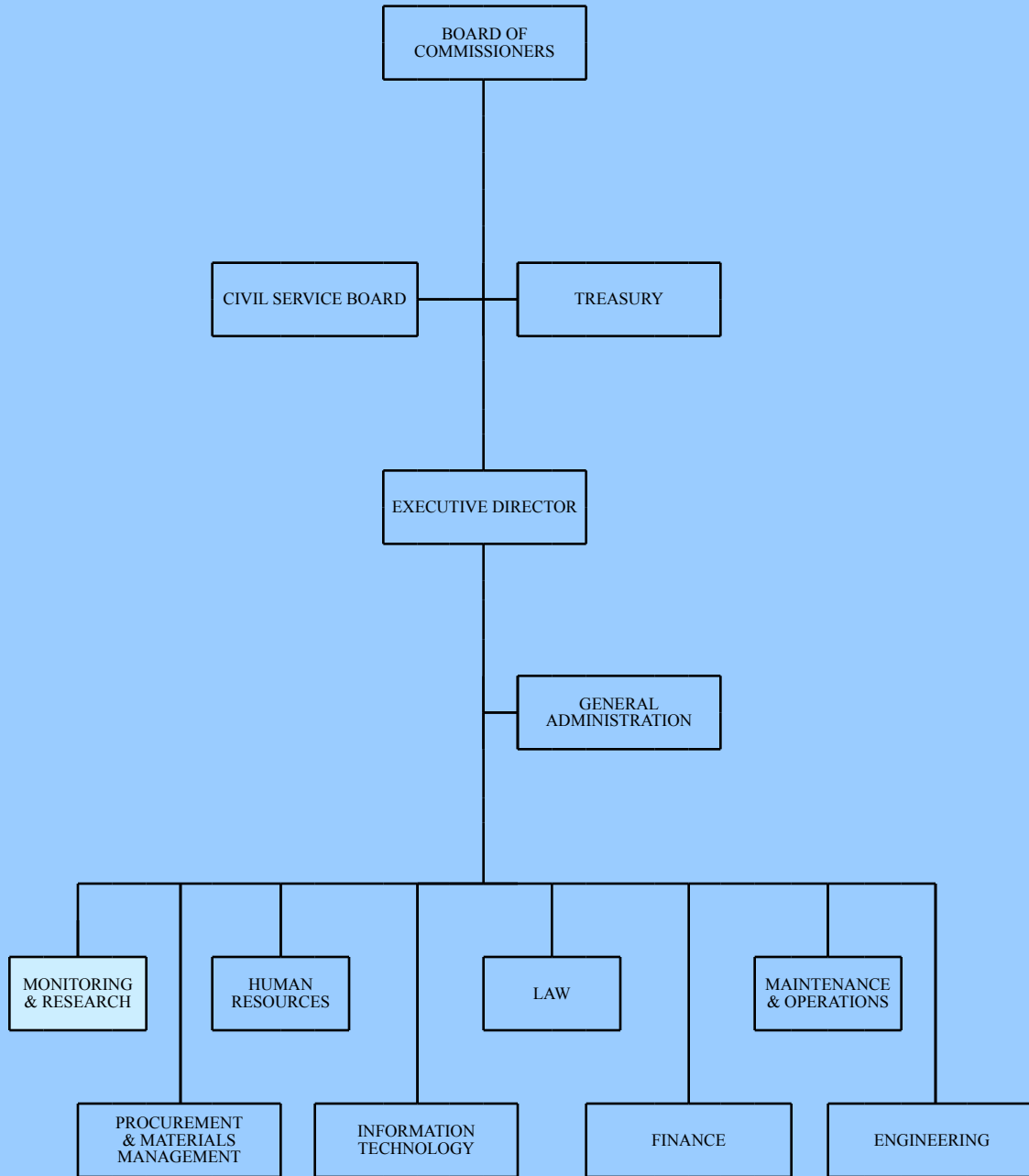
Fund: Corporate Dept: General Administration		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
051	Executive Section					
EX07	Executive Director	1	1		1	
EX06	Secretary to Officer	2	2		2	
TOTAL 051	Executive Section	3	3	495,491	3	500,224
052	Diversity Section					
HP18	Diversity Administrator	1	1		1	
HP16	Senior Diversity Officer	2	2		2	
HP14	Diversity Officer	6	7		7	
HP11	Administrative Specialist	2	2		2	
HP09	Administrative Clerk	1	1		1	
TOTAL 052	Diversity Section	12	13	1,172,982	13	1,179,817
053	Administrative Services Division					
054	Administrative Services Section					
EX19	Administrative Services Officer	1	1		1	
EX06	Secretary to Officer	1	1		1	
TOTAL 054	Administrative Services Section	2	2	351,782	2	351,782
060	Management & Budget Section					
061	Administrative Unit					
HP20	Budget Officer	1	—		—	
TOTAL 061	Administrative Unit	1	—	—	—	—
067	Central Budget Management Unit					
HP20	Budget Officer	—	1		1	
HP18	Supervising Budget & Management Analyst	1	1		1	
HP16	Senior Budget & Management Analyst	4	5		5	
HP14	Budget & Management Analyst	8	8		8	
TOTAL 067	Central Budget Management Unit	13	15	1,586,165	15	1,583,780
TOTAL 060	Management & Budget Section	14	15	1,586,165	15	1,583,780

Fund: Corporate Dept: General Administration		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
080	Police Section					
081	Administrative Unit					
HP18	Chief of Police	1	1		1	
HP12	Administrative Assistant #2 (Administrative Specialist) (New Grade HP11)	1	1		1	
TOTAL 081	Administrative Unit	2	2	254,164	2	254,165
082	Police Main Office Building Complex Unit					
NR2483	Police Officer	5	5		5	
TOTAL 082	Police Main Office Building Complex Unit	5	5	431,392	5	431,392
083	Police North Service Area Unit					
HP14	Police Sergeant	1	1		1	
NR2483	Police Officer	10	10		10	
TOTAL 083	Police North Service Area Unit	11	11	966,131	11	971,164
084	Police Calumet Service Area Unit					
HP14	Police Sergeant	1	1		1	
NR2483	Police Officer	10	10		10	
TOTAL 084	Police Calumet Service Area Unit	11	11	976,195	11	976,195
085	Police Stickney Service Area Unit					
HP16	Police Lieutenant	2	2		2	
HP14	Police Sergeant	5	5		5	
NR2483	Police Officer	22	22		22	
TOTAL 085	Police Stickney Service Area Unit	29	29	2,706,658	29	2,678,532
086	Police Countywide Unit					
NR2483	Police Officer	5	5		5	
TOTAL 086	Police Countywide Unit	5	5	431,392	5	431,392
TOTAL 080	Police Section	63	63	5,765,933	63	5,742,839
090	Facilities Section					
091	Administrative Unit					
HP16	Senior Budget & Management Analyst	1	—		—	

Fund: Corporate Dept: General Administration		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
HP11	Administrative Specialist	2	—		—	
TOTAL 091	Administrative Unit	3	—	—	—	—
096	Building Services Unit					
HP16	Senior Budget & Management Analyst	—	1		1	
HP14	Budget & Management Analyst	1	1		1	
HP14	Chief Printing Press Operator	1	1		1	
HP12	Printing Press Operator	1	1		1	
HP11	Administrative Specialist	2	4		4	
HP09	Administrative Clerk	3	3		3	
NR8661	Motor Vehicle Dispatcher Supervisor	1	1		1	
NR8660	Motor Vehicle Dispatcher	2	2		2	
TOTAL 096	Building Services Unit	11	14	974,794	14	992,879
TOTAL 090	Facilities Section	14	14	974,794	14	992,879
TOTAL 053	Administrative Services Division	93	94	8,678,675	94	8,671,282
072	Public Affairs Section					
EX18	Public & Intergovernmental Affairs Officer	1	1		1	
EX06	Secretary to Officer	1	1		1	
HP17	Senior Public Affairs Specialist #2 (New Grade HP16)	1	1		1	
HP15	Public Affairs Specialist #2 (New Grade HP14)	3	3		3	
HP14	Public Affairs Specialist	1	1		1	
HP13	Graphic Artist	2	2		2	
HP13	Senior Administrative Specialist	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 072	Public Affairs Section	11	11	1,122,050	11	1,131,816
TOTAL	General Administration	119	121	11,469,197	121	11,483,138

NOTE: Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.

NOTE PAGE



Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 8, 2020

Mr. Brian A. Perkovich
Executive Director
OFFICE

Dear Sir:

Subject: 2021 Program for the Monitoring & Research Department

The Monitoring & Research Department's program for 2021, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the department's 2021 initiatives in alignment with and in support of the Strategic Business Plan. The budget requests include all amendments as directed by you during the Executive Director Budget Hearings in August of this year.

The narrative provides a summary of the department, 2021 major initiatives and challenges, and 2020 accomplishments. Supporting schedules of objectives, performance, and staffing levels present three years of detailed budgetary information.

Thank you for the opportunity to present the proposed Monitoring & Research Department budget for 2021.

Respectfully submitted,

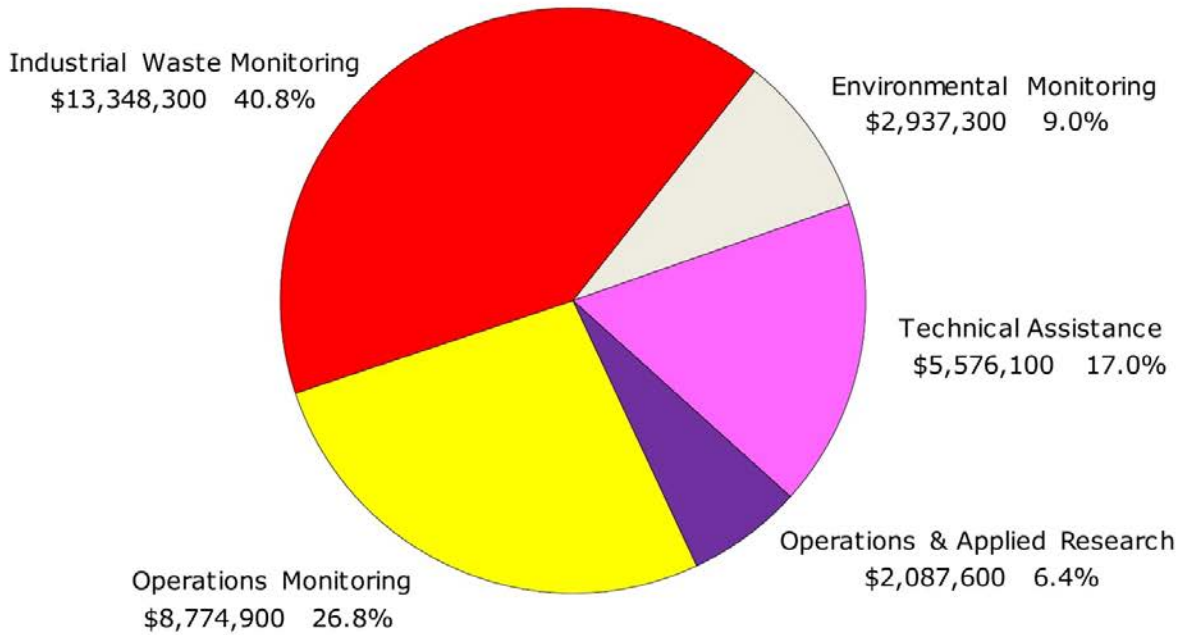


Edward W. Podczerwinski
Director of Monitoring & Research

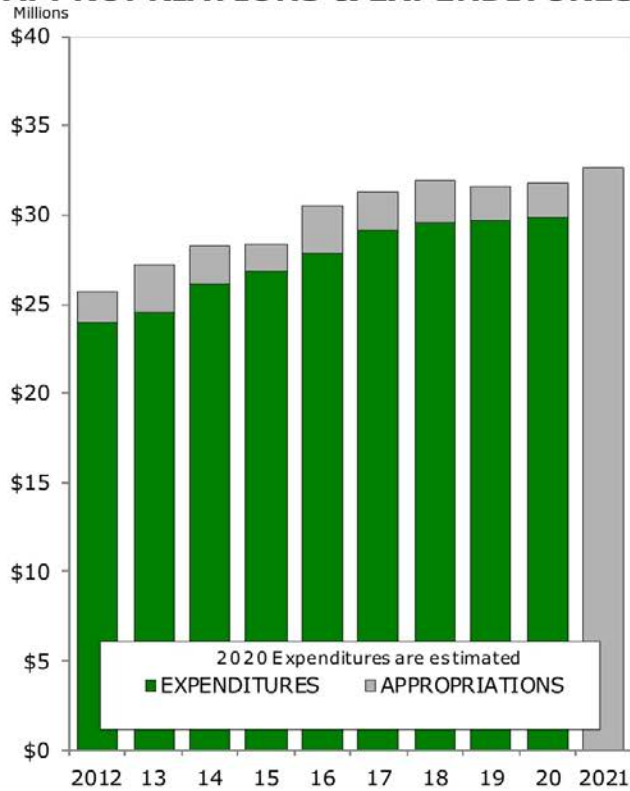
MONITORING & RESEARCH

2021	\$32,724,200
2020	\$31,827,100
Increase	\$897,100

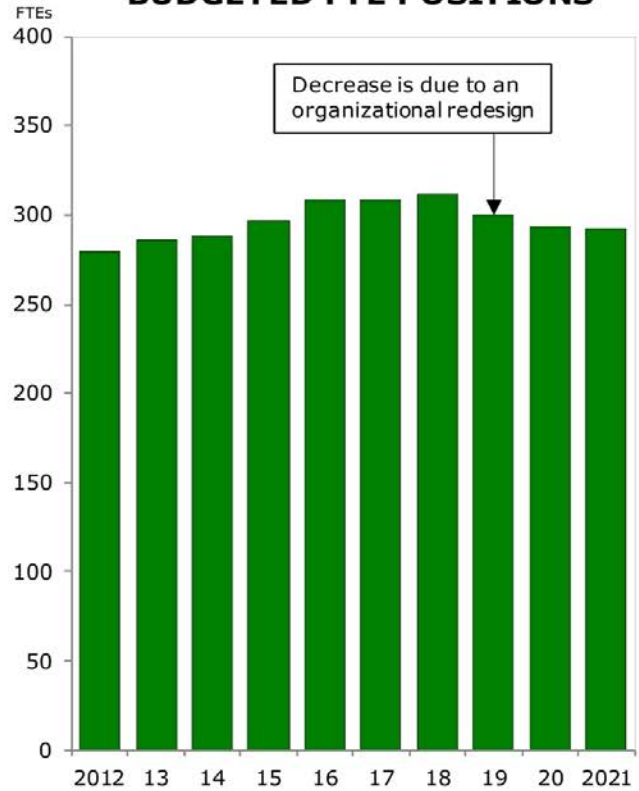
FUNCTIONS



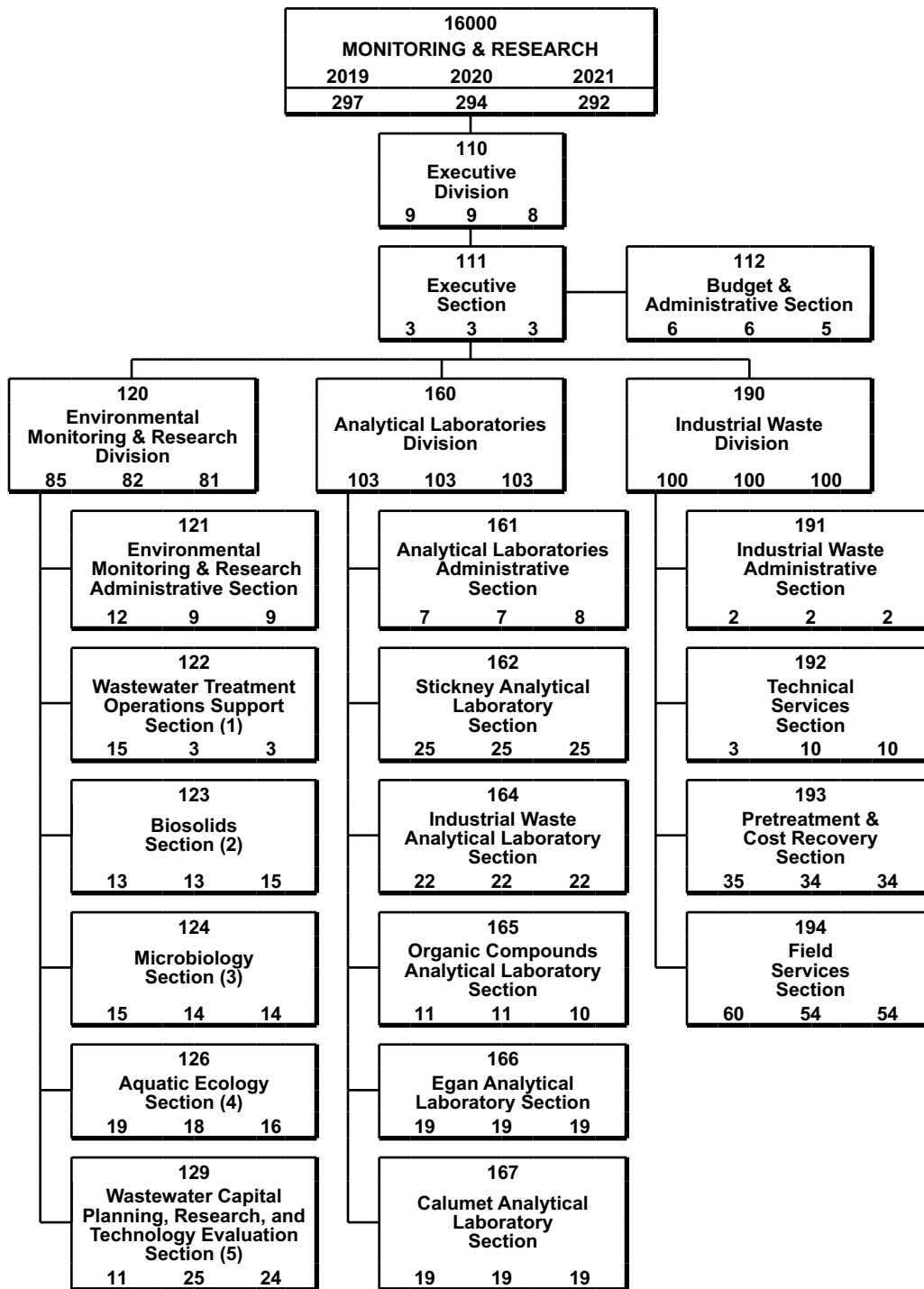
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



MONITORING & RESEARCH



- (1) Effective 01/01/20, Section 122 was retitled from Wastewater Treatment Process Research Section to Wastewater Treatment Operations Support Section.
- (2) Effective 01/01/20, Section 123 was retitled from Biosolids Utilization & Soil Science Section to Biosolids Section.
- (3) Effective 01/01/20, Section 124 was retitled from Analytical Microbiology & Biomonitoring Section to Microbiology Section.
- (4) Effective 01/01/20, Section 126 was retitled from Aquatic Ecology & Water Quality Section to Aquatic Ecology Section.
- (5) Effective 01/01/20, Section 129 was retitled from Process Facilities Capital Planning Section to Wastewater Capital Planning, Research, and Technology Evaluation Section.

MONITORING & RESEARCH

The Monitoring & Research (M&R) Department's mission is to dependably provide industrial waste program ordinance administration, cost-effective monitoring and surveillance, high quality analytical data, technical support, long-term planning, and research to protect and improve District facilities, operations, and the environment.

Departmental Summary

M&R's primary responsibilities include:

- Monitoring liquid and solids process trains for operational control, regulatory compliance, and odor emissions;
- Administering the Pretreatment, Resource Recovery, and User Charge Programs in compliance with federal regulations;
- Monitoring improvements in water quality of area rivers, canals, and groundwater to document regulatory compliance;
- Providing process facility capital planning and technical assistance to address operational challenges and regulatory issues;
- Conducting applied research to reduce the cost of the District's operations and to improve water quality.

Summary of 2020 Accomplishments

- Held a virtual workshop focused on obtaining farmers' input to improve the effectiveness of the collaboration with the Illinois Farm Bureau, Fulton County Farm Bureau, and the University of Illinois at the Fulton County site to demonstrate several best management practices for reducing the nutrient loss from agricultural fields;
- Conducted wet weather monitoring in the Chicago and Des Plaines River Systems to assess the effectiveness of the McCook Stage I Reservoir portion of the Tunnel and Reservoir Plan (TARP);
- Completed installation of real-time telemetry at select Continuous Dissolved Oxygen Monitoring Program stations;
- Conducted special monitoring to provide additional data to the contractor for preparing the Chicago Area Waterway System (CAWS) Phosphorus Assessment and Reduction Plan, in collaboration with Illinois Environmental Protection Agency (IEPA) and Environmental Advocacy Groups;
- Fostered holistic approach to water quality improvements by actively participating in three local watershed workgroups (DuPage River Salt Creek Workgroup, Lower Des Plaines Watershed Group, and North Branch Watershed Workgroup);
- Completed a three-year groundwater monitoring study and report submitted to IEPA to evaluate the potential of reducing the monitoring frequency of some wells in TARP groundwater monitoring program;
- Completed the report on seven-year microbial source tracking study in collaboration with Argonne National Laboratories to determine the source and distribution of microbes in primary contact reaches of the CAWS;
- Completed the evaluation of benthic macroinvertebrates for the Calumet River system as a biological assessment component of the post-construction monitoring plan for the Thornton Composite Reservoir;
- Completed a polymer bidding test including laboratory evaluation and two full-scale centrifuge test (winter and summer) for the Stickney WRP's polymer contract;
- Completed an odor dispersion model for the Stickney WRP to aid in prioritization of odor control projects;
- Developed a Climate Action Plan and Sustainability and Resiliency Action Plan for the District through an interdepartmental task force.

Budget Highlights

The 2021 appropriation for M&R is \$32,724,200, an increase of \$897,100, or 2.8 percent, from 2020. The staffing level has decreased from 294 to 292 positions, which includes the drop of one Assistant Director, and one Environmental Research Technician #1.

Significant features of the 2021 Budget include:

- Continue to develop a District-wide Biosolids Strategy to ensure continued sustainability of the District's Biosolids Management Program;
- Continue to conduct permit-required groundwater monitoring for four TARP systems, three reservoirs, four biosolids management sites, and Fischer Farm in Hanover Park;
- Continue to conduct Ambient Water Quality Monitoring and Continuous Dissolved Oxygen Monitoring programs for the area waterways in the District service area to meet the National Pollutant Discharge Elimination System (NPDES) permit requirements;
- Manage the contract to develop the Phosphorus Assessment and Reduction Plan for the CAWS, and continue to participate on the CAWS Nutrient Oversight Committee;
- Continue the Biological Oxygen Demand (BOD) to Total Organic Carbon (TOC) study to establish reliable data that will modify the NPDES permits to run TOC analysis absent of BOD. An additional instrument was acquired to conduct NPDES permit samples. This TOC analysis resulted in faster data reporting, which allows for better process control of sampling;
- Continue implementation of a Dental Amalgam Program to abate mercury discharges from dental offices to the District's collection system and ultimately the water environment;

- Continue to lead the phosphorus studies and implement biological phosphorus removal at District WRPs;
- Continue to lead long-term capital planning for District WRPs;
- Continue implementation of a District-wide Odor Reduction Strategy and odor monitoring at some District facilities;
- Continue to lead and develop the Resource Recovery Program for supporting the District’s energy recovery, phosphorus recovery, and biosolids composting initiatives.

2021 Initiatives in Support of the Strategic Business Plan Include the Following:

• **Add Value**

M&R continuously works to make improvements to its business practices in order to maintain a clear focus on its mission, while striving to decrease the number of budgeted positions in an increasingly complex environment and maintaining all essential technical support, analytical laboratory, and industrial waste program ordinance administration functions. This is a testament to M&R’s highly skilled, professional, and dedicated staff.

M&R generates an important revenue stream through the recovery of operations, maintenance, and replacement costs incurred from treating wastewater discharges from Large Commercial/Industrial Users and Tax- Exempt Users of the sewerage system and the costs of administering the District’s Pretreatment and User Charge Programs. The User Charge Program assesses charges to recover operations, maintenance, and replacement costs incurred by the District, beyond those recovered through payment of ad valorem property taxes, based on the annual volume and the BOD and suspended solids loadings of wastewater discharged. Projected 2021 User Charge revenue, based on 2021 rates and a five-year (2015-2019) trend of user clearing data, and the recent impact of the COVID-19 pandemic is \$37.0 million. The User Charge rates take into account the costs budgeted in the Corporate Fund for operations and maintenance, as well as in the Construction Fund for the required rehabilitation of the District's facilities and infrastructures.

Five-Year Trend in User Charge Revenue	
Year	User Charge Receipts
2015	\$48,476,512
2016	\$44,487,370
2017	\$53,252,035
2018	\$41,301,817
2019	\$51,783,405
2020 Estimated	\$42,000,000
2021 Projected	\$37,000,000

In 2021, M&R will administer approximately 800 accounts, who are required to submit annual reports as part of M&R’s User Charge and Pretreatment Programs. For these accounts, M&R will conduct approximately 1,100 inspections and sampling events, and anticipates processing about 1,700 reports and filings to reconcile User Charge liabilities. Another 2,850 accounts will be administered via an automatic review and billing process in a continuing effort to simplify the administrative process and reduce administrative costs, as allowed under the District’s User Charge Ordinance. M&R will continue to encourage users who are eligible for reduced reporting and self-monitoring to migrate to this automated process. M&R remains vigilant in identifying and classifying new users and, in 2021, has a goal of identifying, classifying, and administering 50 new users to offset any reductions in existing users under the User Charge Program to recover the costs associated with treating those users’ wastewater. In addition, M&R continues to monitor industrial users that require higher scrutiny to safeguard the WRPs and local waterways.

M&R will continue to provide technical support to the Maintenance & Operations Department in 2021 on the co-composting of biosolids with wood chips and other vegetative materials to produce Exceptional Quality biosolids compost for utilization in the Chicago metropolitan area. M&R will conduct public outreach and marketing for local utilization of the composted and air-dried biosolids product to reduce hauling costs.

• **Excellence**

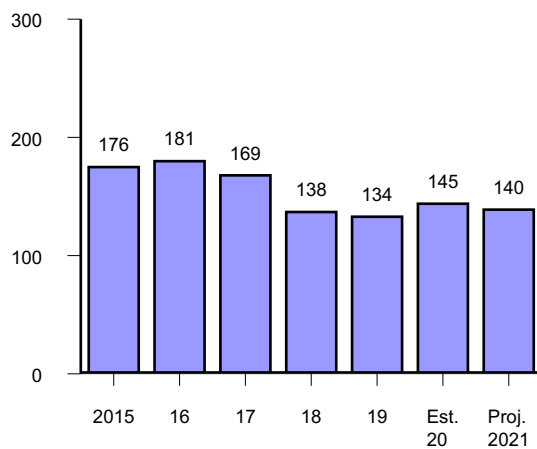
M&R is committed to stopping pollution at its source by operating an effective Industrial Waste Pretreatment Program in full compliance with all federal and state statutes. During 2021, the administration of the District’s Industrial Waste Pretreatment Program will require the issuance or renewal of Discharge Authorizations for approximately 70 Significant Industrial Users and the review of approximately 700 Continued Compliance Reports and 20 Slug Control or Spill Prevention, Control, and Countermeasure Plans. During 2021, M&R expects to perform approximately 1,000 inspections associated with administering the District’s Sewage and Waste Control Ordinance and will randomly sample and analyze at least 50 percent of the anticipated 1,800 chemical toilet disposals at the Stickney WRP. During 2021, M&R is not anticipating any substantial variation in the number of enforcement activities. As a result of the District’s Industrial Waste Pretreatment Program, all of the biosolids produced by the District in 2021 are expected to meet the highest quality criteria for trace metals under the United States Environmental Protection

Agency Biosolids Rule (40 CFR Part 503) and the WRP effluents are expected to meet all NPDES permit limits for regulated industrial pollutants.

Five-Year Trend in Enforcement Activities

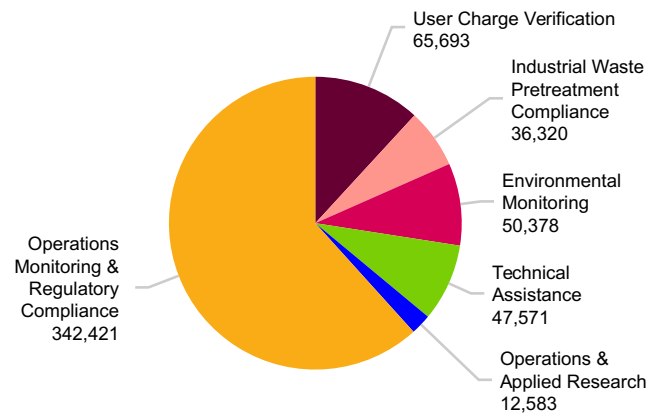
Year	Cease and Desist Orders
2017	72
2018	72
2019	110
2020 Estimated	90
2021 Projected	80

Number of Emergency Responses



2018 - Decrease due to more effective spill precaution and slug control outreach effort to industry, along with fewer heavy precipitation events.

2021 Projected Laboratory Analyses by Program



M&R provides first-response services for hazardous materials emergencies and complaints of pollution to surface water and sewage systems and will conduct approximately 140 investigations in response to requests from federal, state, and local agencies, municipalities, private citizens, industrial sources, and requests from the M&O Department in 2021.

In 2021, M&R will collect and analyze approximately 600 samples from 102 TARP groundwater monitoring wells and three reservoirs. M&R will also compile 10 annual monitoring reports for the four TARP tunnel systems, including the Mainstream, Calumet, Des Plaines (below Weller Creek), and Upper Des Plaines (above Weller Creek - O’Hare) systems as well as three reservoirs, the Gloria Alitto Majewski Reservoir, the Thornton Composite Reservoir, and the McCook Reservoir, to meet the operating permit requirements of these facilities. These samples also include groundwater monitoring at four biosolids management facilities, including Fischer Farm in Hanover Park, in accordance with permits issued by the IEPA. A total of 32 monitoring reports will be submitted to the IEPA.

M&R monitors the liquid and solids process trains daily at multiple critical control points at each of the seven WRPs to inform process control and to improve operations and the quality of effluents and biosolids, which will generate 554,966 projected tests in 2021. This includes chemical, biological, and microbiological monitoring. Whole effluent toxicity tests and fecal bacteria indicator analyses will be conducted as required by NPDES permits. M&R provides support to the M&O Department by making non-proprietary reagents that are needed to operate online ammonia and chlorine analysis systems.

The M&R Department has increased its Service Level Agreement Meetings with the M&O Department to every six months from the previous frequency of every twelve months. This is designed to provide closer support and communication with the M&O Department and to allow for faster feedback about service levels and operational concerns regarding the support provided.

The District conducts an Odor Monitoring Program to document occurrences of odors with the purpose of minimizing or eliminating nuisance odors in the communities surrounding its facilities. In 2021, M&R will continue to lead the development of a District-

wide Odor Reduction Strategy for the District's facilities, collection systems, and biosolids drying areas to target odor problem areas and reduce odors that may affect the communities.

M&R will continue to implement some of the recommendations from the interdepartmental, long-term, process facility capital planning process. The review includes District business initiatives, anticipated regulatory requirements, and community service level expectations. In 2021, M&R will continue to address issues such as updating the WRP process and hydraulic models, as well as incorporating findings from the ongoing development of the District's Biosolids Strategy and Odor Reduction Strategy.

- **Recover Resources**

Nutrient enrichment of the water environment has become a national concern. M&R is leading the District's Phosphorus Removal and Recovery Task Force that assists the M&O Department in implementing and optimizing enhanced biological phosphorus removal at the Stickney, Calumet, O'Brien, and Kirie WRPs. M&R is continuing the investigation of technologies to reduce energy costs such as ammonia-based aeration control and new aeration systems. M&R will also continue to work with the Engineering and M&O Departments to evaluate phycoremediation (algae-based) strategies to reduce nutrients in the O'Brien WRP's effluent and to reduce the District's carbon footprint.

The District has developed a sound local biosolids distribution program. Under this program, Exceptional Quality air-dried biosolids and composted biosolids are used as a soil amendment by local park and school districts in the Chicago metropolitan area for maintaining high-quality vegetation on fields and landscaping. M&R will continue the promotion of biosolids and sustainability practices through a sustainability workshop, biosolids beneficial reuse awards, and other public events.

- **Develop Employees**

M&R is committed to providing continuing education and professional development to all of its employees. M&R conducts a monthly Environmental Issues and Research Seminar series at the Cecil Lue-Hing Research and Development Complex, which is video conferenced to multiple facilities and is available online through the District's web portal. The seminar series is approved by the Illinois Society of Professional Engineers for professional development credits, the Illinois Environmental Agency for Wastewater Operator Continual Education Units for some topics, and is available to all employees and the local community. Seminars were curtailed in the middle of 2020 due to the COVID-19 pandemic. However, M&R worked with the Information Technology Department to develop a capability to conduct monthly seminars virtually in some months of late 2020. M&R will resume its monthly seminar series in 2021 and continue to evaluate how the State of Illinois resumes normal activities to determine if the monthly seminars will be virtual or in-person in 2021. Based on the 2,000 attendees in 2019, it is anticipated that attendance for 2021 will be approximately 2,000.

M&R employees benefit from participation at local, regional, and national professional society meetings and workshops as speakers, session chairs and moderators, or committee chairs or members. M&R provides its employees access to webinars that are presented by the Water Environment Federation, Water Research Foundation, National Association of Clean Water Agencies, United States Environmental Protection Agency, National Environmental Laboratory Accreditation Conference Institute, American Chemical Society, and others. In 2021, M&R will continue to encourage professional staff to attend relevant conferences and view webinars to promote professional growth and request all staff to utilize the District's eLearning resources to enhance working knowledge and job skills. In addition, M&R continues to develop employees through cross-training and job shadowing opportunities.

M&R emphasizes employee safety in the work environment. M&R maintains a Chemical Hygiene Plan to ensure employee safety at its laboratories and conducts monthly safety training. An M&R staff member has been certified to handle radioactive materials at the laboratory in a safe and secure manner and perform radiation safety checks on laboratory instrumentation.

- **Leading Partnerships**

M&R will provide support to outreach activities, such as school science fair projects, District laboratory tours, local public meetings, and parades. M&R will continue to represent the District as a member in local watershed groups. M&R will provide water quality data and analysis to support the CAWS Chloride Reduction Initiative and the Chloride Time Limited Water Quality Standard annual requirements and the Phosphorus Assessment and Reduction Plan for the CAWS.

M&R has been providing assistance to oversight agencies studying and controlling the migration of invasive aquatic species for decades. In 2021, M&R will continue to assist the United States Fish and Wildlife Service and the Army Corps of Engineers with surveillance for the presence of Asian carp (*Hypophthalmichthys spp.*) in the CAWS and for the Great Lakes and Mississippi River Interbasin Study, respectively.

M&R will continue to represent the District on technical committees for the Illinois Association of Wastewater Agencies, and will have a representative on their executive board in 2021.

M&R provides support to the IEPA by participating in various work groups for implementing the Illinois Nutrient Loss Reduction Strategy and developing nutrient water quality standards for Illinois. M&R is also continuing to work through the Illinois Association of Wastewater Agencies in 2021 to partner with a consortium of agricultural industry organizations to investigate watershed approaches for improving water quality in the Illinois River basin. The activities under this partnership include research and

demonstration projects, and field days at the District's Fulton County site. M&R completed a four-season study of TOC and BOD correlation from samples of each of the seven WRPs. M&R will submit data to the IEPA for approval to use TOC analysis in place of BOD. The TOC analysis provides a more environmentally beneficial analysis by eliminating the use of the mercury reagent that is required for oxygen demand index analysis to predict BOD concentrations.

- **Information Technology**

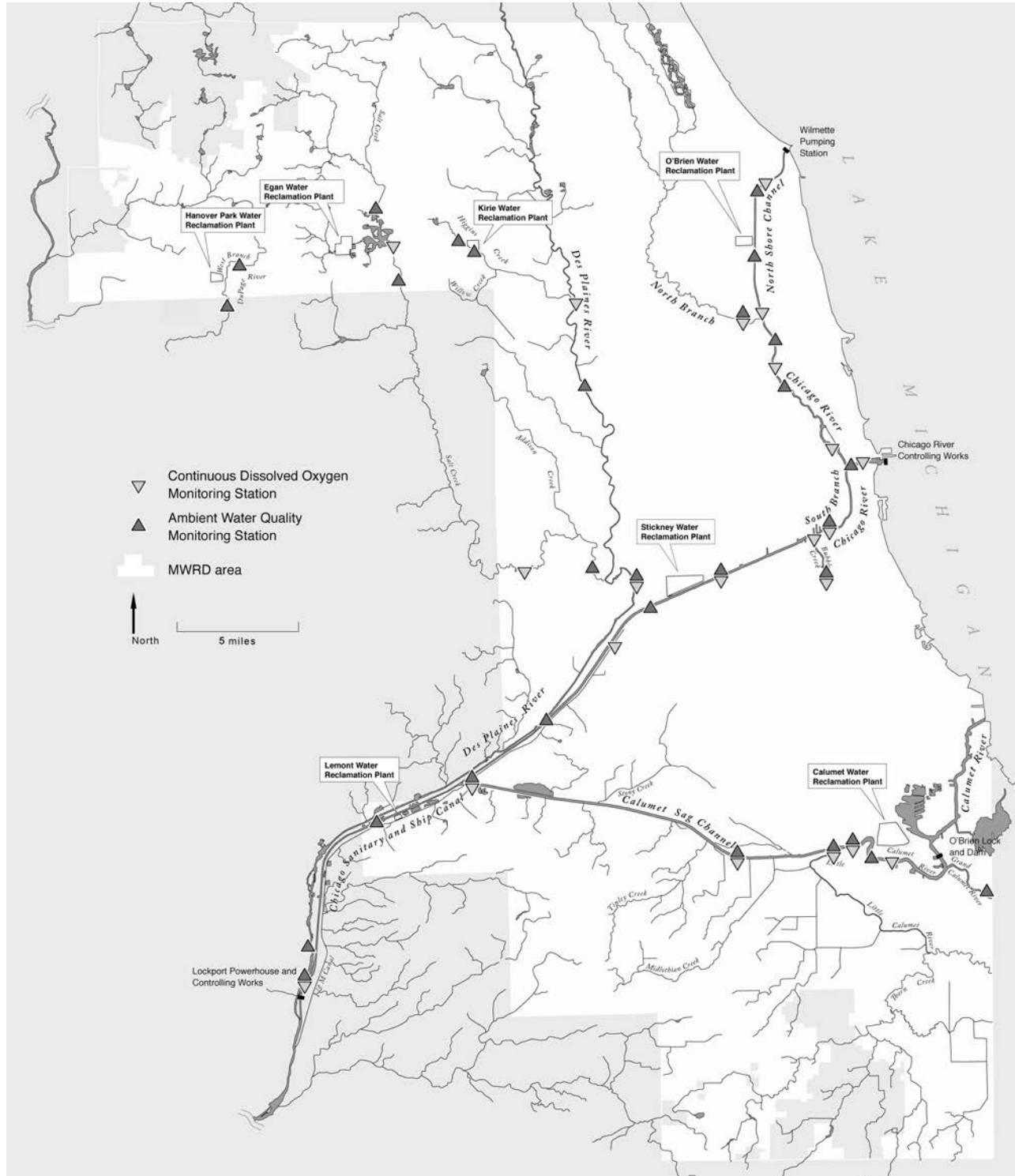
The internet-based Publicly owned treatment works Administration and Compliance System is used to monitor Commercial/Industrial User compliance with United States Environmental Protection Agency regulations. In 2020, M&R began development of a self-reporting system, allowing Commercial/Industrial Users to electronically submit self-monitoring data and permit applications to M&R and anticipates a partial deployment of electronic reporting capabilities for use by its Users by the end of 2021.

In 2020, the Analytical Laboratories Division spearheaded an acquisition of a new laboratory data management system. Research to upgrade the current system and reduce custom code determined a new system with enhanced technology is necessary. The goal is to procure and implement a system that is configurable without customization; therefore, eliminating the need for outside consultants. The new system will provide for traceability of reagents and analysts' training, which will improve error prevention and reduce the use of paper. The new system will be adaptable to the use of mobile devices, which will enable electronic chain of custody of samples in the future.

A second TOC Analyzer was acquired to measure total organic carbon in the NPDES permit samples at each of the seven WRPs. The TOC Analyzer also provides significant reduction in the number of "No Data" reports as a result of failed BOD analyses. The TOC is reproducible, automated, and fast; samples can be preserved and reanalyzed.

Monitoring & Research

Waterways Monitoring Program 4672 - Waterways Monitoring Stations



Operations of the District meet stringent standards contained in NPDES permits issued for each WRP. Processing and utilization of solids are regulated by IEPA permits and federal regulations. M&R monitors ambient water quality at 29 sampling locations, and operates 21 continuous dissolved oxygen monitoring stations in the shallow and deep-draft waterways within the District's service area. The environmental information is used to demonstrate compliance with water quality standards and the beneficial effects of the District's operational improvements on water quality in the waterways. Fish sampling in the District service area is also conducted at select locations to characterize the biological integrity of the waterways.

16000 MONITORING & RESEARCH

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:		Cost	Percent	
1. OPERATIONS MONITORING: Monitor the District's collection, treatment, and disposal operations to ensure compliance with National Pollutant Discharge Elimination System, Illinois Environmental Protection Agency, and other regulations.	Liquid Process Analyses	\$ 5,980,800	18.3%	
	Solids Process Analyses	\$ 2,622,000	8.0%	
	Air Quality Monitoring	\$ 172,100	0.5%	
		\$ 8,774,900	26.8%	
2. INDUSTRIAL WASTE MONITORING: Administer the Sewage and Waste Control Ordinance (Pretreatment Program), User Charge Ordinance (User Charge Program), Environmental Remediation Wastewater Ordinance, and Chemical Toilet Wastes Disposal Ordinance.	Residential Users	\$ 333,900	1.0%	
	Tax-Exempt Users	\$ 1,263,300	3.9%	
	Large Commercial/Industrial Users	\$ 4,763,500	14.6%	
	Environmental Remediation	\$ 134,000	0.4%	
	Chemical Toilet Waste	\$ 174,600	0.5%	
	* Note: "SIUs" refers to Significant Industrial Users.	SIUs* - Pretreatment Program	\$ 4,658,300	14.2%
	SIUs* - Extraordinary Monitoring/ Enforcement	\$ 1,037,700	3.2%	
	Other Industrial Users	\$ 559,200	1.7%	
	All Other - General	\$ 423,800	1.3%	
			\$ 13,348,300	40.8%
3. ENVIRONMENTAL MONITORING: Monitor the water quality of Lake Michigan and the waterways in order to detect and reduce the incidence of pollution.	Lake Michigan Monitoring	\$ 71,700	0.2%	
	Waterways Monitoring	\$ 2,186,800	6.7%	
	Inspection Events	\$ 216,300	0.7%	
	Groundwater Monitoring	\$ 462,500	1.4%	
		\$ 2,937,300	9.0%	
4. TECHNICAL ASSISTANCE: Conduct a program of independent review of water reclamation plant operations, regular consultation, and assistance for the solution of operating problems, provide technical assistance to other agencies upon request, provide review and response to proposed regulations issued by federal, state, and local governments, and provide long-term facility planning.	M&O Assistance	\$ 1,543,300	4.7%	
	General Assistance	\$ 625,700	1.9%	
	Regulatory Review and Response	\$ 1,096,300	3.4%	
	Engineering Process Design Support	\$ 1,285,500	3.9%	
	Regulatory Compliance Reporting	\$ 258,300	0.8%	
	Facility Capital Planning	\$ 767,000	2.3%	
		\$ 5,576,100	17.0%	
5. OPERATIONS & APPLIED RESEARCH: Conduct operations and applied research for process improvement and cost reduction in District operations.		\$ 2,087,600	6.4%	
		Totals \$ 32,724,200	100.0%	

16000 MONITORING & RESEARCH

OBJECTIVES AND PROGRAM SUMMARY

MEASURABLE GOALS:	2019	2020	2021
	Actual	Estimated	Proposed
1. Submit all required environmental monitoring reports on time.	100%	100%	100%
2. Maintain laboratory accreditation.	100%	100%	100%
3. Continue a seven-year microbiome microbial source monitoring study of the Chicago Area Waterways.	99%	100%	n/a
4. Provide sample data for Illinois Environmental Protection Agency monitoring compliance reports by the 13th of the following month 100 percent on time.	100%	100%	100%
5. Provide sample data for industrial surveillance and the Pretreatment and Cost Recovery Section by the 15th of the following month 100 percent on time.	100%	100%	100%
6. Provide water quality sample data by the 15th of the following month 100 percent on time.	100%	100%	100%
7. Issue Discharge Authorizations in response to all SIU requests and enforcement actions within the timeframes established under the Sewage and Waste Control Ordinance.	100%	90%	100%
8. Process User Charge Annual Certified Statements submitted by Commercial/Industrial Users by September 30th.	100%	100%	100%
9. Respond to emergency assistance requests from fire and police departments, citizens, state and federal agencies, municipalities, industries, and the District.	134	145	140

PROGRAMS BY PRIORITY:		2019	Budgeted		Change			
Number	Name	Actual	FTEs	Dollars	Dollars	Percent		
4650	Operations Monitoring	\$ 7,303,806	2021	77	\$ 8,774,900	\$ 834,400	10.5	a)
			2020	77	\$ 7,940,500			
4660	Industrial Waste Monitoring	\$12,044,432	2021	120	\$12,924,500	\$ 84,200	0.7	
			2020	120	\$12,840,300			
4670	Environmental Monitoring	\$ 2,810,149	2021	28	\$ 2,937,300	\$ 4,100	0.1	
			2020	28	\$ 2,933,200			
4680	Technical Assistance	\$ 4,899,143	2021	47	\$ 5,576,100	\$ 76,200	1.4	
			2020	48	\$ 5,499,900			
4690	Operations and Applied Research	\$ 2,225,782	2021	20	\$ 2,087,600	\$ (99,700)	(4.6)	
			2020	21	\$ 2,187,300			
7604	Social Security and Medicare Contributions	\$ 382,954	2021	—	\$ 423,800	\$ (2,100)	(0.5)	
			2020	—	\$ 425,900			
Totals		\$29,666,266	2021	292	\$32,724,200	\$ 897,100	2.8%	
			2020	294	\$31,827,100			

a) Increase is due to the purchase of a laboratory information management system (\$500,000), the planned purchase of instruments for the Organic Compounds Analytical Laboratory and Stickney Analytical Laboratory (\$170,000), preventive maintenance for Stickney Analytical Laboratory instruments (\$64,900), and the reallocation of salaries to more accurately reflect current activities (\$58,800).

16000 MONITORING & RESEARCH

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
4650	Operations Monitoring: Monitoring of water reclamation plant operations to inform operations and comply with permits and regulations					
4652	Liquid Monitoring: Monitoring of the District's liquid process trains (primarily effluent) to inform operations and comply with permits and regulations	Liquid Process Analyses	246,737	235,832	249,797	
		Program Cost	\$ 4,710,143	\$ 5,191,400	\$ 5,980,800	a)
		Program Cost/Analysis	\$ 19.09	\$ 22.01	\$ 23.94	
4653	Solids Monitoring: Monitoring of the District's sludge and biosolids generated from the wastewater treatment process to inform operations and comply with permits and regulations	Number of Analyses	90,905	79,172	88,124	
		Program Cost	\$ 2,430,862	\$ 2,580,700	\$ 2,622,000	
		Program Cost/Analysis	\$ 26.74	\$ 32.60	\$ 29.75	
4654	Air Monitoring: Air quality monitoring at the District's WRPs and solids management areas to comply with regulations and identify odors affecting surrounding areas resulting in citizen complaints	Number of Analyses	4,145	4,284	4,500	
		Sampling Events	443	441	450	
		Program Cost	\$ 162,801	\$ 168,400	\$ 172,100	
		Program Cost/Analysis	\$ 39.28	\$ 39.31	\$ 38.24	
4660	Industrial Waste Monitoring: Activities associated with sampling, analysis, enforcement, and administration of users so classified below to monitor compliance with the User Charge and Pretreatment Programs					
4661	User Charge Ordinance - Residential and Small Non-Residential Commercial/Industrial Users	Number of Users	2,950	6,000	1,500	b)
		Program Cost	\$ 301,405	\$ 325,100	\$ 333,900	
		Program Cost/User	\$ 102.17	\$ 54.18	\$ 222.60	
4662	User Charge Ordinance - Tax-Exempt Users	Number of Users	2,897	2,940	2,800	
		Program Cost	\$ 1,180,068	\$ 1,253,000	\$ 1,263,300	
		Program Cost/User	\$ 407.34	\$ 426.19	\$ 451.18	
		Revenue	\$ 12,945,851	\$ 10,750,000	\$ 11,000,000	
		Revenue/User	\$ 4,468.71	\$ 3,656.46	\$ 3,928.57	
4663	User Charge Ordinance - Large Commercial/Industrial Users	Number of Users	632	630	620	
		Program Cost	\$ 4,434,746	\$ 4,770,300	\$ 4,763,500	
		Program Cost/User	\$ 7,017.00	\$ 7,571.90	\$ 7,683.06	
		Revenue	\$ 38,837,554	\$ 32,250,000	\$ 26,000,000	c)
		Revenue/User	\$ 61,451.83	\$ 51,190.48	\$ 41,935.48	
		Industrial Waste Monitoring Analyses	63,556	58,414	65,693	
		Program Cost/Analysis	\$ 69.78	\$ 81.66	\$ 72.51	
4664	Environmental Remediation Wastewater Ordinance	Permits Issued	10	15	15	
		Program Cost	\$ 133,254	\$ 135,100	\$ 134,000	
		Program Cost/Permit	\$ 13,325.40	\$ 9,006.67	\$ 8,933.33	
<p>a) Increase is due to the purchase of a laboratory information management system (\$500,000), the planned purchase of instruments for the Organic Compounds Analytical Laboratory and Stickney Analytical Laboratory (\$170,000), and preventive maintenance for Stickney Analytical Laboratory instruments (\$64,900).</p> <p>b) Decrease is due to a database clean up that started at the end of 2019 into early 2020, reviewing facilities that are no longer administered by the District. This number is anticipated to continue to decrease as more facilities are found to have closed and do not require additional District regulatory oversight.</p> <p>c) Decrease is due to the COVID-19 pandemic. The District is projecting a significant decrease in User Charge revenue due to the decrease in production starting in March 2020.</p>						

16000 MONITORING & RESEARCH

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
4665	Chemical Toilet Wastes Disposal Ordinance	Permits Issued	3	3	3	
		Program Cost	\$ 204,151	\$ 188,700	\$ 174,600	
		Program Cost/Permit	\$ 68,050.33	\$ 62,900.00	\$ 58,200.00	
4666	Sewage and Waste Control Ordinance - SIU Minimum Regulatory Requirement Activities: Annual sampling and inspection of SIU facilities, as required by federal regulation	Number of SIUs	340	340	340	
		Waste Monitoring Analyses	35,308	36,212	36,320	
		Program Cost	\$ 4,279,572	\$ 4,574,800	\$ 4,658,300	
		Program Cost/Analysis	\$ 121.21	\$ 126.33	\$ 128.26	
		Program Cost/SIU	\$ 12,586.98	\$ 13,455.29	\$ 13,700.88	
4667	Sewage and Waste Control Ordinance - SIU Extraordinary Monitoring and Enforcement Activities: SIUs that have been the subject of violation-related enforcement actions to verify compliance through inspection and/or sampling	Number of SIUs	107	120	120	
		Program Cost	\$ 989,732	\$ 1,032,700	\$ 1,037,700	
		Program Cost/SIU	\$ 9,249.83	\$ 8,605.83	\$ 8,647.50	
4668	Other Regulatory Activities - Industrial Users	Number of IUs	210	300	300	
		Program Cost	\$ 521,504	\$ 560,600	\$ 559,200	
		Program Cost/IU	\$ 2,483.35	\$ 1,868.67	\$ 1,864.00	
4670	Environmental Monitoring: Regulatory required monitoring or discretionary sampling and analysis to address or evaluate the impact of wastewater conveyance, treatment, and discharge of treated effluent on local surface water and groundwater					
4671	Lake Michigan Monitoring: Sampling and analysis to determine the impact of Combined Sewer Overflow backflow, due to storm events, on the water quality of Lake Michigan	Environmental Analyses	299	—	240	d)
		Program Cost	\$ 68,059	\$ 72,600	\$ 71,700	
		Program Cost/Analysis	\$ 227.62	\$ —	\$ 298.75	
4672	Waterways Monitoring: Sampling and analysis of Chicago Area Waterways to assess the impact of treated effluent discharge and comply with regulations	Sampling Events	860	875	900	
		Environmental Analyses	29,509	26,761	30,566	
		Program Cost	\$ 2,134,073	\$ 2,159,100	\$ 2,186,800	
		Program Cost/Analysis	\$ 72.32	\$ 80.68	\$ 71.54	
4673	Inspection Events: Inspections in response to complaints from citizens and requests from fire and police departments, and municipal and regulatory agencies. Also, activities related to enforcement of the Sewage and Waste Control Ordinance for direct discharges to waterways	Inspection Events	134	145	140	
		Program Cost	\$ 209,399	\$ 215,500	\$ 216,300	
		Program Cost/Inspection	\$ 1,562.68	\$ 1,486.21	\$ 1,545.00	
4674	Groundwater Monitoring: Sampling and analysis conducted at various sites such as wells and reservoirs associated with the TARP System, and lysimeters and wells at solids management areas to comply with IEPA permits	Number of Analyses	19,149	18,370	19,572	
		Sampling Events	755	750	600	e)
		Number of Sites	165	165	165	
		Program Cost	\$ 398,618	\$ 486,000	\$ 462,500	
		Program Cost/Analysis	\$ 20.82	\$ 26.46	\$ 23.63	

d) Increase is due to a projection of backflow events based on weather-dependent events.

e) Decrease is due to a projected reduction in monitoring from IEPA following completion of a three-year study in 2020 to evaluate the potential of reducing the monitoring frequency.

16000 MONITORING & RESEARCH

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
4680	Technical Assistance					
4681	Assistance to Maintenance & Operations Department Troubleshoot problems in plant operations or evaluate options to improve the effectiveness and cost efficiencies in plant operations	Responses Completed	525	470	483	
		Number of Analyses	41,103	30,589	29,415	
		Sampling Events	709	438	650	f)
		Program Cost	\$ 1,422,469	\$ 1,535,100	\$ 1,543,300	
		Program Cost/Analysis	\$ 34.61	\$ 50.18	\$ 52.47	
		Program Cost/Event	\$ 2,006.30	\$ 3,504.79	\$ 2,374.31	
4682	General Assistance to All Other Departments: Technical assistance based on requests, primarily to the Law Department	Responses Completed	200	224	250	
		Number of Analyses	402	466	633	g)
		Sampling Events	64	10	60	h)
		Program Cost	\$ 570,137	\$ 618,400	\$ 625,700	
		Program Cost/Analysis	\$ 1,418.25	\$ 1,327.04	\$ 988.47	
		Program Cost/Event	\$ 8,908.39	\$ 61,840.00	\$ 10,428.33	
4683	Regulatory Review and Response: Review of current or pending federal, state, and local regulations to determine the impact and cost on District operations	Responses Completed	70	92	70	i)
		Program Cost	\$ 574,855	\$ 944,300	\$ 1,096,300	j)
4684	Engineering Process Design Support: Technical assistance to the Engineering Department to improve District facilities and optimize process design	Number of Analyses	20,587	17,448	17,523	
		Responses Completed	104	60	123	k)
		Sampling Events	19	—	21	l)
		Program Cost	\$ 1,276,082	\$ 1,330,900	\$ 1,285,500	
		Program Cost/Analysis	\$ 61.98	\$ 76.28	\$ 73.36	
4685	Regulatory Compliance Reporting: Preparation of reports and letters required by regulatory agencies, such as USEPA and IEPA, to comply with permits and other regulatory requirements or to justify modifications of regulatory requirements	Reports/Data Transmittal Letters	56	55	56	
		Number of Analyses	—	—	—	
		Program Cost	\$ 262,001	\$ 254,500	\$ 258,300	
		Program Cost/Report	\$ 4,678.59	\$ 4,627.27	\$ 4,612.50	
4686	Facility Capital Planning and Capital/Maintenance Project Evaluations: Activities to develop, facilitate, prioritize, and document the District's capital plan alternatives to improve the District's treatment plant processes and infrastructure	Program Cost	\$ 793,599	\$ 816,700	\$ 767,000	

- f) Increase is due to additional support to the M&O department on solids handling and biogas, and the addition of resource recovery sampling which was previously not reported.
- g) Increase is due to the anticipated requests for assistance on Coronavirus Sewage Surveillance monitoring.
- h) Increase is due to expected support that will be provided on the H2NOW project which began in 2019 and entails testing real-time water quality monitoring technology in the CAWS.
- i) Decrease is due to varying requests and current regulatory issues.
- j) Increase is due to higher scheduled costs for CAWS Phosphorus assessment (\$166,800), offset by cost savings from the conclusion of the microbial source tracking peer review (\$14,700).
- k) Increase is due to the expected review of side-stream enhanced biological phosphorus removal project at Calumet.
- l) Increase is due to a counting error in the budget for 2020 sampling events, which was understated.

16000 MONITORING & RESEARCH

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
4690	Operations and Applied Research: Basic and applied research to generate information to improve District operations, evaluate the impact of District activities on the environment, and to address the potential impact of regulations on District operations	Sampling Events	1,869	4,070	1,800	m)
		Research Projects	70	60	65	
		Laboratory Analyses	9,794	10,100	12,583	n)
		Program Cost	\$ 2,225,782	\$ 2,187,300	\$ 2,087,600	
		Program Cost/Analysis	\$ 227.26	\$ 216.56	\$ 165.91	
7604	Social Security and Medicare Contributions	Program Cost	\$ 382,954	\$ 425,900	\$ 423,800	
		Totals	\$ 29,666,266	\$ 31,827,100	\$ 32,724,200	
<p>m) Decrease is due to the completion of sampling done for the Argonne microbial source tracking project, changes in expected sampling requirements on some projects, and a counting error in the 2020 budget for sampling events, which was overstated.</p> <p>n) Increase is due to varying requests that require analysis.</p>						

101 16000	Fund: Corporate Department: Monitoring & Research	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 26,966,334	\$ 28,436,300	\$ 28,436,300	\$ 19,919,063	\$ 27,260,500	\$ 28,297,400	\$ —
601060	Compensation Plan Adjustments	478,809	789,000	789,000	662,686	713,400	776,400	—
601070	Social Security and Medicare Contributions	382,954	425,900	425,900	297,157	390,300	423,800	—
601080	Salaries of Nonbudgeted Employees	55,082	—	—	—	—	—	—
601100	Tuition and Training Payments	77,160	27,800	27,800	4,159	14,600	82,500	—
100	TOTAL PERSONAL SERVICES	27,960,340	29,679,000	29,679,000	20,883,065	28,378,800	29,580,100	—
612010	Travel	19,611	10,000	10,000	250	6,100	16,800	—
612030	Meals and Lodging	36,534	21,500	21,500	536	10,500	37,600	—
612040	Postage, Freight, and Delivery Charges	5,639	5,700	5,700	5,627	5,700	7,900	—
612050	Compensation for Personally-Owned Automobiles	25,263	17,700	17,700	13,969	16,900	27,300	—
612080	Motor Vehicle Operating Services	268	300	300	36	100	300	—
612330	Rental Charges	—	1,100	1,100	—	—	300	—
612400	Intergovernmental Agreements	49,547	49,600	49,600	49,547	49,600	99,100	—
612410	Governmental Service Charges	17,000	17,000	17,000	13,600	17,000	17,000	—
612430	Payments for Professional Services	62,243	354,100	354,100	186,353	269,600	500,200	—
612440	Preliminary Engineering Reports and Studies	—	—	—	—	—	20,000	—
612490	Contractual Services, N.O.C.	165,235	242,900	239,100	189,490	154,900	217,900	—
612790	Repairs to Marine Equipment	33,871	33,600	33,600	33,176	33,200	31,500	—
612820	Computer Software Maintenance	27,825	9,000	10,500	10,250	10,300	25,700	—
612970	Repairs to Testing and Laboratory Equipment	358,914	312,800	315,100	308,907	307,500	368,800	—
200	TOTAL CONTRACTUAL SERVICES	801,950	1,075,300	1,075,300	811,741	881,400	1,370,400	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	30,773	19,100	19,100	15,074	18,000	25,100	—
623530	Farming Supplies	11,440	15,000	15,000	13,900	13,900	12,000	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	347,795	323,100	323,100	297,036	289,000	396,000	—
623700	Wearing Apparel	11,990	16,300	16,300	16,000	16,300	15,000	—
623720	Books, Maps, and Charts	425	400	900	304	400	400	—
623800	Computer Software	18,320	—	—	—	—	—	—
623820	Fuel	12,129	18,000	18,000	15,325	15,400	15,000	—

101 Fund: Corporate 16000 Department: Monitoring & Research		LINE ITEM ANALYSIS						
		2019	2020				2021	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623990	Materials and Supplies, N.O.C.	32,597	89,900	89,400	64,274	86,200	80,500	—
300	TOTAL MATERIALS AND SUPPLIES	465,469	481,800	481,800	421,913	439,200	544,000	—
634820	Computer Software	—	500,000	473,400	302,800	100,000	950,000	—
634970	Testing and Laboratory Equipment	438,506	91,000	117,600	116,343	102,600	279,700	—
400	TOTAL MACHINERY AND EQUIPMENT	438,506	591,000	591,000	419,143	202,600	1,229,700	—
TOTAL MONITORING & RESEARCH		\$ 29,666,265	\$ 31,827,100	\$ 31,827,100	\$ 22,535,862	\$ 29,902,000	\$ 32,724,200	\$ —

NOTES: 1. Amounts may not add up due to rounding.
 2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.
 Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.

Fund: Corporate Dept: Monitoring & Research		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
110	Executive Division					
111	Executive Section					
EX11	Director of Monitoring & Research	1	1		1	
EX06	Secretary to Officer	1	1		1	
HP12	Secretary #2 (Administrative Specialist) (New Grade HP11)	1	1		1	
TOTAL 111	Executive Section	3	3	467,097	3	471,174
112	Budget & Administrative Section					
HP22	Assistant Director of Monitoring & Research	1	1		—	
HP18	Supervising Budget & Management Analyst	1	1		1	
HP16	Senior Budget & Management Analyst	1	1		1	
HP14	Budget & Management Analyst	2	2		2	
HP11	Administrative Specialist	1	1		1	
TOTAL 112	Budget & Administrative Section	6	6	777,563	5	507,656
TOTAL 110	Executive Division	9	9	1,244,660	8	978,830
120	Environmental Monitoring & Research Division					
121	Environmental Monitoring & Research Administrative Section					
HP22	Assistant Director of Monitoring & Research	1	1		1	
HP20	Environmental Monitoring & Research Manager	1	1		1	
HP20	Managing Civil Engineer	1	—		—	
HP18	Biostatistician	1	1		1	
HP18	Principal Environmental Scientist	1	—		—	
HP15	Associate Civil Engineer	1	1		1	
HP13	Senior Administrative Specialist	2	2		2	
HP11	Administrative Specialist	4	3		3	
TOTAL 121	Environmental Monitoring & Research Administrative Section	12	9	1,121,684	9	1,135,078
122	Wastewater Treatment Operations Support Section (formerly Wastewater Treatment Process Research Section)					
HP18	Principal Environmental Scientist	1	—		—	
HP17	Senior Environmental Research Scientist	3	2		2	

Fund: Corporate Dept: Monitoring & Research		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
HP15	Environmental Research Scientist	3	1		1	
HP13	Senior Environmental Research Technician	1	—		—	
HP11	Environmental Research Technician	7	—		—	
TOTAL 122	Wastewater Treatment Operations Support Section (formerly Wastewater Treatment Process Research Section)	15	3	387,939	3	358,110
123	Biosolids Section (formerly Biosolids Utilization & Soil Science Section)					
HP18	Principal Environmental Scientist	1	1		1	
HP17	Senior Environmental Soil Scientist	2	2		2	
HP15	Environmental Soil Scientist	3	2		2	
HP15	Environmental Chemist	1	—		—	
HP15	Environmental Chemist #2 (Senior Environmental Research Technician) (New Grade HP 13)	—	1		1	
HP11	Environmental Research Technician	5	6		6	
HP09	Laboratory Assistant	1	1		1	
NR3642	Pollution Control Technician II	—	—		2	
TOTAL 123	Biosolids Section (formerly Biosolids Utilization & Soil Science Section)	13	13	1,090,926	15	1,239,758
124	Microbiology Section (formerly Analytical Microbiology & Biomonitoring Section)					
HP18	Principal Environmental Scientist	1	1		1	
HP17	Senior Environmental Microbiologist	1	1		1	
HP16	Associate Environmental Microbiologist #2 (Environmental Microbiologist) (New Grade HP15)	1	1		1	
HP15	Environmental Microbiologist	1	1		1	
HP13	Senior Laboratory Technician	1	1		1	
HP11	Laboratory Technician II	8	7		7	
HP09	Laboratory Assistant	2	2		2	
TOTAL 124	Microbiology Section (formerly Analytical Microbiology & Biomonitoring Section)	15	14	1,161,349	14	1,186,078
126	Aquatic Ecology Section (formerly Aquatic Ecology & Water Quality Section)					
HP18	Principal Environmental Scientist	1	1		1	

Fund: Corporate Dept: Monitoring & Research		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
HP17	Senior Aquatic Biologist	1	1		1	
HP16	Associate Aquatic Biologist #2 (Aquatic Biologist) (New Grade HP15)	2	2		2	
HP15	Aquatic Biologist	1	1		1	
HP13	Senior Environmental Research Technician	1	1		1	
HP11	Environmental Research Technician	5	4		4	
NR6441	Patrol Boat Operator	2	2		2	
NR3642	Pollution Control Technician II	2	2		—	
NR3641	Pollution Control Technician I	4	4		4	
TOTAL 126	Aquatic Ecology Section (formerly Aquatic Ecology & Water Quality Section)	19	18	1,525,443	16	1,385,413
129	Wastewater Capital Planning, Research, and Technology Evaluation Section (formerly Process Facilities Capital Planning Section)					
HP20	Managing Civil Engineer	—	1		1	
HP18	Principal Civil Engineer	1	1		1	
HP18	Principal Environmental Scientist	—	2		2	
HP17	Senior Civil Engineer	2	2		2	
HP17	Senior Environmental Research Scientist	3	4		4	
HP17	Senior Mechanical Engineer	1	1		1	
HP15	Associate Civil Engineer	1	1		1	
HP15	Associate Mechanical Engineer	1	1		1	
HP15	Environmental Research Scientist	2	3		3	
HP13	Senior Environmental Research Technician	—	2		2	
HP11	Environmental Research Technician	—	6		6	
HP11	Environmental Research Technician #1	—	1		—	
TOTAL 129	Wastewater Capital Planning, Research, and Technology Evaluation Section (formerly Process Facilities Capital Planning Section)	11	25	2,662,196	24	2,662,086
TOTAL 120	Environmental Monitoring & Research Division	85	82	7,949,536	81	7,966,524
160	Analytical Laboratories Division					
161	Analytical Laboratories Administrative Section					
HP22	Assistant Director of Monitoring & Research	1	1		1	

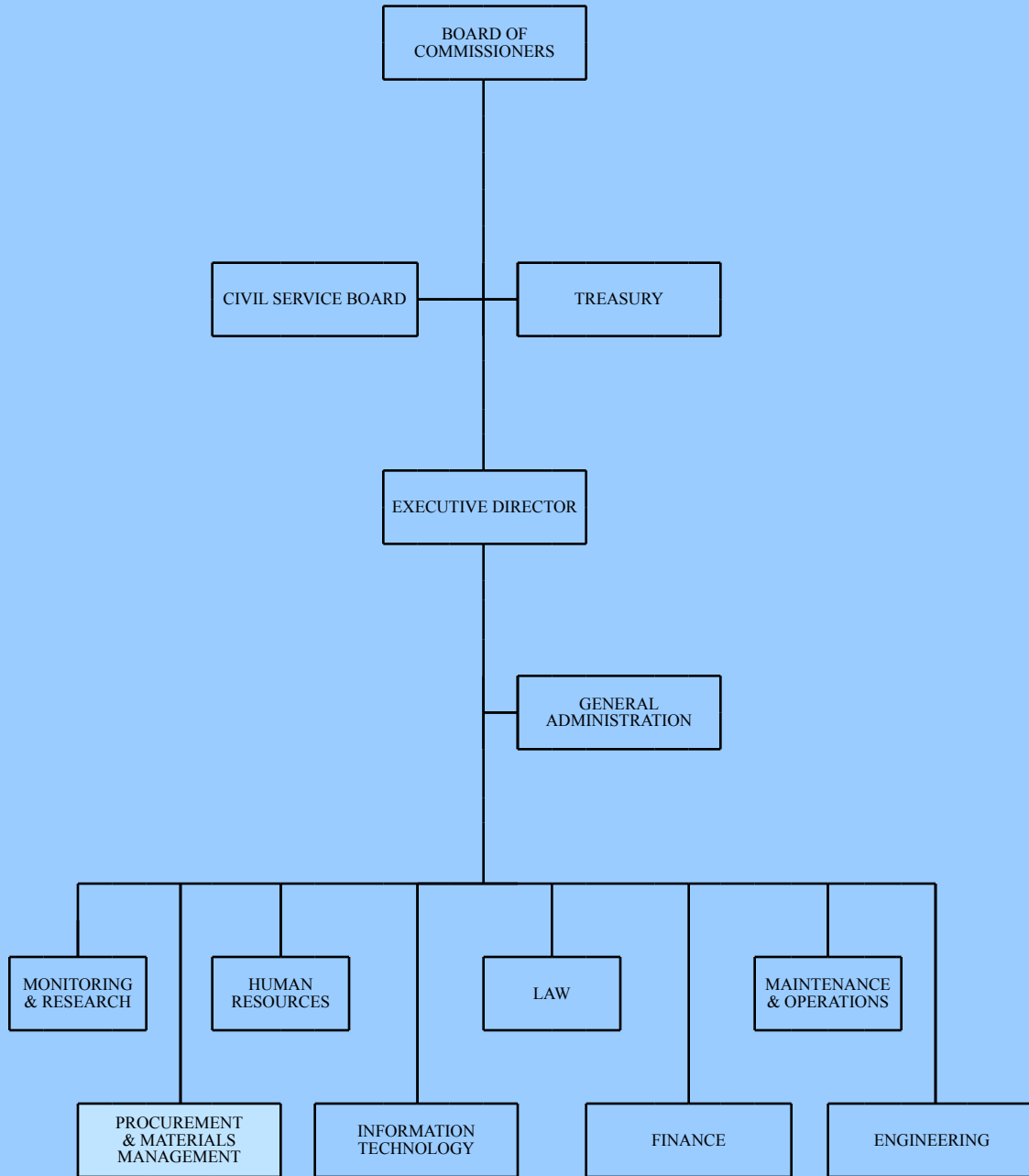
Fund: Corporate Dept: Monitoring & Research		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
HP18	Supervising Environmental Chemist	1	1		1	
HP17	Senior Environmental Chemist	1	1		1	
HP15	Environmental Chemist	2	2		3	
HP13	Senior Administrative Specialist	2	2		2	
TOTAL 161	Analytical Laboratories Administrative Section	7	7	813,415	8	893,064
162	Stickney Analytical Laboratory Section					
HP18	Supervising Environmental Chemist	1	1		1	
HP17	Senior Environmental Chemist	2	2		2	
HP15	Environmental Chemist	4	4		4	
HP13	Senior Laboratory Technician	3	3		3	
HP11	Administrative Specialist	1	1		1	
HP11	Laboratory Technician II	10	11		11	
HP10	Laboratory Technician I #1	2	1		1	
HP09	Laboratory Assistant	2	2		2	
TOTAL 162	Stickney Analytical Laboratory Section	25	25	2,122,103	25	2,156,415
164	Industrial Waste Analytical Laboratory Section					
HP18	Supervising Environmental Chemist	1	1		1	
HP17	Senior Environmental Chemist	2	2		2	
HP15	Environmental Chemist	4	4		4	
HP13	Senior Laboratory Technician	3	3		3	
HP11	Laboratory Technician II	10	10		10	
HP09	Laboratory Assistant	2	2		2	
TOTAL 164	Industrial Waste Analytical Laboratory Section	22	22	1,918,998	22	1,929,516
165	Organic Compounds Analytical Laboratory Section					
HP18	Supervising Instrumentation Chemist	1	1		1	
HP17	Senior Instrumentation Chemist	2	2		2	
HP16	Instrumentation Chemist II #2 (Environmental Chemist) (New Grade HP15)	—	2		1	
HP16	Instrumentation Chemist II #2 (Instrumentation Chemist) (New Grade HP15)	2	—		—	

Fund: Corporate Dept: Monitoring & Research		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
HP15	Environmental Chemist	—	2		2	
HP15	Instrumentation Chemist	2	—		—	
HP13	Senior Laboratory Technician	1	1		1	
HP11	Laboratory Technician II	3	3		3	
TOTAL 165	Organic Compounds Analytical Laboratory Section	11	11	1,225,160	10	1,100,062
166	Egan Analytical Laboratory Section					
HP18	Supervising Environmental Chemist	1	1		1	
HP17	Senior Environmental Chemist	2	2		2	
HP15	Environmental Chemist	3	3		3	
HP13	Senior Laboratory Technician	2	2		2	
HP12	Administrative Assistant #2 (Administrative Specialist) (New Grade HP11)	1	1		1	
HP11	Laboratory Technician II	7	7		8	
HP11	Laboratory Technician II #4	1	1		—	
HP09	Laboratory Assistant	2	2		2	
TOTAL 166	Egan Analytical Laboratory Section	19	19	1,593,558	19	1,555,737
167	Calumet Analytical Laboratory Section					
HP18	Supervising Environmental Chemist	1	1		1	
HP17	Senior Environmental Chemist	2	2		2	
HP15	Environmental Chemist	3	3		3	
HP13	Senior Laboratory Technician	2	2		2	
HP12	Administrative Assistant #2 (Administrative Specialist) (New Grade HP11)	1	1		1	
HP11	Laboratory Technician II	8	8		8	
HP09	Laboratory Assistant	2	2		2	
TOTAL 167	Calumet Analytical Laboratory Section	19	19	1,660,296	19	1,715,360
TOTAL 160	Analytical Laboratories Division	103	103	9,333,532	103	9,350,154
190	Industrial Waste Division					
191	Industrial Waste Administrative Section					
HP22	Assistant Director of Monitoring & Research	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 191	Industrial Waste Administrative Section	2	2	246,291	2	256,144

Fund: Corporate Dept: Monitoring & Research		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
192	Technical Services Section					
HP18	Supervising Environmental Specialist	—	1		1	
HP17	Senior Environmental Specialist	1	1		1	
HP15	Environmental Specialist	2	5		5	
HP11	Administrative Specialist	—	1		1	
NR3642	Pollution Control Technician II	—	2		2	
TOTAL 192	Technical Services Section	3	10	1,036,593	10	998,594
193	Pretreatment & Cost Recovery Section					
HP18	Supervising Environmental Specialist	2	2		2	
HP17	Senior Civil Engineer	1	1		1	
HP17	Senior Environmental Specialist	3	3		3	
HP15	Associate Civil Engineer	7	7		7	
HP15	Associate Mechanical Engineer #2 (Associate Civil Engineer)	1	1		1	
HP15	Environmental Specialist	16	16		16	
HP11	Administrative Specialist	3	2		2	
HP09	Administrative Clerk	2	2		2	
TOTAL 193	Pretreatment & Cost Recovery Section	35	34	3,724,042	34	3,770,380
194	Field Services Section					
HP18	Supervising Environmental Specialist	1	2		2	
HP17	Senior Environmental Specialist	5	4		4	
HP15	Environmental Specialist	29	26		26	
HP13	Senior Administrative Specialist	1	1		1	
HP11	Administrative Specialist	1	1		1	
NR3642	Pollution Control Technician II	2	—		—	
NR3641	Pollution Control Technician I	21	20		20	
TOTAL 194	Field Services Section	60	54	5,110,017	54	5,119,726
TOTAL 190	Industrial Waste Division	100	100	10,116,943	100	10,144,844
TOTAL	Monitoring & Research	297	294	28,644,671	292	28,440,351

NOTE: Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.

NOTE PAGE



Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 8, 2020

Mr. Brian A. Perkovich
Executive Director
OFFICE

Dear Sir:

Subject: 2021 Program for Procurement & Materials Management Department

The Procurement & Materials Management Department's program for 2021, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of 2021 initiatives in alignment with and in support of the Strategic Business Plan. The budget requests include all amendments as directed by you during the Executive Director Budget Hearings in August of this year.

The narrative provides a summary of the department, 2021 major initiatives and challenges, and 2020 accomplishments. Supporting schedules of objectives, performance, and staffing levels present three years of detailed budgetary information.

Thank you for the opportunity to present the proposed Procurement & Materials Management Department budget for 2021.

Respectfully submitted,

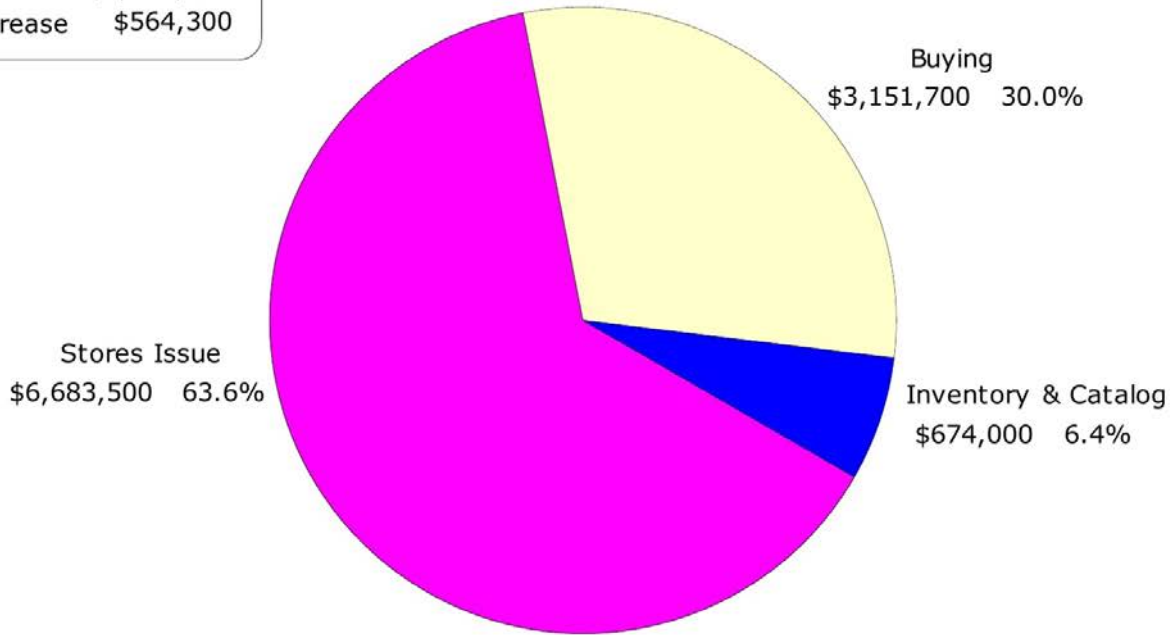


Darlene A. LoCascio
Director of Procurement & Materials Management

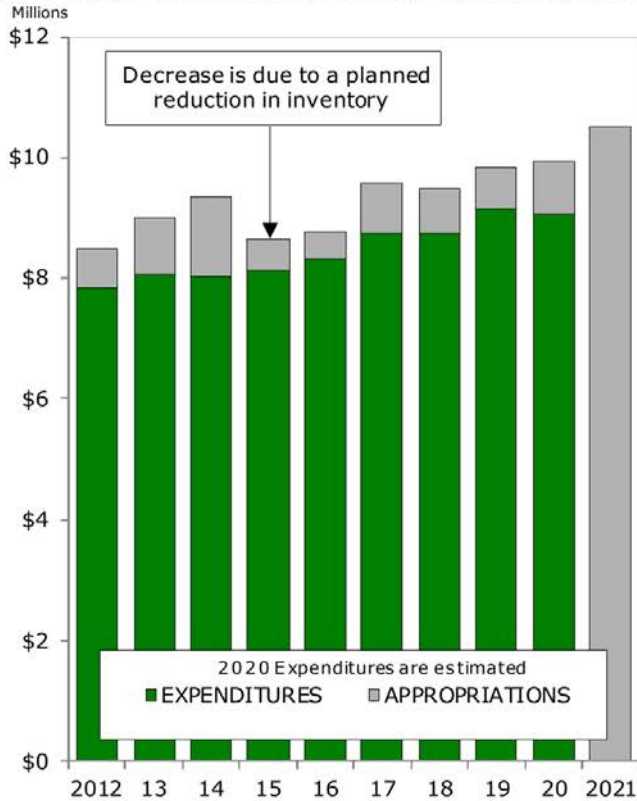
PROCUREMENT & MATERIALS MANAGEMENT

2021	\$10,509,200
2020	\$9,944,900
Increase	\$564,300

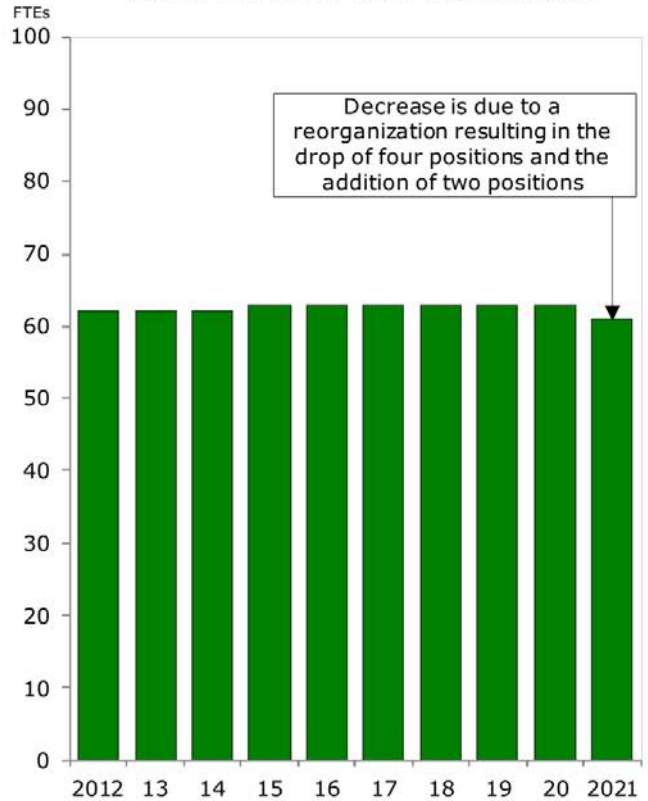
FUNCTIONS



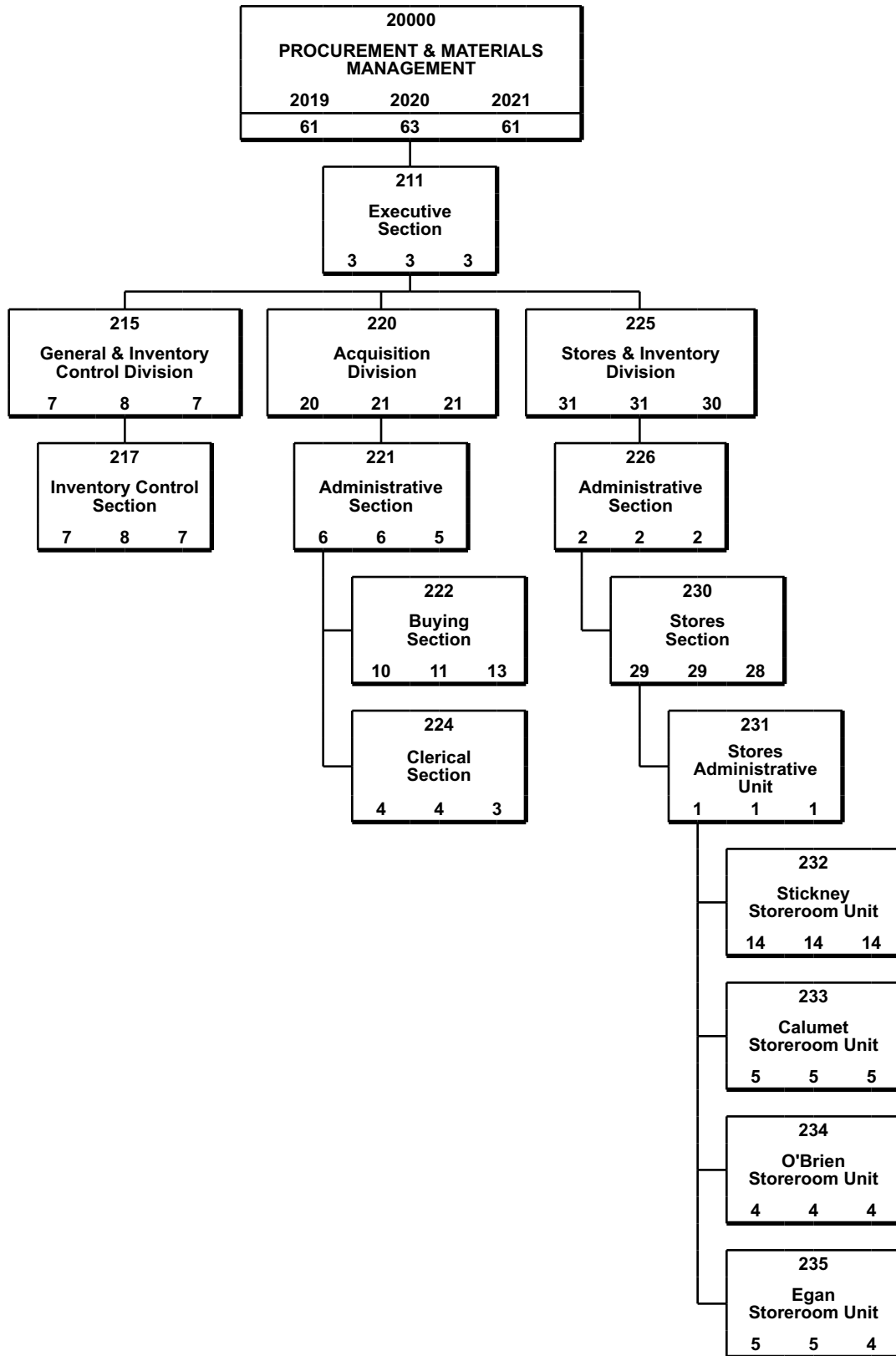
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



PROCUREMENT & MATERIALS MANAGEMENT



PROCUREMENT & MATERIALS MANAGEMENT

The mission of the Procurement & Materials Management Department (P&MM) is to procure goods and services required for District operations in compliance with the Purchasing Act.

Departmental Summary

P&MM is charged with the responsibility of procuring all of the materials and services that are used by the District. The Purchasing Act for the District delineates both the authority and operating regulations. This Act outlines the duties and responsibilities of the Director of P&MM in the various areas of purchasing supplies and services, requesting and receiving bids, determining control and operation of the storerooms, disposing of obsolete, surplus, or unusable materials, and verifying quality and testing of materials.

Summary of 2020 Accomplishments

- Proactive in the procurement of sufficient and appropriate personal protective equipment and cleaning supplies, ensuring the safety of District employees and facilities during the Covid-19 pandemic;
- Implemented e-procurement software for the online submission of bids, and DocuSign software to allow for the electronic signing of documents, streamlining the procurement process to make it more efficient for both the District and vendors;
- Green initiatives, including new software to automate the procurement process, and the move to an electronic material relocation sheet at storerooms, has reduced the use of paper, fax machines, printers, and ink, as well as the volume of physical documents that need to be processed and stored.

Budget Highlights

The 2021 appropriation for P&MM is \$10,509,200, an increase of \$564,300, or 5.7 percent, from 2020. The staffing level has decreased from 63 to 61 positions, which includes the drop of one Stores Specialist, two Administrative Clerks, and one Administrative Assistant, offset by the addition of one Buyer and one Senior Buyer.

Significant features of the 2021 Budget are:

- Enhancement to the electronic bidding system;
- Reorganization of staff to implement an electronic procurement process, resulting in the net reduction of two positions;
- Develop a request for proposal and implement an interactive vendor portal;
- Green initiatives, including new software to automate the procurement process and revised storeroom procedures, to further reduce the use of paper, fax machines, printers, and ink, as well as the volume of physical documents that need to be processed and stored.

2021 Initiatives in Support of the Strategic Business Plan Include the Following:

• Add Value

P&MM will continue to collaborate with the Maintenance & Operations Department to ensure that 100 percent of materials and supplies required for preventive maintenance work orders are available in the storerooms.

P&MM will continue to evaluate and modify the processing of requisitions under \$25,000 for materials and supplies and under \$10,000 for services in order to reach the goal of a five-day turnaround time from requisition to purchase order by 2021. This will represent a 53 percent reduction in turnaround time since 2015.

The above will improve service levels to meet the needs and expectations of the internal customer, to improve planning schedules, and to adhere to project timeframes.

• Excellence

In 2020, the Board of Commissioners gave authorization to accept pricing on electrical energy for 2022. In 2021, the District will continue efforts to secure the electrical energy supply for 2022 with a potential cost savings to the District. This reflects our commitment to ensure the best use of current spending.

• Recover Resources

The District will continue to sell Renewable Energy Credits on the wholesale market in 2021.

• Develop Employees

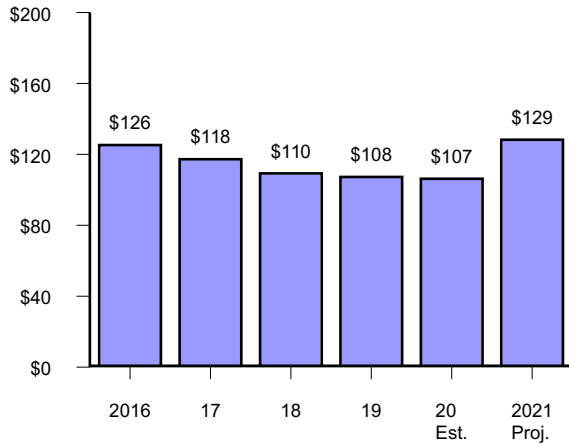
The development of employees is important to P&MM. We continue to develop and implement leadership initiatives that support succession planning. In 2021, we have budgeted for training opportunities for staff in both our Acquisitions Division and Inventory Control Section.

• Information Technology

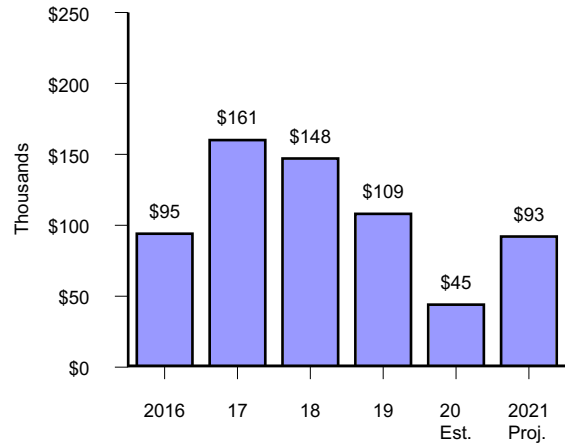
P&MM will continue to collaborate with the Information Technology Department to implement the vendor portal, which will allow vendors to update information in their vendor profile, and obtain purchase orders and payment information. This enhancement will ensure that vendor information is current and accurate.

As always, P&MM is committed to supporting the District’s Strategic Business Plan.

Cost to Prepare a Purchase Order



Sales of Surplus Goods



– 2021 - Projected increase is due to the addition of one Buyer and one Senior Buyer position in 2021.

- 2017 - Increase is due to more materials being identified as surplus.
- 2018 - Decrease is due to fewer materials being identified as surplus.
- 2019 - Decrease is due to fewer materials being identified as surplus.
- 2020 - Estimated decrease is due to the suspension of surplus and scrap sales during the Covid-19 pandemic.
- 2021 - Projected increase is due to the resumption of regular scrap and surplus sales.

20000 PROCUREMENT & MATERIALS MANAGEMENT

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:	Cost	Percent
1. Provide purchasing services for all outside labor, materials, services, and equipment through contracts and purchase orders with an estimated value of \$175.1 million. The estimated number of contracts and purchase orders is 158 and 5,800, respectively. Maximize participation in District purchases by administering the Minority-owned Business Enterprise, Women-owned Business Enterprise, Small Business Enterprise, and Veteran-owned Business Enterprise programs. Support for the department's budget preparation.	\$ 3,151,700	30.0%
2. Service the District's user departments' material and supply requirements by operating and maintaining an effective and economical storeroom function by ordering, receiving, storing, and issuing inventory valued at \$35,000,000 and consisting of 69,900 items.	\$ 6,683,500	63.6%
3. Support the material and supply requirements of the District by planning, monitoring, cataloging, and controlling \$35,000,000 of inventory consisting of 69,900 items.	\$ 674,000	6.4%
Totals	\$ 10,509,200	100.0%

MEASURABLE GOALS:	2019	2020	2021
	Actual	Estimated	Proposed
1. Process all requisitions and issue the related purchase orders within 25 days.			
Percent of Purchase Orders Processed within 25 days	84%	92%	90%
Percent of Purchase Orders Processed within 10 days	64%	77%	80%
Percent of Purchase Orders (Board approved) Processed within 120 days	100%	100%	100%
2. Maintain an inventory level of at least 97 percent for operating supplies and engineering material in stock.			
Total Number of Inventory Items	69,777	69,938	69,900
Stock Issues (Number of Stock Documents)	17,742	16,000	18,000
Total Quantity SKUs (Individual Items) Issued	1,217,396	783,000	1,200,000
Total Stock-outs (Storeroom stock items only)	420	500	480
Items Requested (Multi-Issues of Like Items)	39,406	20,000	38,000
Percent of Stock-outs (Maintain a level below three percent)	1.1%	2.5%	1.3%
3. Achieve inventory accuracy of 98 percent of operating supplies.			
Total Cycle Counts (Periodic physical inventory)	76,599	62,225	77,975
Total Errors	322	380	285
Percent Accuracy	99.6%	99.4%	99.6%
4. Maximize participation in District purchases under \$10,000 by pursuing Minority-owned Business Enterprise, Women-owned Business Enterprise, Small Business Enterprise, and Veteran-owned Business Enterprise solicitation initiatives.			
Minority-owned Business Enterprises Solicited	6.6%	4.8%	6.0%
Women-owned Business Enterprises Solicited	8.2%	6.8%	6.0%
Small Business Enterprises Solicited	0.2%	0.1%	1.0%
Veteran-owned Business Enterprises Solicited	0.3%	0.3%	0.5%
Total Percent Solicited	15.3%	12.0%	13.5%

20000 PROCUREMENT & MATERIALS MANAGEMENT

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
7253	Support Department Budget Preparation, Monitoring, and Administration	\$ 128,670	2021	1 \$ 131,200	\$ 200	0.2	
			2020	1 \$ 131,000			
7260	Buying Procedures	\$ 2,229,258	2021	23 \$ 3,020,500	\$ 344,700	12.9	a)
			2020	23 \$ 2,675,800			
7270	Inventory and Cataloging	\$ 658,182	2021	7 \$ 674,000	\$ (65,900)	(8.9)	
			2020	8 \$ 739,900			
7280	Stores Operation and Issue	\$ 6,079,082	2021	30 \$ 6,595,600	\$ 283,500	4.5	b)
			2020	31 \$ 6,312,100			
7604	Social Security and Medicare Contributions	\$ 75,965	2021	— \$ 87,900	\$ 1,800	2.1	
			2020	— \$ 86,100			
Totals		\$ 9,171,157	2021	61 \$ 10,509,200	\$ 564,300	5.7%	
			2020	63 \$ 9,944,900			
a) Increase is due to the addition of two FTE positions (\$182,500), the deferment of the interactive vendor portal project from 2020 (\$100,000), the purchase of DocuSign software (\$46,000), and licenses for e-procurement software (\$33,500), offset by the drop of two FTE positions (\$116,200).							
b) Increase is due to an increased demand for cleaning supplies (\$370,000), wearing apparel (\$130,000) and laboratory supplies (\$45,000), offset by the completion of Phase II of the conveyor removal project (\$95,000) and the purchase of cantilever racking (\$75,000) in 2020, a decrease in the projected cost of fuel (\$51,000), and the drop of one FTE position (\$47,200).							

20000 PROCUREMENT & MATERIALS MANAGEMENT

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
7253	Support Department Budget Preparation, Monitoring, and Administration	Cost	\$ 128,670	\$ 131,000	\$ 131,200	
7260	Buying Procedures					
	Purchase of all Labor, Materials, Services, and Equipment for the District					
7261	Prepare, Issue, and Maintain Purchase Orders to Appropriate Suppliers	Purchase Orders	5,757	5,600	5,800	
		Cost	\$ 417,928	\$ 492,700	\$ 491,000	
		Cost/Purchase Order	\$ 72.59	\$ 87.98	\$ 84.66	
7262	Process Requisition Requirements into Inquiries for Competitive Purchases	Requisitions	8,657	8,400	8,700	
		Cost	\$ 222,080	\$ 261,900	\$ 288,500	
		Cost/Requisition	\$ 25.65	\$ 31.18	\$ 33.16	
7263	Purchase all Labor, Materials, Services, and Equipment through Formal Contracts	Contracts Advertised	175	142	158	
		Cost	\$ 915,338	\$ 1,004,900	\$ 1,021,700	
		Cost/Contract	\$ 5,230.50	\$ 7,076.76	\$ 6,466.46	
7264	Prepare, Receive, and Evaluate Quotations from Various Suppliers	Inquiries	25,901	30,000	27,400	
		Cost	\$ 250,634	\$ 280,800	\$ 298,000	
		Cost/Inquiry	\$ 9.68	\$ 9.36	\$ 10.88	
7265	Advertise, Evaluate Bids, and Award the Sale of Obsolete Inventory, Scrap, Surplus Materials, and Document Fees	Revenue	\$ 109,236	\$ 120,000	\$ 93,000	a)
		Cost	\$ 104,760	\$ 111,800	\$ 109,000	
		Cost/\$1,000 Revenue	\$ 959.02	\$ 931.67	\$ 1,172.04	
7269	Buying Procedures - All Other (General)	Cost	\$ 318,518	\$ 523,700	\$ 812,300	b)
7270	Inventory and Cataloging					
	Plan and Control Inventory to Support Material and Supply Requirements of the District					
7271	Identify, Classify, Code, and Maintain Catalog Descriptions for Equipment, Materials, and Supplies in District Storerooms	Inventory	35,077,709	34,200,000	35,000,000	
		Cost	\$ 172,140	\$ 190,500	\$ 176,800	
		Cost/Million	\$ 4,907.39	\$ 5,570.18	\$ 5,051.43	
7272	Cycle Counting and Transaction File Maintenance to Ensure Optimum Levels of Inventory and Accountability of District Stock	Inventory	35,077,709	34,200,000	35,000,000	
		Cost	\$ 313,886	\$ 371,600	\$ 319,500	
		Cost/Million	\$ 8,948.30	\$ 10,865.50	\$ 9,128.57	
7273	Requirement Planning, Controlling, Monitoring, and Analyzing Commodity Index Coded Items in an Optimum and Economic Manner	Cost	\$ 144,983	\$ 150,100	\$ 150,500	
7279	Inventory and Cataloging - All Other (General)	Cost	\$ 27,173	\$ 27,700	\$ 27,200	

a) Decrease is due to the projected reduction of surplus materials.

b) Increase is due to the deferment of the interactive vendor portal project from 2020 (\$100,000), a projected increase in retirements (\$90,600), and the purchase of DocuSign software (\$46,000) and additional licenses for e-procurement software (\$33,500).

20000 PROCUREMENT & MATERIALS MANAGEMENT

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
7280	Stores Operation and Issue					
	Operate and Maintain an Effective and Economical Storeroom Function					
7282	Initiate and Prepare Requisitions, Material Requirement Planning Runs, Systems Contracts, Total Stock Transports, Two-Steps, and Miscellaneous Purchases in Accordance with Established Policies and Rules	Requisitions	11,081	12,000	10,900	
		Cost	\$ 481,735	\$ 496,000	\$ 488,200	
		Cost/Requisition	\$ 43.47	\$ 41.33	\$ 44.79	
7283	Receive, Inspect, and Move Purchased Materials, Both Stock and Non-Stock Items, to Ensure Compliance with Quantity, Quality, and Specifications of Purchase Orders	Receipts	23,108	21,000	23,500	
		Cost	\$ 653,291	\$ 692,100	\$ 672,200	
		Cost/Receipt	\$ 28.27	\$ 32.96	\$ 28.60	
7284	Provide the Proper Storage Facilities, People, and Equipment to Effectively Store Materials and Supplies to Protect Against Damage, Malfunction or Loss, and to Move Materials in a Safe and Economical Manner	Inventory	35,077,709	34,200,000	35,000,000	
		Cost	\$ 875,574	\$ 804,200	\$ 636,400	c)
		Cost/Million	\$ 24,960.98	\$ 23,514.62	\$ 18,182.86	
7285	Provide Controlled Disbursement of Stored Materials and Supplies to Requesting Departments	Issue Slips	17,742	17,000	18,000	
		Cost	\$ 639,592	\$ 663,200	\$ 660,100	
		Cost/Issue Slip	\$ 36.05	\$ 39.01	\$ 36.67	
7286	Stores Operation and Issue - All Other (General)	Cost	\$ 211,738	\$ 264,000	\$ 262,100	
7289	Inventory Purchases	Cost	\$ 3,217,152	\$ 3,392,600	\$ 3,876,600	d)
7604	Social Security and Medicare Contributions	Cost	\$ 75,965	\$ 86,100	\$ 87,900	
		Totals	\$ 9,171,157	\$ 9,944,900	\$ 10,509,200	
<p>c) Decrease is due to the completion of Phase II of the conveyor removal project (\$95,000) and purchase of cantilever racking (\$75,000) in 2020.</p> <p>d) Increase is due to an increased demand for cleaning supplies (\$370,000), wearing apparel (\$130,000), and laboratory supplies (\$45,000), offset by a projected decrease in cost for unleaded fuel (\$51,000) and building and grounds material (\$20,000).</p>						

101 20000	Fund: Corporate Department: Procurement & Materials Management	LINE ITEM ANALYSIS						
		2019	2020				2021	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 5,418,817	\$ 5,859,600	\$ 5,859,600	\$ 3,910,047	\$ 5,283,400	\$ 5,809,300	\$ —
601060	Compensation Plan Adjustments	29,324	84,900	84,900	21,933	80,300	170,800	—
601070	Social Security and Medicare Contributions	75,965	86,100	86,100	57,008	74,800	87,900	—
601100	Tuition and Training Payments	645	1,000	2,300	2,205	2,300	13,800	—
100	TOTAL PERSONAL SERVICES	5,524,751	6,031,600	6,032,900	3,991,193	5,440,800	6,081,800	—
612010	Travel	—	600	—	—	—	700	—
612030	Meals and Lodging	358	700	—	—	—	1,000	—
612050	Compensation for Personally-Owned Automobiles	733	1,200	1,200	144	500	1,200	—
612360	Advertising	89,909	123,000	121,200	104,655	100,500	125,000	—
612430	Payments for Professional Services	—	—	1,800	—	—	—	—
612490	Contractual Services, N.O.C.	—	—	—	—	—	700	—
612680	Repairs to Buildings	113,599	101,800	101,800	6,210	110,000	9,000	—
612800	Repairs to Office Furniture and Equipment	1,507	1,600	1,600	1,600	1,000	2,000	—
612820	Computer Software Maintenance	27,500	20,000	150,000	54,449	50,000	345,500	—
612840	Communications Equipment Maintenance (Includes Software)	—	2,500	2,500	1,000	700	500	—
612860	Repairs to Vehicle Equipment	4,410	8,900	8,900	8,850	7,500	8,900	—
200	TOTAL CONTRACTUAL SERVICES	238,016	260,300	389,000	176,908	270,200	494,500	—
623030	Metals	134,961	95,600	95,600	53,115	93,500	95,600	—
623070	Electrical Parts and Supplies	295,425	280,300	250,300	153,028	173,000	280,300	—
623090	Plumbing Accessories and Supplies	350,760	345,800	305,800	232,572	225,000	345,800	—
623110	Hardware	79,305	81,400	71,400	31,243	63,100	81,400	—
623130	Buildings, Grounds, Paving Materials, and Supplies	190,233	278,100	188,100	83,879	175,700	258,100	—
623170	Fiber, Paper, and Insulation Materials	56,493	62,800	52,800	27,249	45,900	62,800	—
623190	Paints, Solvents, and Related Materials	49,080	50,500	40,500	10,790	38,000	50,500	—
623250	Vehicle Parts and Supplies	13,281	12,300	12,300	12,247	11,500	12,300	—
623270	Mechanical Repair Parts	200,034	225,300	150,300	86,453	146,000	225,300	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	14,140	13,400	13,400	10,195	13,000	14,300	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	664,644	668,000	718,000	580,598	700,000	713,000	—
623660	Cleaning Supplies	285,041	266,000	636,000	545,610	636,000	636,000	—

101 20000	Fund: Corporate Department: Procurement & Materials Management	LINE ITEM ANALYSIS						
		2019	2020				2021	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623680	Tools and Supplies	108,178	100,500	100,500	64,697	96,500	100,500	—
623700	Wearing Apparel	172,646	165,100	295,100	230,500	290,000	295,100	—
623780	Safety and Medical Supplies	77,822	72,800	62,800	36,096	57,800	72,800	—
623810	Computer Supplies	59,901	57,200	67,200	55,181	55,500	67,200	—
623820	Fuel	204,059	339,200	229,200	98,495	166,300	288,200	—
623840	Gases	86,678	84,100	84,100	82,763	78,200	84,100	—
623850	Communications Supplies	10,391	7,200	7,200	6,653	7,000	7,200	—
623860	Lubricants	223,967	200,400	200,400	148,822	151,400	200,400	—
623990	Materials and Supplies, N.O.C.	50,729	42,000	67,000	58,149	65,000	42,000	—
300	TOTAL MATERIALS AND SUPPLIES	3,327,768	3,448,000	3,648,000	2,608,335	3,288,400	3,932,900	—
634760	Material Handling and Farming Equipment	80,622	—	—	—	—	—	—
634820	Computer Software	—	130,000	—	—	—	—	—
400	TOTAL MACHINERY AND EQUIPMENT	80,622	130,000	—	—	—	—	—
645680	Buildings	—	75,000	75,000	64,510	74,000	—	—
500	TOTAL CAPITAL PROJECTS	—	75,000	75,000	64,510	74,000	—	—
TOTAL PROCUREMENT & MATERIALS MANAGEMENT		\$ 9,171,157	\$ 9,944,900	\$ 10,144,900	\$ 6,840,946	\$ 9,073,400	\$ 10,509,200	\$ —

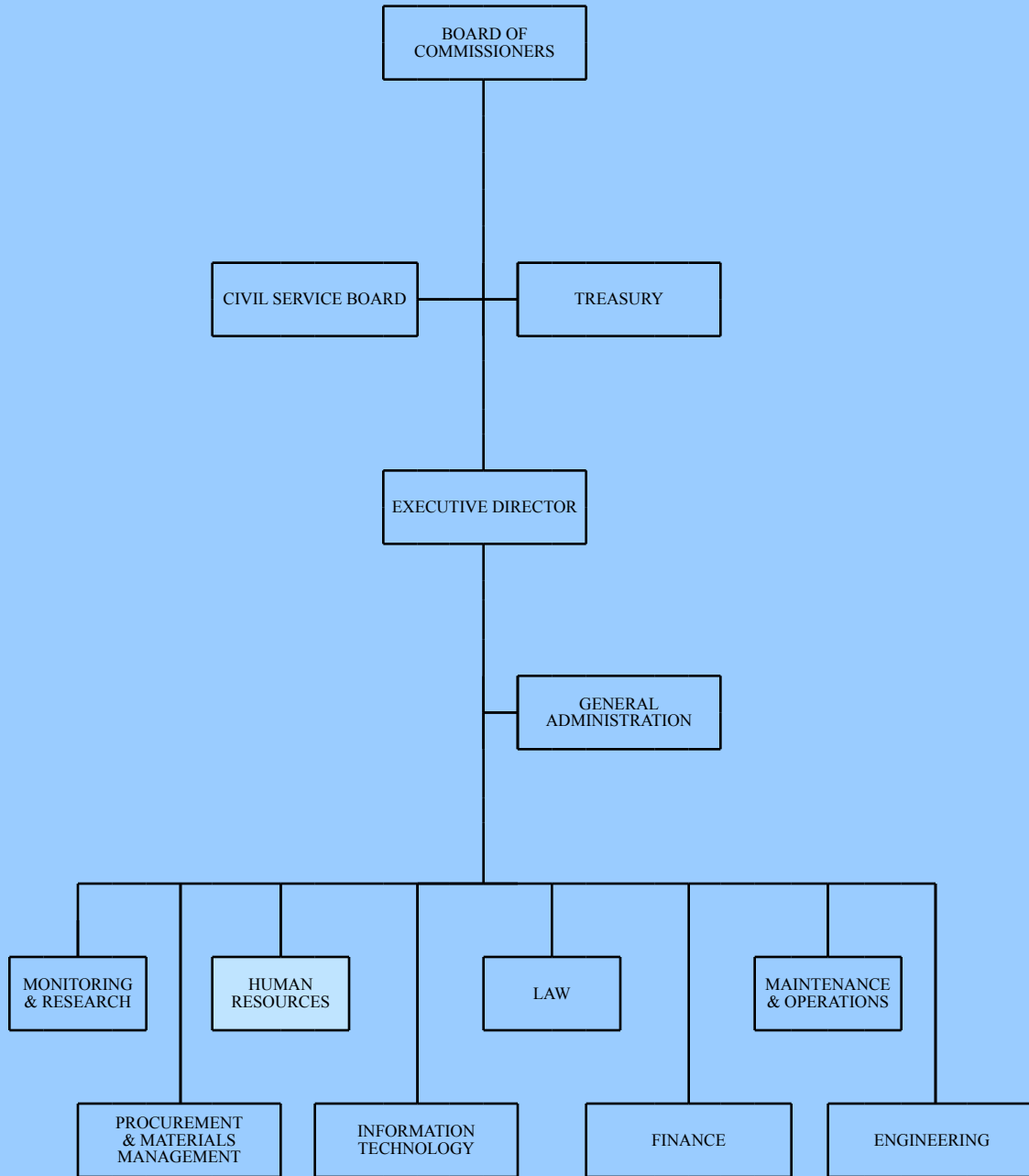
NOTES: 1. Amounts may not add up due to rounding.
 2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.
 Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.

Fund: Corporate Dept: Procurement & Materials Management		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
211	Executive Section					
EX08	Director of Procurement & Materials Management	1	1		1	
EX06	Secretary to Officer	2	2		2	
TOTAL 211	Executive Section	3	3	457,685	3	457,685
215	General & Inventory Control Division					
217	Inventory Control Section					
HP17	Supervising Stores Specialist #2 (New Grade HP16)	1	1		1	
HP16	Materials Planning Supervisor #2 (Senior Stores Specialist) (New Grade HP14)	1	1		1	
HP12	Stores Specialist	4	5		4	
HP09	Administrative Clerk	1	1		1	
TOTAL 217	Inventory Control Section	7	8	708,890	7	635,051
TOTAL 215	General & Inventory Control Division	7	8	708,890	7	635,051
220	Acquisition Division					
221	Administrative Section					
HP20	Assistant Director of Procurement & Materials Management	1	1		1	
HP14	Budget & Management Analyst	1	1		1	
HP13	Senior Administrative Specialist	1	1		1	
HP12	Administrative Assistant #2 (Administrative Specialist) (New Grade HP11)	1	—		—	
HP11	Administrative Specialist	2	3		2	
TOTAL 221	Administrative Section	6	6	581,823	5	525,288
222	Buying Section					
HP18	Head Buyer	1	2		2	
HP16	Senior Buyer	5	5		6	
HP14	Buyer	4	4		5	
TOTAL 222	Buying Section	10	11	1,220,338	13	1,369,572
224	Clerical Section					
HP11	Administrative Specialist	2	2		2	

Fund: Corporate Dept: Procurement & Materials Management		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
HP09	Administrative Clerk	2	2		1	
TOTAL 224	Clerical Section	4	4	237,447	3	194,439
TOTAL 220	Acquisition Division	20	21	2,039,608	21	2,089,300
225	Stores & Inventory Division					
226	Administrative Section					
HP19	Stores & Inventory Manager #2 (New Grade HP18)	1	1		1	
HP15	Senior Stores Specialist #2 (New Grade HP14)	1	1		1	
TOTAL 226	Administrative Section	2	2	289,225	2	295,916
230	Stores Section					
231	Stores Administrative Unit					
HP17	Supervising Stores Specialist #2 (New Grade HP16)	1	1		1	
TOTAL 231	Stores Administrative Unit	1	1	134,546	1	140,394
232	Stickney Storeroom Unit					
HP11	Administrative Specialist	1	1		1	
HP09	Administrative Clerk	1	1		1	
NR1857	Principal Storekeeper	2	2		2	
NR1853	Storekeeper	8	8		8	
NR8651	Maintenance Laborer Class A	1	1		1	
NR1835	Materials Handler Laborer #1	1	1		1	
TOTAL 232	Stickney Storeroom Unit	14	14	1,155,008	14	1,161,083
233	Calumet Storeroom Unit					
HP09	Administrative Clerk	1	1		1	
NR1857	Principal Storekeeper	1	1		1	
NR1853	Storekeeper	2	2		2	
NR8651	Maintenance Laborer Class A	1	1		1	
TOTAL 233	Calumet Storeroom Unit	5	5	396,657	5	399,245
234	O'Brien Storeroom Unit					
HP09	Administrative Clerk	1	1		1	
NR1857	Principal Storekeeper	1	1		1	

Fund: Corporate Dept: Procurement & Materials Management		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
NR1853	Storekeeper	1	1		1	
NR8651	Maintenance Laborer Class A	1	1		1	
TOTAL 234	O'Brien Storeroom Unit	4	4	312,967	4	312,967
235	Egan Storeroom Unit					
HP09	Administrative Clerk	1	1		—	
NR1857	Principal Storekeeper	1	1		1	
NR1853	Storekeeper	2	2		2	
NR8651	Maintenance Laborer Class A	1	1		1	
TOTAL 235	Egan Storeroom Unit	5	5	394,070	4	346,674
TOTAL 230	Stores Section	29	29	2,393,248	28	2,360,363
TOTAL 225	Stores & Inventory Division	31	31	2,682,472	30	2,656,279
TOTAL	Procurement & Materials Management	61	63	5,888,655	61	5,838,315

NOTE: Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.



Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 8, 2020

Mr. Brian A. Perkovich
Executive Director
OFFICE

Dear Sir:

Subject: 2021 Program for the Human Resources Department

The Human Resources Department's program for 2021, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of 2021 initiatives in alignment with and in support of the Strategic Business Plan. The budget requests include all amendments as directed by you during the Executive Director Budget Hearings in August of this year.

The narrative provides a summary of the department, 2021 major initiatives and challenges, and 2020 accomplishments. Supporting schedules of objectives, performance, and staffing levels present three years of detailed budgetary information.

Thank you for the opportunity to present the proposed Human Resources Department budget for 2021.

Respectfully submitted,

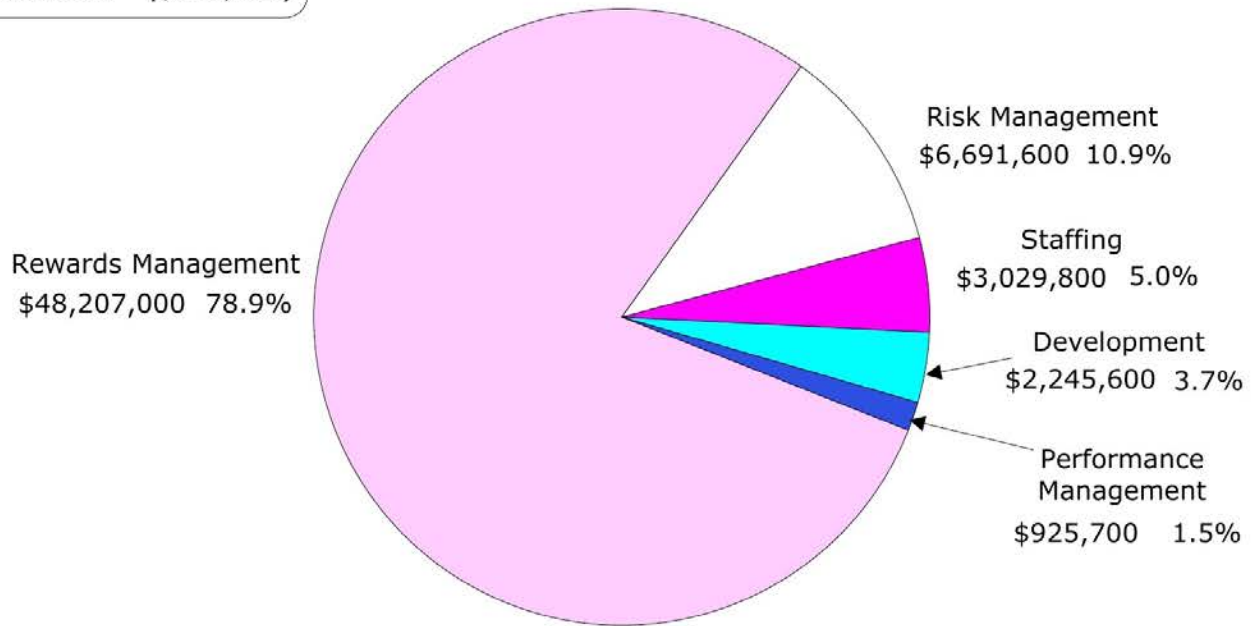


Beverly K. Sanders
Director of Human Resources

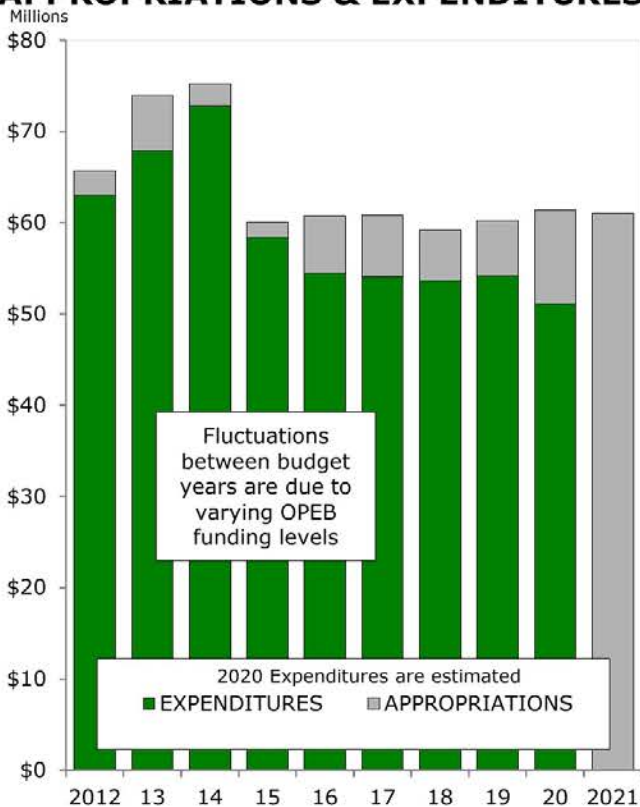
HUMAN RESOURCES

2021	\$61,099,700
2020	\$61,446,800
Decrease	(\$347,100)

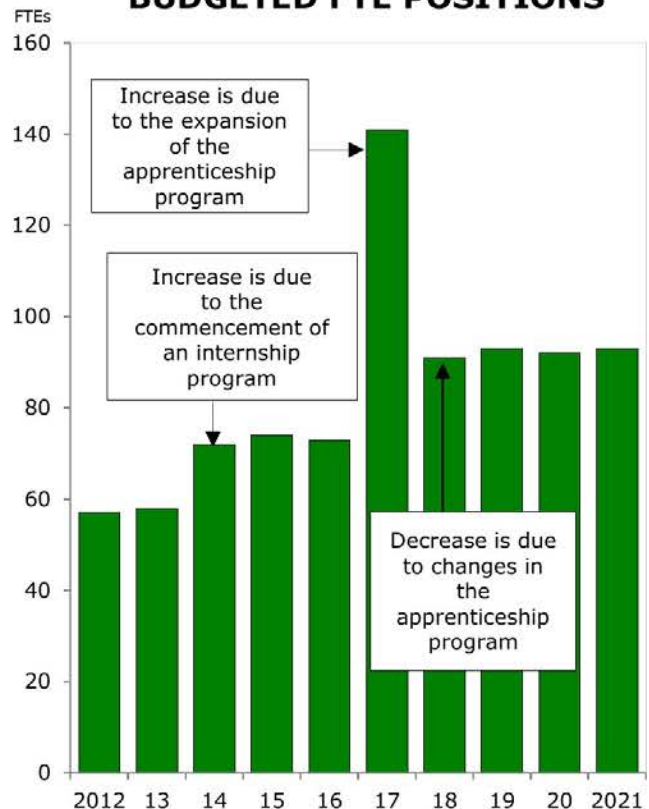
FUNCTIONS



APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



HUMAN RESOURCES

25000		
HUMAN RESOURCES		
2019	2020	2021
81	92	93

252		
Executive Unit		
7	7	7

254		
Employee Selection Section		
14	13	13

255		
Employee Development Section		
27	39	39

256		
Classification, Compensation, & Benefits Section		
9	8	8

257		
Risk Management Section (1)		
4	4	5

258		
Employee Relations Section		
8	8	8

259		
Safety Section (1) (2)		
12	13	13

(1) Effective 01/01/19, four positions from Section 259 were transferred to Section 257.

(2) Effective 01/01/19, Section 259 was retitled from Risk Management Section to Safety Section.

HUMAN RESOURCES

Through strategic partnerships, the Human Resources Department develops and delivers innovative, efficient, and cost-effective programs and services that are aligned with the District's core business strategies.

Departmental Summary

The Human Resources Department's primary responsibilities include:

- Staffing: ensure that the District plans for recruiting, hiring, and retaining the diverse talent needed to meet its organizational goals;
- Development: guide staff in acquiring and maintaining the skills needed to properly perform their roles within the organization;
- Performance Management: assist managers and employees by developing and implementing a performance management system that supports the goals of the organization;
- Rewards Management: develop and implement appropriate incentives to aid in recruiting and retaining the highest quality staff;
- Risk Management: develop and administer a comprehensive risk management program that protects the assets of the District;
- Safety: develop safety guidelines and procedures and monitor compliance; provide safety training, conduct safety inspections, and make recommendations to provide a safe working environment for employees and others on District property.

Summary of 2020 Accomplishments

The following initiatives and accomplishments strengthened the District's financial stability and better assured the continuity of operations in adverse circumstances:

- The District's Emergency Operations Plan, Business Continuity Plan, and Critical Operational Guidance documents were updated;
- Developed and implemented a COVID-19 pandemic specific module in the District's risk management information system to capture and track all actual and potential cases of COVID-19 at the District;
- The District's Electrical Safety Program was updated as part of the three-year update cycle. This coincides with the National Fire Protection Association's 70E® standard cycle. All electrically qualified personnel were trained on the updates which increased employee awareness and updated their knowledge about safe electrical work practices.

The following initiatives and accomplishments supported process improvement, were results-oriented, and decreased costs for the District:

- The District's Return-to-Work Program continued to positively impact both frequency and severity of employee injuries, with the average bi-weekly lost time payroll lower in 2020 than in all years since the inception of the Program in 2013;
- Safety staff conducted Occupational Safety and Health Administration focused training sessions, including training on the revised Hot Work Permit Program, training on Hazard Communications, and training on the Lockout/Tagout Program to safeguard employees from the unexpected startup of machinery and equipment.

Maintained a culture that recognizes the value of every employee:

- Employees received mandatory refresher compliance training for sexual harassment prevention and ethics in the workplace;
- Implemented an enhanced training landscape with a new Learning Management System providing virtual training opportunities and an online performance management system;
- Over 5,000 individuals, including employees and the public, were served by Employee Selection Section staff through the recruitment and selection process.

Other major accomplishments include:

- A comprehensive review of the District's Confined Space Entry Program was completed;
- The Employee Selection Section developed and implemented an online internship application, thereby increasing public awareness of the available internship opportunities and automating workflow in the application process.

Budget Highlights

The 2021 appropriation for the Human Resources Department is \$61,099,700, a decrease of \$347,100, or 0.6 percent, from 2020. The staffing level has increased from 92 to 93 positions, which includes the addition of one Risk Manager. The number of employees budgeted in the Human Resources Department includes 13 Apprentices, 20 full-time equivalent Interns, and three Civil Service Board members.

A significant feature for 2021 is the Employee Selection Section will implement an electronic requisition system in 2021 to streamline the position appointment process, making the process simpler and quicker for employees and supervisors to complete.

2021 Initiatives in Support of the Strategic Business Plan Include the Following:

• Add Value

In 2021, the Risk Management Section will continue its focus on the development and administration of a comprehensive and sustainable risk management program. Key areas of focus include use of the Risk Management Information System for risk analysis and enhanced communication on risk issues across the organization and further development of key programs, including return-to-work, emergency operations, and continuity of operations.

The Safety Section will continue to focus on safe work procedures, a safe work environment, preventive health measures, life safety protection, accident prevention and investigations, and recordkeeping. Increased emphasis will be placed on compliance tracking and targeting programs to address the District’s key cost drivers. A robust safety training schedule will continue, with needed participation identified and tracked. Training content will continue to be updated to reflect the most recent regulatory guidance concerning general safety and COVID-19 pandemic protocols. Additionally, Safety will collaborate with Maintenance & Operations and other departments for continued monitoring of compliance with COVID-19 pandemic guidelines.

An emphasis will be on reducing the frequency and severity of injuries involving strains as well as slip and fall accidents. Safety staff will work closely with Claims staff to reduce overall workers’ compensation costs for the District.

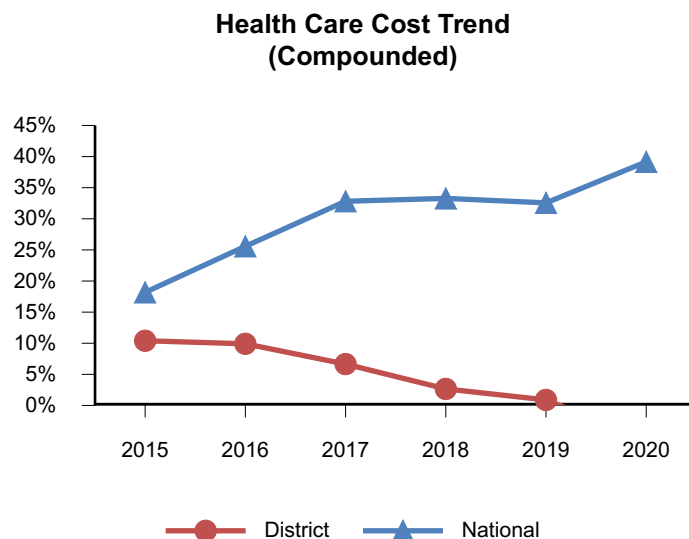
The Human Resources Department’s merit-based selection practices provide the District with a pool of candidates who have demonstrated the essential job-related knowledge, skills, and abilities to perform effectively. The Human Resources Department plans to administer 75 examinations in 2021.

• Excellence

The District’s benefits program plays an integral part in its ability to attract and retain a high-quality workforce. The District offers health care benefits to employees and eligible dependents, as well as approximately 2,000 retirees. The core components of the program are a Participating Provider Option and Health Maintenance Organization, a Medicare Advantage Plan (Medicare-eligible retirees only), and prescription drug coverage. Dental and vision benefits are also provided to active employees.

The cost of these health care benefits has a significant impact on the District’s budget each year with total spending of approximately \$47 million, which must be actively managed to ensure the program is sustainable long term. The District continues to implement programs and plan design elements that help manage these costs. Several digital health programs were launched in 2020 designed to help employees manage health conditions such as diabetes and hypertension, back and joint pain and obesity-related chronic disease. In addition, the District continues its wellness initiatives with annual on-site health fairs, free on-site flu shots, and wellness events such as the Mainstream March 5K Walk/Run. The goal of these wellness initiatives is to build a work environment that promotes health and wellness for all District employees.

As a result of these efforts, the District has been able to control its health care spending. From 2015 through 2019, the national trend has been an average annual increase of 6.51 percent in health care costs resulting in a total increase of 32.56 percent during this period. The District’s health care trend over that same period has been 0.18 percent annually or a total of 0.89 percent. In 2020, health care expenses for the District and employers as a whole have been significantly impacted by the COVID-19 pandemic. The District health care trend for 2020 is projected to be (6.41) percent, significantly below the projected national trend of 6.60 percent.



The Labor Management Committee on Health Care continues to meet semiannually with union leadership to discuss health care utilization, cost trends, and cost containment strategies. This creates a forum for open communication between the District and the unions on important health care issues. The goal is to develop strategies to contain future health care costs, while continuing to provide affordable health care benefits to employees.

• Develop Employees

The District provides its employees with training and development opportunities through tuition reimbursement, seminars and conferences, training courses, and online eLearning courses. In the following table, the 2020 to 2021 increase in the number of tuition reimbursement participants is based on trend data. The reduction in training courses, over the same period, is due to less in-person courses because of abiding to restrictions on social distancing due to the COVID-19 pandemic, with an undetermined end date for these precautions. Most training will be adapted to an online platform until employees can gather safely. The 2020 to 2021 increase is attributed to more online training, including harassment awareness and ethics training.

Employee Development Participation

	Tuition Reimbursement *	Training Courses	eLearning Courses
2018	54	2,175	6,243
2019	65	1,614	6,555
Budgeted 2020	55	5,350	5,000
Projected 2021	65	60	6,500

*Number of participants who were reimbursed

To ensure the ongoing professional development of all District employees in 2020, the Human Resources Department implemented a new online learning management system (LMS). The new LMS offers a new landscape of virtual training along with online courses, history, and ease of reporting for end users. It also has an online performance management system which the District implemented to automate this process.

The Human Resources Department administers seven collective bargaining agreements for the District’s 772 represented employees and provides advice and counseling to managers and supervisors regarding investigations and disciplinary matters for both represented and non-represented employees. The Human Resources Department will continue to promote the use of proactive and timely discussions between managers, employees, and their representatives to address grievance and complaint activities. Due to the COVID-19 pandemic and the uncertainty surrounding this extraordinary event all seven collective bargaining agreements, which were set to expire on June 30, 2020, were extended by one year until June 30, 2021 with the same terms and conditions. The Human Resources Department staff will meet with the Executive Director and representatives from the departments to discuss contract issues, objectives and priorities, and to develop a strategy for negotiating successor agreements.

The Human Resources Department also ensures the District’s compliance with the Family and Medical Leave Act and the Americans with Disabilities Act and is responsible for receiving and investigating complaints of workplace violence, discrimination, sexual harassment, and other types of harassment and complaints.

In 2020, the District hired six Trainees under a unique apprenticeship partnership between the District and Local 399, International Union of Operating Engineers. This program will train individuals so that they can qualify to become Operating Engineers, and it will provide the District the opportunity to increase female and minority representation in the Operating Engineer job classification.

• Leading Partnerships

As of October 1, 2013, the District began using the revised external labor rates for females and minorities, based on published data from the 2010 census. The District’s minority workforce representation, as of June 30, 2020, was 43 percent, which compares favorably with the Cook County minority labor force availability rate of 36 percent. The District’s female workforce representation, as of June 30, 2020, was 26 percent, compared to the Cook County female labor force availability rate of 41 percent, when adjusted for District-specific occupations.

Percentage of District Employees Who Are Minorities or Females							2000 Census External Availability	2010 Census External Availability
	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Estimated	2021 Projected		
Minorities	41%	41%	42%	43%	43%	43%	33%	36%
Females	26%	26%	26%	26%	26%	26%	25%	41%

It is important to note that a majority of the District's job categories include classifications that are nontraditional for women. Nontraditional occupations, as defined by the United States Department of Labor, are those occupations wherein 25 percent or fewer women have the requisite skills or work in that occupation. Consequently, the external female labor force rates are adjusted for District-specific occupations. They include only job classifications found at the District and exclude occupations such as teachers, registered nurses, and social workers.

The Human Resources Department coordinates the District-wide recruitment program. Ongoing advertising in print and electronic media assists the District in attracting a diverse and qualified applicant pool for current and future examinations. In 2021, the District will continue to target its recruitment efforts on increasing minority and female representation in specific job categories in which they are underrepresented. A large part of the public image of the District is dependent on employee behaviors and interactions with the public. To assist employees in representing the District well, various training programs will continue. Uniform application of disciplinary processes and the Civil Service Board forum will provide unambiguous expectations of employees and will assure employees that good work is rewarded.

- **Information Technology**

The following Employee Selection Section and Employee Development Section initiatives are in alignment with the Strategic Business Plan goal of excellence and its strategy of process evaluation.

The Employee Selection Section developed and implemented virtual interviews through the Microsoft Teams platform in order to address challenges presented by the COVID-19 pandemic. To continue Employee Selection Section operations, the use of this new process may continue in 2021 due to the uncertainty surrounding the duration of the COVID-19 pandemic.

The Employee Selection Section developed and tested an electronic requisition system to streamline the appointment process. The system leverages our JobAps platform and allows the ability to automate the employment requisition, certification, and appointment process. The system will be fully implemented in 2021.

The Employee Development Section implemented a new LMS. The new LMS provides virtual training, online classes, transcript reporting, and an online performance management process. The new system will ensure the ongoing professional development and performance management of all District employees in 2021.

25000 HUMAN RESOURCES

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:	Cost	Percent
1. Review employment applications and develop and administer 75 examinations to meet Civil Service requirements and current operational needs. Oversee the certification process to fill positions. Develop and maintain a targeted advertising program necessary to establish recruitment resources, administer college and campus recruitment activities, and administer diversity outreach activities.	\$ 1,695,400	2.8%
2. Develop and administer a comprehensive risk management program and provide a safe work environment for District employees through training, accident prevention initiatives, and workplace monitoring.	\$ 6,691,600	11.0%
3. Maintain comparative wage and salary data, administer non-represented and management compensation systems, and recommend changes to the Civil Service Board and the Board of Commissioners in order to ensure internal pay equity and external competitiveness. Maintain a highly competitive employee benefits package, including health, life, and dental insurance, a vision plan, and a deferred compensation plan, as well as administer other related benefit programs, such as Employee Assistance Program services, a flexible spending account plan, and voluntary insurance products.	\$ 30,647,700	50.2%
4. Administer seven collective bargaining agreements, covering 773 employees, and manage employee relations programs, which include investigation of employee complaints and performance rating reviews on behalf of the Director of Human Resources, and administer the unemployment compensation and performance management programs.	\$ 925,700	1.5%
5. Provide health insurance benefits and administration for retirees and annuitants, which include Other Postemployment Benefits pre-funding for retiree health care expenses.	\$ 17,559,300	28.7%
6. Implement the District's equal employment opportunity and affirmative action objectives through targeted recruitment, counseling, and complaint investigation.	\$ 367,800	0.6%
7. Provide the necessary administrative support to the District and Human Resources Department sections by maintaining centralized files; overseeing the hiring, promotion, transfer, termination, return-to-work, or any other action affecting an employee's status; and managing computerized information to perform departmental functions with greater efficiency at a lower cost. Comply with state Civil Service statutes by arranging for hearing of complaints from employees or other persons, the hearing of charges against employees for discharge, and the ratification of amendments to the Personnel Rules and the compensation and classification plan.	\$ 966,600	1.6%
8. Provide educational opportunities for employees through professional development, technical training, and tuition reimbursement.	\$ 2,245,600	3.7%
Totals	\$ 61,099,700	100.0%

MEASURABLE GOALS:	2019	2020	2021
	Actual	Estimated	Proposed
1. Minimize the number of days between an original entrance appointment and the start date for the new employee.	41	36	35
2. Reduce the number of workers' compensation claims per 100 employees.	5.96	3.79	4.00
3. Reduce the number of lost time claims per 100 employees.	1.76	1.41	1.50

25000 HUMAN RESOURCES

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change			
Number	Name	Actual	FTEs	Dollars	Dollars	Percent		
7290	Examinations and Employment Activities	\$ 1,646,691	2021	12	\$ 1,695,400	\$ (55,400)	(3.2)	
			2020	12	\$ 1,750,800			
7295	Equal Employment Opportunity Activities	\$ 391,391	2021	3	\$ 367,800	\$ 5,600	1.5	
			2020	3	\$ 362,200			
7310	Training and Development Activities	\$ 1,250,842	2021	39	\$ 2,245,600	\$ (510,300)	(18.5)	a)
			2020	39	\$ 2,755,900			
7315	Retiree Benefits	\$12,746,792	2021	1	\$ 12,559,300	\$ (1,629,500)	(11.5)	b)
			2020	1	\$ 14,188,800			
7316	Other Postemployment Benefits Trust Management and Report Preparation	\$ 5,000,000	2021	—	\$ 5,000,000	\$ —	—	
			2020	—	\$ 5,000,000			
7320	Employee Benefits	\$25,555,028	2021	4	\$ 30,506,400	\$ 1,383,400	4.8	c)
			2020	4	\$ 29,123,000			
7325	Labor and Employee Relations	\$ 864,974	2021	7	\$ 925,700	\$ 10,800	1.2	
			2020	7	\$ 914,900			
7330	Human Resources Administration	\$ 885,934	2021	9	\$ 966,600	\$ (90,400)	(8.6)	
			2020	9	\$ 1,057,000			
7480	Safety Program	\$ 1,483,429	2021	13	\$ 1,900,100	\$ 18,500	1.0	
			2020	13	\$ 1,881,600			
7500	Risk Management Operations	\$ 4,314,890	2021	5	\$ 4,791,500	\$ 522,200	12.2	d)
			2020	4	\$ 4,269,300			
7604	Social Security and Medicare Contributions	\$ 100,283	2021	—	\$ 141,300	\$ (2,000)	(1.4)	
			2020	—	\$ 143,300			
Totals		\$54,240,254	2021	93	\$ 61,099,700	\$ (347,100)	(0.6)%	
			2020	92	\$ 61,446,800			

a) Decrease is due to the reallocation of salaries for Interns and Operating Engineer Trainees (\$280,700), a change in delivery method for workplace violence awareness training is being evaluated for conversion to an online platform (\$100,000), a reduction in the cost of ethics training due to the change to an online platform (\$70,000), the one time cost of IT security training in 2020 (\$50,000), supervisory online training is to begin development in 2021 and continue into 2022 (\$30,000), and fewer requests from other departments for technical writing training (\$20,000), offset by the addition of arc flash recertification training (\$50,000).

b) Decrease is due to the federal government's repeal of the Affordable Care Act Fee (\$932,000), a reduction in the cost of retiree pharmacy benefits (\$602,400), and a reduction in the Medicare Advantage Plan for retirees (\$450,800), offset by an increase in PPO insurance premiums for retirees (\$340,000) and HMO insurance premiums for retirees (\$13,700).

c) Increase is due to the rise in the cost of PPO health insurance premiums for active employees (\$743,700), a rise in the cost of dental insurance premiums for active employees (\$236,500), a rise in the cost of active employee pharmacy benefits (\$179,200), an expected increase in retirements within the Human Resources Department (\$172,300), and an increase in the cost of HMO insurance premiums for active employees (\$73,900), offset by a decrease in Affordable Care Act fees (\$59,600) because of a repeal by the federal government.

d) Increase is due to an increase in the estimate for the property insurance premium (\$400,000) and the addition of a Risk Manager position for succession planning purposes (\$123,500).

25000 HUMAN RESOURCES

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
7290	Examinations and Employment Activities					
		Candidates	2,485	2,000	2,500	a)
		Examinations	74	55	75	a)
		Applications	8,770	4,000	9,000	a)
		Requisitions	279	324	350	
		Cost	\$ 1,646,691	\$ 1,750,800	\$ 1,695,400	
7295	Equal Employment Opportunity Activities					
	Provide Counseling and Investigate Complaints	Actions	1,000	1,000	1,000	
		Cost	\$ 391,391	\$ 362,200	\$ 367,800	
		Cost/Action	\$ 391.39	\$ 362.20	\$ 367.80	
7310	Training and Development Activities					
	Training and Professional Development	Training Courses	1,614	5,350	60	b)
		eLearning Courses	6,555	5,000	6,500	c)
		Cost	\$ 781,211	\$ 1,210,000	\$ 826,700	d)
	Apprenticeship Program	Cost	\$ —	\$ 779,500	\$ 664,100	
	Administer and Finance the Tuition Reimbursement Program for the Entire District	Participants	65	55	65	e)
		Cost	\$ 260,266	\$ 306,400	\$ 294,800	
		Cost/Participant	\$ 4,004.09	\$ 5,570.91	\$ 4,535.38	e)
	Internship Program	Cost	\$ 209,365	\$ 460,000	\$ 460,000	
7315	Retiree Benefits					
	Health Insurance - Corporate Fund Retirees	Retirees	1,984	1,984	1,995	
		Cost	\$ 7,846,515	\$ 9,562,800	\$ 8,535,700	f)
		Cost/Retiree	\$ 3,954.90	\$ 4,819.96	\$ 4,278.55	
	Prescription Drug Retirees	Participants	1,984	1,984	1,995	
		Cost	\$ 4,900,277	\$ 4,626,000	\$ 4,023,600	g)
		Cost/Participant	\$ 2,469.90	\$ 2,331.65	\$ 2,016.84	
<p>a) Increase is due to the deferral of some employment examinations due to the impact of the COVID-19 pandemic on securing facilities in which to hold examinations with a large number of candidates.</p> <p>b) The reduction is due to less in-person courses because of abiding to restrictions on social distancing due to the COVID-19 pandemic, with an undetermined end date for these precautions. Most training will be adapted to an online platform until employees can gather safely in proximity.</p> <p>c) Increase is due to more online training, including harassment awareness and ethics training.</p> <p>d) Decrease is due to the reallocation of salaries for Interns (\$154,500), a change in the delivery method for workplace violence awareness training is being evaluated for conversion to an online platform (\$100,000), a reduction in the cost of ethics training due to the change to an online platform (\$70,000), the one time cost of IT security training in 2020 (\$50,000), and supervisory online training is to begin development in 2021 and continue into 2022 (\$30,000).</p> <p>e) The increase in the number of tuition reimbursement participants is based on trend data from the past few years.</p> <p>f) Decrease is due to the federal government's repeal of the Affordable Care Act Fee (\$932,000) and a reduction in the Medicare Advantage Plan for retirees (\$450,800), offset by an increase in PPO insurance premiums for retirees (\$340,000) and HMO insurance premiums for retirees (\$13,700).</p> <p>g) Decrease is due to a reduction in the cost of retiree pharmacy benefits (\$602,400).</p>						

25000 HUMAN RESOURCES

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
7316	Other Postemployment Benefits Trust Management and Report Preparation	Cost	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	
7320	Employee Benefits					
	Health Insurance - Corporate Fund Employees (includes vision care) ¹	Participants	1,648	1,694	1,650	
		Cost	\$ 19,891,668	\$ 22,134,600	\$ 22,931,500	h)
		Cost/Participant	\$ 12,070.19	\$ 13,066.47	\$ 13,897.88	
	Prescription Drugs - Corporate Fund Employees ¹	Participants	1,648	1,694	1,650	
		Cost	\$ 3,878,895	\$ 5,052,200	\$ 5,231,400	i)
		Cost/Participant	\$ 2,353.70	\$ 2,982.41	\$ 3,170.55	
	Dental Insurance - Corporate Fund Employees ¹	Participants	1,638	1,685	1,635	
		Cost	\$ 1,127,717	\$ 1,151,000	\$ 1,387,500	j)
		Cost/Participant	\$ 688.47	\$ 683.09	\$ 848.62	
	Life Insurance - Corporate Fund Employees ¹	Employees	1,734	1,790	1,735	
		Cost	\$ 65,059	\$ 74,700	\$ 74,700	
		Cost/Employee	\$ 37.52	\$ 41.73	\$ 43.05	
	Deferred Compensation Administration	Cost	\$ 78,000	\$ 41,000	\$ 39,000	
	Other Benefits					
	Employee Assistance Program	Cost	\$ 39,522	\$ 42,000	\$ 42,000	
	Flexible Spending Accounts Program	Cost	\$ 51,968	\$ 49,500	\$ 49,500	
	Compensation and Classification Activities	Cost	\$ 422,199	\$ 578,000	\$ 750,800	k)
7325	Labor and Employee Relations					
	Labor and Employee Relations Activities	Employees Served	1,927	1,953	1,941	
		Cost	\$ 655,699	\$ 679,500	\$ 691,900	
	Compliance with Unemployment Compensation Requirements	Claims	25	24	25	
		Cost	\$ 72,411	\$ 94,100	\$ 83,300	
		Cost/Claim	\$ 2,896.44	\$ 3,920.83	\$ 3,332.00	
	Employee Performance Management	Cost	\$ 136,864	\$ 141,300	\$ 150,500	

h) Increase is due to the rise in the cost of PPO health insurance premiums for active employees (\$743,700) and HMO insurance premiums for active employees (\$73,900), offset by a decrease in Affordable Care Act fees (\$59,600) because of a repeal by the federal government.

i) Increase is due to a rise in the cost of active employee pharmacy benefits (\$179,200).

j) Increase is due to a rise in the cost of dental insurance premiums for active employees (\$236,500).

k) Increase is due to an expected increase in retirements within the Human Resources Department (\$172,300).

¹ Additional funds are budgeted in the Stormwater Management Fund.

25000 HUMAN RESOURCES

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
7330	Human Resources Administration					
	Personnel Activity Administration	Employees Served	1,927	1,953	1,941	
		Cost	\$ 677,764	\$ 835,300	\$ 693,700	l)
		Cost/Employee	\$ 351.72	\$ 427.70	\$ 357.39	l)
	Pre-employment Activities	New Hires	106	115	100	
		Cost	\$ 47,359	\$ 58,600	\$ 109,800	m)
		Cost/New Hire	\$ 446.78	\$ 509.57	\$ 1,098.00	m)
	Civil Service Board Procedures					
	Hear and Render Decisions on Appeals from Employees, Ratify Amendments to the Personnel Rules, Hear and Render Decisions on Discharges	Actions	11	25	20	
		Cost	\$ 160,811	\$ 163,100	\$ 163,100	
		Cost/Action	\$ 14,619.18	\$ 6,524.00	\$ 8,155.00	
7480	Safety Program					
	Occupational Safety and Health Administration Compliance, Inspections, Reporting, and Accident Investigation, Contract Review for Compliance with Safety Standards, Safety Training, and Professional Development	Cost	\$ 1,173,245	\$ 1,491,500	\$ 1,468,200	
	Safety Training	# of Classes	1,890.00	1,400	1,250	
		# of Attendees	12,972	9,500	8,500	
	Safety Equipment Purchase, Rental, and Maintenance	Cost	\$ 153,713	\$ 252,600	\$ 262,000	
	Payment for External Services to Support Safety Activities	Cost	\$ 156,471	\$ 137,500	\$ 169,900	n)
7500	Risk Management Operations					
	Administration and Professional Development (formerly Administration)	Cost	\$ 477,724	\$ 490,900	\$ 605,700	o)
	Third Party Services	Cost	\$ 481,124	\$ 531,500	\$ 531,500	
	Insurance Premiums (such as property insurance)	Cost	\$ 3,356,042	\$ 3,246,900	\$ 3,654,300	p)
7604	Social Security and Medicare Contributions	Cost	\$ 100,283	\$ 143,300	\$ 141,300	
	Totals		\$ 54,240,254	\$ 61,446,800	\$ 61,099,700	

l) Decrease is due to a one-time cost for a total compensation study that was expected to occur in 2020, but has been deferred due to the COVID-19 pandemic (\$150,000).

m) Increase is due to the need for pre-employment psychological evaluations because of the Police Officer exam schedule and candidate eligibility process (\$43,200).

n) Increase is due to an increase in the estimate for hazardous material abatement (\$27,400).

o) Increase is due to the addition of a Risk Manager position for succession planning purposes (\$123,500).

p) Increase is due to an increase in the estimate for the property insurance premium (\$400,000).

101 25000	Fund: Corporate Department: Human Resources	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 5,766,454	\$ 6,836,100	\$ 6,836,100	\$ 4,449,536	\$ 5,979,100	\$ 6,808,600	\$ —
601060	Compensation Plan Adjustments	199,435	260,000	260,000	8,800	224,300	413,500	—
601070	Social Security and Medicare Contributions	100,283	143,300	143,300	65,639	84,000	141,300	—
601090	Employee Claims	72,411	94,100	94,100	63,646	94,100	83,300	—
601100	Tuition and Training Payments	454,474	879,400	779,400	248,712	705,100	658,300	—
601250	Health and Life Insurance Premiums	42,606,920	47,509,500	47,259,500	27,430,375	39,022,500	47,059,000	—
601300	Personal Services, N.O.C. (Not Otherwise Classified)	209,365	460,000	460,000	592	600	460,000	—
100	TOTAL PERSONAL SERVICES	49,409,342	56,182,400	55,832,400	32,267,300	46,109,700	55,624,000	—
612010	Travel	4,686	6,400	6,400	380	700	1,400	—
612030	Meals and Lodging	9,531	15,700	15,700	1,048	1,100	7,800	—
612050	Compensation for Personally-Owned Automobiles	586	1,100	1,100	43	900	1,300	—
612080	Motor Vehicle Operating Services	49	100	100	—	100	100	—
612250	Court Reporting Services	13,057	16,000	16,000	10,000	16,000	16,000	—
612260	Medical Services	88,728	127,600	127,600	125,946	119,200	170,800	—
612290	Insurance Premiums	3,572,542	3,463,400	3,463,400	1,552,474	3,688,400	3,870,800	—
612330	Rental Charges	16,975	13,500	13,500	3,090	13,500	18,500	—
612360	Advertising	454	7,000	7,000	—	7,000	3,000	—
612430	Payments for Professional Services	747,355	1,097,500	1,097,500	452,391	716,800	797,100	—
612490	Contractual Services, N.O.C.	50,332	83,500	83,500	19,966	38,600	79,400	—
612780	Safety Repairs and Services	147,000	109,500	109,500	107,390	109,400	151,500	—
612820	Computer Software Maintenance	—	30,000	30,000	—	30,000	60,000	—
200	TOTAL CONTRACTUAL SERVICES	4,651,295	4,971,300	4,971,300	2,272,728	4,741,700	5,177,700	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	27,563	44,500	44,500	22,294	30,800	43,800	—
623720	Books, Maps, and Charts	232	500	500	98	500	1,000	—
623780	Safety and Medical Supplies	146,663	241,100	241,100	195,361	236,100	238,700	—
623990	Materials and Supplies, N.O.C.	5,159	7,000	7,000	1,404	7,000	8,500	—
300	TOTAL MATERIALS AND SUPPLIES	179,617	293,100	293,100	219,157	274,400	292,000	—

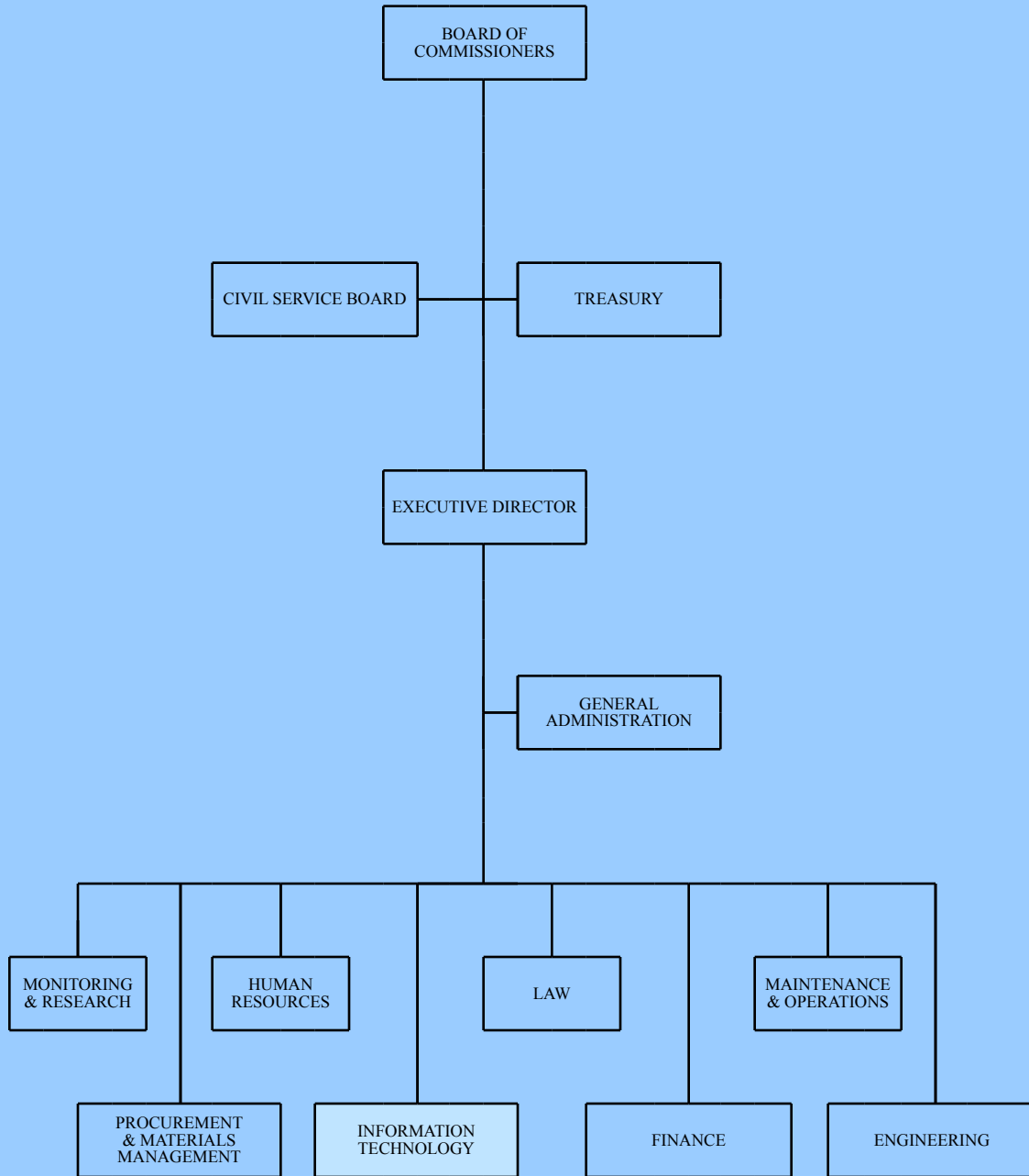
101 Fund: Corporate 25000 Department: Human Resources		LINE ITEM ANALYSIS						
		2019	2020				2021	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
634780	Safety and Medical Equipment	—	—	150,000	12,166	20,000	6,000	—
400	TOTAL MACHINERY AND EQUIPMENT	—	—	150,000	12,166	20,000	6,000	—
TOTAL HUMAN RESOURCES		\$ 54,240,254	\$ 61,446,800	\$ 61,246,800	\$ 34,771,351	\$ 51,145,800	\$ 61,099,700	\$ —

NOTES: 1. Amounts may not add up due to rounding.
 2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.
 Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.

Fund: Corporate Dept: Human Resources		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
252	Executive Unit					
EX10	Director of Human Resources	1	1		1	
HP20	Assistant Director of Human Resources	1	1		1	
EX06	Secretary to Officer	1	1		1	
EX16	Civil Service Board Chairman	1	1		1	
EX09	Civil Service Board Member	2	2		2	
HP11	Administrative Specialist	1	1		1	
TOTAL 252	Executive Unit	7	7	646,130	7	650,863
254	Employee Selection Section					
HP19	Human Resources Manager #1	1	—		—	
HP18	Human Resources Manager	1	1		1	
HP16	Senior Human Resources Analyst	2	2		2	
HP15	Associate Human Resources Analyst #2 (Human Resources Analyst) (New Grade HP14)	1	—		—	
HP14	Human Resources Analyst	5	6		6	
HP13	Senior Administrative Specialist	2	2		2	
HP11	Administrative Specialist	2	2		2	
TOTAL 254	Employee Selection Section	14	13	1,243,338	13	1,300,025
255	Employee Development Section					
HP19	Human Resources Manager #2 (New Grade HP18)	1	1		1	
HP16	Senior Human Resources Analyst	1	1		1	
HP14	Human Resources Analyst	2	2		2	
HP12	Human Resources Assistant #2 (Administrative Specialist) (New Grade HP11)	1	1		1	
HP11	Administrative Specialist	1	1		1	
TM01	Intern	20	20		20	
PR1025	Apprentice	1	13		—	
PR1025	Apprentice - Machinist Trainee	—	—		7	
NR1027	Apprentice - Operating Engineer Trainee	—	—		6	
TOTAL 255	Employee Development Section	27	39	1,897,666	39	1,788,111
256	Classification, Compensation, & Benefits Section					
HP19	Human Resources Manager #2 (New Grade HP18)	1	1		1	

Fund: Corporate Dept: Human Resources		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
HP17	Senior Human Resources Analyst #2 (New Grade HP16)	2	2		2	
HP14	Human Resources Analyst	3	3		3	
HP11	Administrative Specialist	1	1		1	
HP11	Administrative Specialist #1	1	—		—	
HP11	Administrative Specialist #4	1	1		1	
TOTAL 256	Classification, Compensation, & Benefits Section	9	8	860,281	8	886,372
257	Risk Management Section					
HP19	Risk Manager #1	—	—		1	
HP19	Risk Manager #2 (New Grade HP18)	1	1		—	
HP18	Risk Manager	—	—		1	
HP17	Claims Administrator #2 (New Grade HP16)	1	1		1	
HP17	Senior Risk Analyst #2 (New Grade HP16)	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 257	Risk Management Section	4	4	485,739	5	603,980
258	Employee Relations Section					
HP18	Human Resources Manager	1	1		1	
HP16	Senior Human Resources Analyst	2	2		2	
HP15	Associate Human Resources Analyst #2 (Human Resources Analyst) (New Grade HP14)	1	1		1	
HP14	Human Resources Analyst	2	2		2	
HP11	Administrative Specialist	2	2		2	
TOTAL 258	Employee Relations Section	8	8	858,465	8	875,999
259	Safety Section (formerly Risk Management Section)					
HP18	Safety Manager	1	1		1	
HP17	Senior Safety Specialist #2 (New Grade HP16)	1	—		—	
HP16	Senior Safety Specialist	—	1		1	
HP15	Safety Coordinator #2 (Safety Specialist) (New Grade HP14)	3	3		3	
HP14	Safety Specialist	6	7		7	
HP11	Administrative Specialist	1	1		1	
TOTAL 259	Safety Section (formerly Risk Management Section)	12	13	1,335,685	13	1,362,039
TOTAL	Human Resources	81	92	7,327,303	93	7,467,390

NOTE: Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.



Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 8, 2020

Mr. Brian A. Perkovich
Executive Director
OFFICE

Dear Sir:

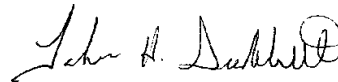
Subject: 2021 Program for the Information Technology Department

The Information Technology Department's program for 2021, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the department's 2021 initiatives in alignment with and in support of the Strategic Business Plan. The budget requests include all amendments as directed by you during the Executive Director Budget Hearings in August of this year.

The narrative provides a summary of the department, 2021 major initiatives and challenges, and 2020 accomplishments. Supporting schedules of objectives, performance, and staffing levels present three years of detailed budgetary information.

Thank you for the opportunity to present the proposed Information Technology Department budget for 2021.

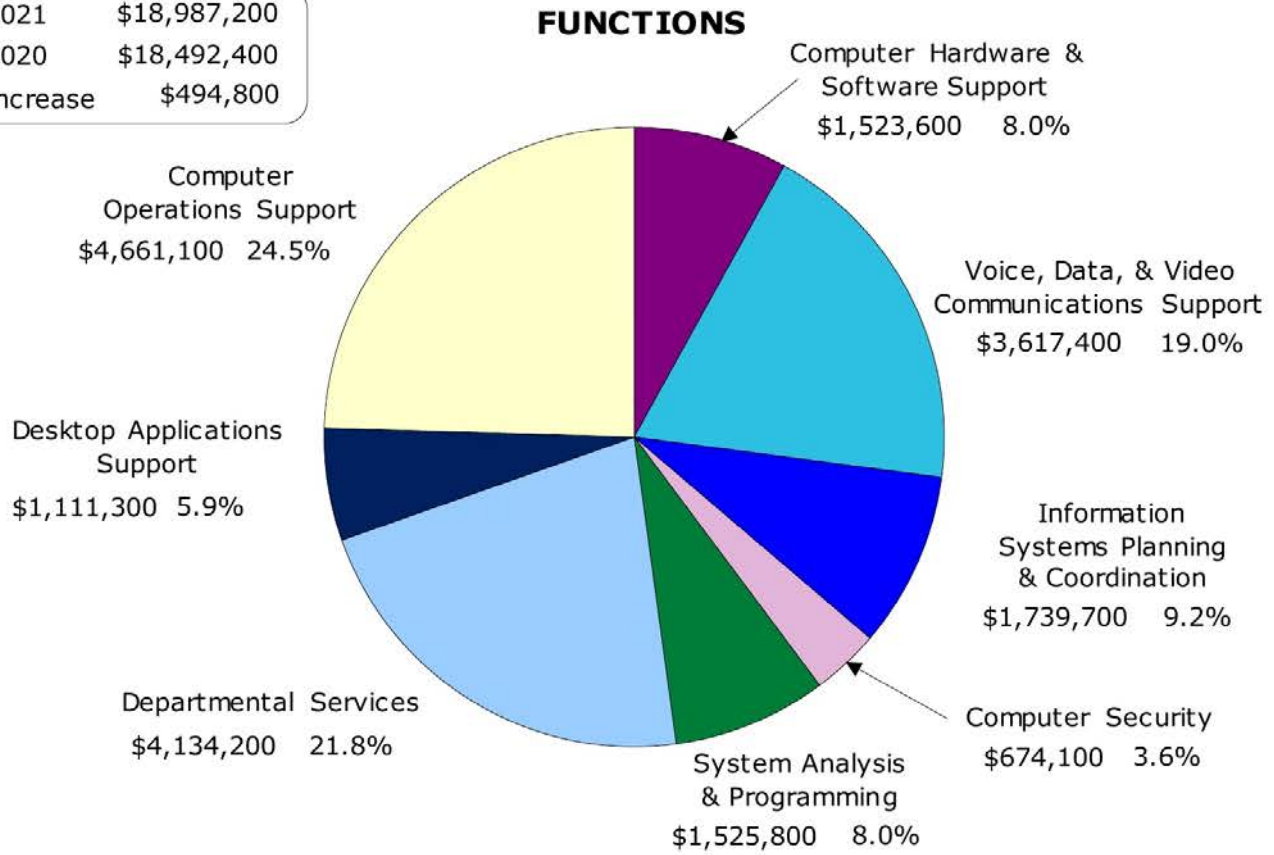
Respectfully submitted,



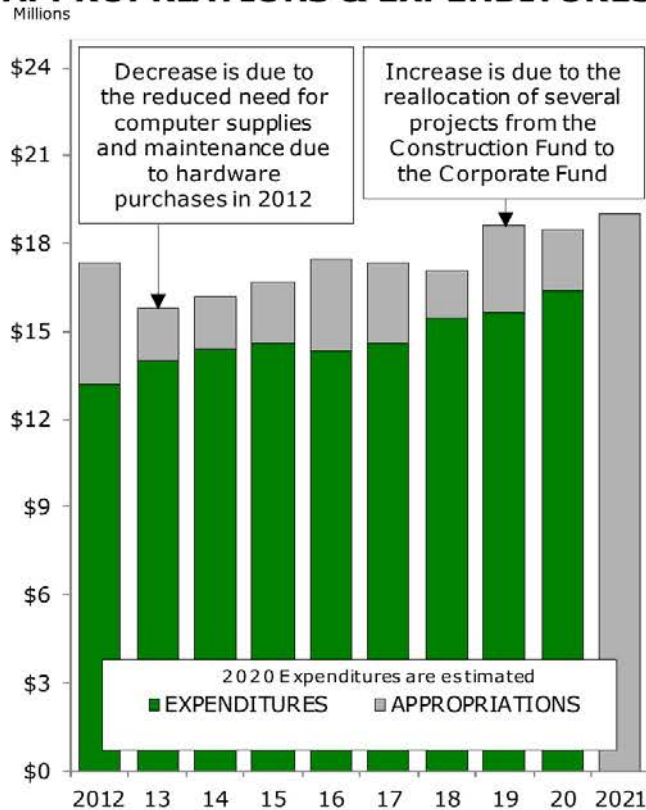
John H. Sudduth
Director of Information Technology

INFORMATION TECHNOLOGY

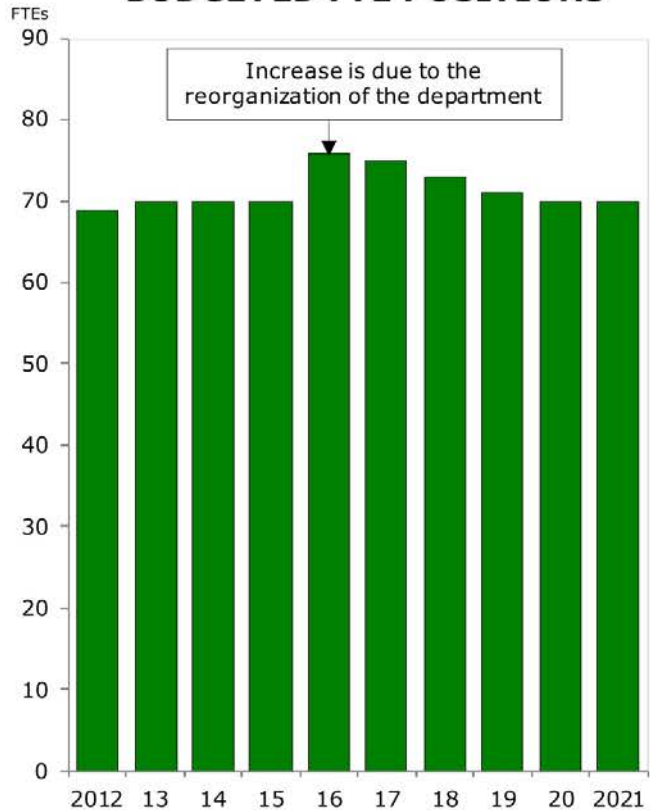
2021	\$18,987,200
2020	\$18,492,400
Increase	\$494,800



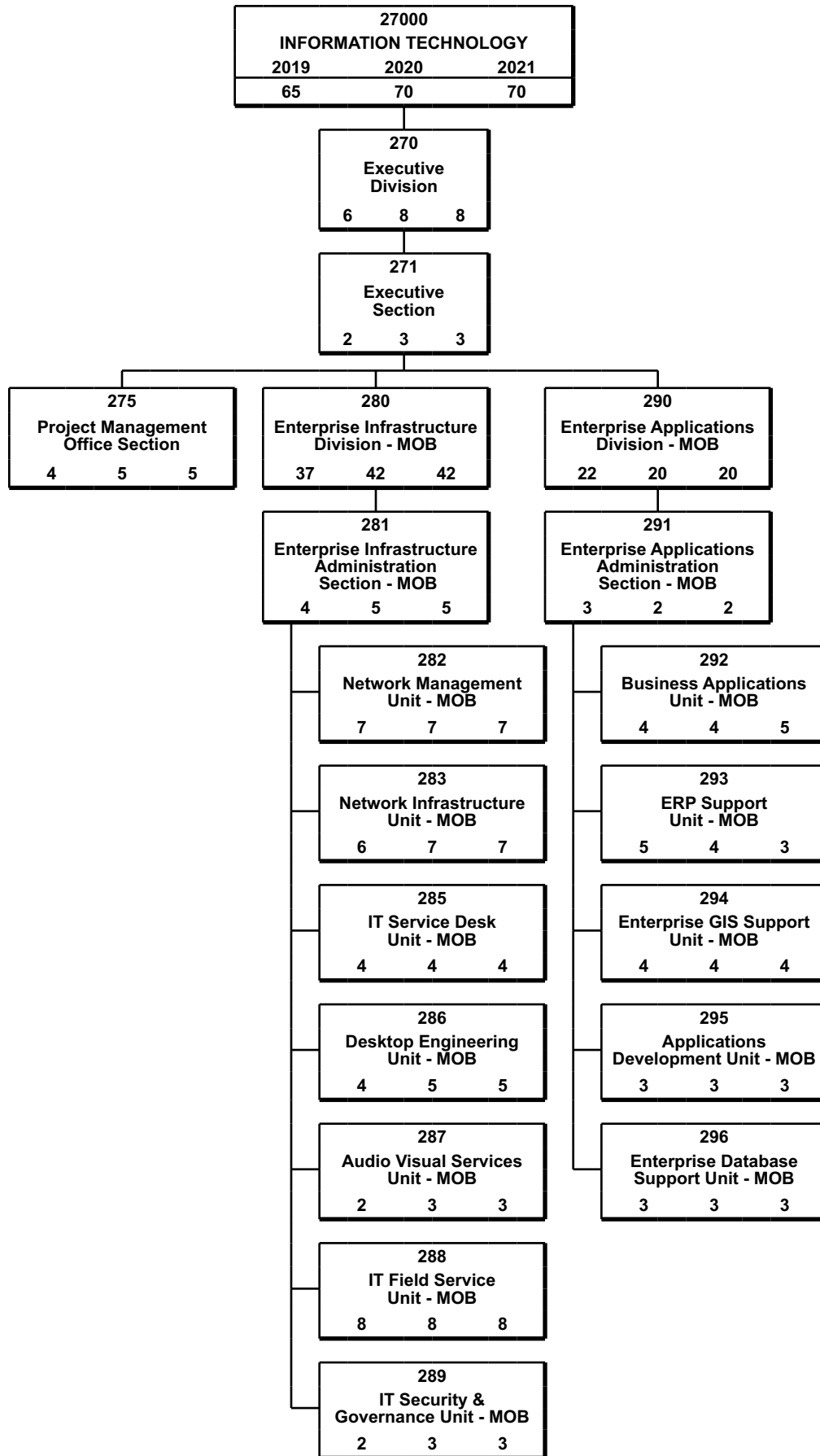
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



INFORMATION TECHNOLOGY



INFORMATION TECHNOLOGY

The mission of the Information Technology Department (ITD) is to promote successful achievement of the District's Strategic Business Plan through targeted information technology (IT) investments and services and to maintain technology infrastructures and architectures at levels that promote efficacy, efficiency, and sustainable practices throughout the District.

Departmental Summary

In pursuit of its mission, the ITD coordinates the planning and implementation of IT throughout the District. The ITD establishes District-wide computer standards and provides services in the following key areas: IT planning and program management, design and implementation, applications development and support, infrastructure operations and maintenance, user support, security, and disaster recovery.

Summary of 2020 Accomplishments

- Continued the implementation of the IT Infrastructure Strategy, including the replacement of networking equipment at the Main Office Building, the Stickney Water Reclamation Plant, and the Egan Water Reclamation Plant;
- Implemented Microsoft Teams allowing for remote collaboration;
- Upgraded District's phone system to support computer based soft phones;
- Digitized District permitting system in efforts to continue operations during the COVID-19 pandemic;
- Implemented Lobbyist registration system, increasing transparency for the District;
- Launched the District's new website, www.mwr.org;
- Improved Graphic Information System (GIS) reporting of combined sewer overflow events;
- Enhanced Citrix environment to accommodate a remote workforce;
- Implemented remote user profiles in effort to provide a secure remote work solution;
- Received the Special Achievement in GIS award for an internally developed GIS application;
- Continued the implementation of the IT service catalog;
- Continued the replacement of antiquated communication lines.

Budget Highlights

The 2021 appropriation for the ITD is \$18,987,200, an increase of \$494,800, or 2.7 percent, from 2020. The staffing level remains unchanged at 70 positions, which includes the addition of two Applications Administrator positions and the drop of one Applications Analyst and one GIS Analyst.

Significant features of the 2021 Budget are:

- Implement new hardware solutions as part of the program to enable District employees to work remotely;
- Continue the replacement of antiquated communication lines in the effort to reduce telecommunications cost;
- Develop a new application for issuing local sewer permits;
- Complete the implementation of the IT service catalog, which will increase transparency, by detailing the services offered by the ITD;
- Continue the upgrade of the District's desk phone system, transforming the District's phone system to digital from analog;
- Implement additional cyber security protection, including e-mail filtering and advanced intrusion detection;
- Evaluate additional consolidation of infrastructure and software technologies to streamline administration, leading to reduced costs and optimized performance.

2021 Initiatives in Support of the Strategic Business Plan Include the Following:

• Add Value

The ITD supports the various systems that are used by departments to implement their strategies. Among these are the internet-based Publicly owned treatment works Administration and Compliance System, the Laboratory Information Management System, the Combined Sewer Overflow Notification System, the Small Streams Maintenance Reporting System, the Metropolitan Water Reclamation District Citizen Incident Reporting System, the Stormwater Inundation Mapping Application, and the Stormwater Management Reporting Application.

• Excellence

The ITD will continue to assist the Public Affairs Section of General Administration in improving the delivery and maintenance of the District's website content, www.mwr.org, by providing easy and transparent access to clear, consistent, and accurate information about the District and its areas of responsibility.

The development and use of current technologies, such as mobile applications, will facilitate interaction with the public and deliver reliable and useful information. The first District-developed mobile application, the Metropolitan Water Reclamation District

Citizen Incident Reporting System, available at www.mwr.org, was developed for use by the public to report odor, water pollution, waterway blockage, or other incidents.

- **Recover Resources**

The ITD supports systems that are used by the departments to implement their strategies to pursue the recovery of natural resources. Among these are the internet-based Publicly owned treatment works Administration and Compliance System, the Laboratory Information Management System, and the Scales application. In addition, the ITD is committed to maintaining a reliable and flexible technology infrastructure to support new initiatives.

- **Develop Employees**

The ITD will continue to develop a culture that encourages a collaborative environment where the contributions of every employee are recognized. The ITD will continue to develop process and people-focused skill sets to meet the challenges of the changing demands of user departments and current technology platforms. When projects require highly specialized subject matter expertise, the ITD may partner with outside resources. Management will work with staff to develop competency-based individual development plans and ensure that employees recognize and understand their accountabilities.

The ITD will continue to facilitate the overall development of the District employees by providing the audio and video infrastructure to prepare in-house training sessions, which will be available to all employees via the District's portal. The portal also supports other training materials.

The ITD will continue to support the use of videoconferencing technologies and webinars to facilitate meetings and on-site training. Infrastructure improvements will facilitate the use of web-based training, managed by the Human Resources Department, from employee workstations.

- **Leading Partnerships**

The ITD will maintain its relationship with the Water and Wastewater Chief Information Officer Forumsm, which is the only water and wastewater agency-focused organization for IT executives. The Water and Wastewater Chief Information Officer Forumsm provides its members with the unique opportunity to discuss specific IT leadership challenges and solutions with their industry counterparts. It also provides an opportunity for members to engage with industry leaders from global technology companies regarding the future state of systems relevant to the District.

The ITD staff will continue to attend the Water Environment Federation's Annual Technical Exhibition and Conference to stay abreast of IT developments in water quality.

- **Information Technology**

The GIS program will continue to grow via data and application development and continued systems integration. Application and data development will continue to focus on providing the District's staff with the richest geographic information available, while integrating the information with current business systems to support various business decisions. Also in 2021, the GIS program will continue to deliver data and applications to the District's field staff via mobile devices, providing them with a more streamlined and efficient mechanism to enter data at the point of origin.

The ITD will continue to upgrade technology infrastructure, such as storage area networks, servers, VMware, Citrix, and desktops, which will provide higher reliability and availability, as well as reduce power and cooling requirements.

The ITD will continue to evolve the District's IT security offering by implementing new protection mechanisms in the effort to combat spam, malware, and other cyber security threats.

The ITD will continue to pursue opportunities for enterprise solutions to ensure that efforts can be shared across agency resources. Efforts are underway in the areas of document management, project management, and completing the rollout of Microsoft Office 365. The move to Microsoft Office 365 provides employees with the latest versions of Microsoft Office software and also moves them into the mobile workspace by providing access to the District's e-mail and documents on up to five different devices (including Windows Phone, Apple iOS, and Android devices). The ITD expects considerable savings over time in infrastructure, administration, and licensing costs due to the Microsoft Office 365 implementation.

27000 INFORMATION TECHNOLOGY

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:	Cost	Percent
1. COMPUTER HARDWARE AND SOFTWARE SUPPORT: The Information Technology Department (ITD) provides maintenance and operations of all hardware, including SAP servers, storage area networks/thin client central computer hardware, and software for nine major locations.	\$ 1,523,600	8.0%
2. VOICE, DATA, AND VIDEO COMMUNICATIONS SUPPORT: The Enterprise Infrastructure Division maintains the District's wide area network as well as the Main Office Building Complex local area networks. Staff is responsible for planning, installing, and maintaining voice, data, and video communications for the entire District.	\$ 3,617,400	19.0%
3. INFORMATION SYSTEMS PLANNING AND COORDINATION: Provides a strategic perspective used to align the ITD with the stated goals and objectives of the District and its departments. Staff is responsible for services such as strategic planning of technology and communications as well as disaster recovery planning.	\$ 1,739,700	9.2%
4. SYSTEMS ANALYSIS AND PROGRAMMING: The Enterprise Applications Division is responsible for the system management of the Enterprise Financial System applications which includes ongoing database maintenance, system configuration, and enhancement using Advanced Business Application Programming techniques. Internet/intranet services will continue to expand to meet the District's needs.	\$ 1,525,800	8.0%
5. COMPUTER OPERATIONS SUPPORT: The ITD operates two computer rooms which house the District's Sun and ALPHA systems, storage area networks, network servers, and ancillary equipment.	\$ 4,661,100	24.5%
6. DEPARTMENTAL SERVICES: The ITD provides direct consulting, planning, and maintenance assistance to all departments as well as the administration of storage area networks/thin clients and necessary networking. Additional services include support of department-specific software such as the Laboratory Information Management System, Maintenance Management System, and the internet-based Publicly owned treatment works Administration and Compliance System, along with Treasury Section and real estate applications.	\$ 4,134,200	21.8%
7. COMPUTER SECURITY: The ITD is responsible for the security of all District information systems, disaster recovery system, and data, which includes monitoring and enforcing compliance with software licensing agreements, District security directives, and the disaster recovery plan. Staff is also responsible for auditing remaining workstations to verify compliance.	\$ 674,100	3.6%
8. DESKTOP APPLICATIONS SUPPORT: The assigned staff will continue to provide applications and technical support to approximately 1,941 computer system users.	\$ 1,111,300	5.9%
Totals	\$ 18,987,200	100.0%

MEASURABLE GOALS:	2019 Actual	2020 Estimated	2021 Proposed
1. Call Center – Percent of calls responded to in less than 24 hours	100%	100%	100%
2. Call Center - Total Repeats: Reduce number of repeat calls for service.	Reduced 20%	Reduce 20%	Reduce 20%
3. Project Schedule: Ensure project completion consistent with Request For Proposal/Budget requests.	On Time	On Time	On Time
4. Project Budget: Ensure the completion of ITD projects at or below budget.	At Budget	At Budget	At Budget
5. Customer Satisfaction – Ensure user satisfaction with service call response.	4	4	4

27000 INFORMATION TECHNOLOGY

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted			Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent		
7381	Systems Analysis and Programming	\$ 1,730,397	2021	12	\$ 1,525,800	\$ (155,500)	(9.2)	a)
			2020	14	\$ 1,681,300			
7382	Desktop Applications Support	\$ 820,907	2021	5	\$ 1,111,300	\$ 222,500	25.0	b)
			2020	5	\$ 888,800			
7383	Voice, Data, and Video Communications Support	\$ 2,820,030	2021	11	\$ 3,617,400	\$ 206,800	6.1	c)
			2020	11	\$ 3,410,600			
7384	Central Computer Hardware and Proprietary Software Support	\$ 1,661,308	2021	8	\$ 1,523,600	\$ (39,900)	(2.6)	
			2020	8	\$ 1,563,500			
7385	Computer Operations, Maintenance, and Support	\$ 3,626,148	2021	7	\$ 4,661,100	\$ 363,500	8.5	d)
			2020	7	\$ 4,297,600			
7387	Computer Security	\$ 278,561	2021	4	\$ 674,100	\$ (284,500)	(29.7)	e)
			2020	4	\$ 958,600			
7388	Information Systems Planning	\$ 713,828	2021	5	\$ 905,400	\$ 8,700	1.0	
			2020	5	\$ 896,700			
7389	Information Systems Coordination	\$ 440,747	2021	4	\$ 834,300	\$ 23,700	2.9	
			2020	4	\$ 810,600			
7800	Information Technology Services	\$ 3,458,553	2021	14	\$ 4,009,300	\$ 147,300	3.8	
			2020	12	\$ 3,862,000			
7604	Social Security and Medicare Contributions	\$ 106,889	2021	—	\$ 124,900	\$ 2,200	1.8	
			2020	—	\$ 122,700			
Totals		\$ 15,657,368	2021	70	\$ 18,987,200	\$ 494,800	2.7%	
			2020	70	\$ 18,492,400			

a) Decrease is due to the drop of a GIS Analyst position (\$102,800) and an Applications Analyst position (\$62,100), offset by the reallocation of salaries to more accurately reflect current activities (\$13,400).

b) Increase is due to an increased demand for workstation replacement due to remote working requirements (\$170,200), computer supplies due to remote working requirements (\$29,100), and uninterruptible power supply batteries (\$10,000).

c) Increase is due to an increased demand for local and long distance phone services (\$133,000), telemetry services (\$104,400), AT&T switched ethernet (\$90,400), and the addition of upgrade of WiFi services at the Stickney WRP (\$35,000), offset by the 2020 purchase of Avaya handsets (\$50,000), Genetec Security Desk computer upgrades (\$26,000), Media Suite software licenses (\$25,000), a reduced demand for communications and cabling supplies (\$20,000), the 2020 purchase of the Genetec archiver redundancy (\$19,100), and a reduced demand for cellphone equipment and hardware (\$17,000).

d) Increase is due to the addition of Microsoft Premier (\$87,000), an increased demand for Microsoft License Support (\$74,500), Fire Eye maintenance (\$46,600), ESRI maintenance (\$25,000), HP servers (\$25,000), the addition of Adobe subscriptions (\$25,000), Microsoft Teams Viewer (\$20,000), remote control software (\$20,000), an increased demand for Citrix licenses (\$16,100), and Adobe Acrobat Professional maintenance (\$13,300).

e) Decrease is due to the 2020 purchase of cloud backup software (\$175,000) and the deferral of security consulting services (\$108,300).

27000 INFORMATION TECHNOLOGY

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
7380	Information Technology and Telecommunications					
7381	Systems Analysis and Programming	Application Modules Supported	90	90	90	
		Cost	\$ 1,730,397	\$ 1,681,300	\$ 1,525,800	a)
		Cost/Module	\$ 19,226.63	\$ 18,681.11	\$ 16,953.33	
7382	Desktop Applications Support	# of Service Calls	18,518	14,000	18,000	b)
		Cost	\$ 820,907	\$ 888,800	\$ 1,111,300	b)
		Cost/Service Call	\$ 44.33	\$ 63.49	\$ 61.74	
7383	Voice, Data, and Video Communications Support	Cost	\$ 2,820,030	\$ 3,410,600	\$ 3,617,400	c)
7384	Central Computer Hardware and Proprietary Software Support	Cost	\$ 1,661,308	\$ 1,563,500	\$ 1,523,600	
7385	Computer Operations, Maintenance, and Support	Cost	\$ 3,626,148	\$ 4,297,600	\$ 4,661,100	d)
7387	Computer Security	Cost	\$ 278,561	\$ 958,600	\$ 674,100	e)
7388	Information Systems Planning	Cost	\$ 713,828	\$ 896,700	\$ 905,400	
7389	Information Systems Coordination	Cost	\$ 440,747	\$ 810,600	\$ 834,300	
7800	Information Technology Services	# of Users	1,932	1,967	1,941	
		Cost	\$ 3,458,553	\$ 3,862,000	\$ 4,009,300	
		Cost/User	\$ 1,790.14	\$ 1,963.40	\$ 2,065.58	
7604	Social Security and Medicare Contributions	Cost	\$ 106,889	\$ 122,700	\$ 124,900	
		Totals	\$ 15,657,368	\$ 18,492,400	\$ 18,987,200	

- a) Decrease is due to the drop of a GIS Analyst position (\$102,800) and an Applications Analyst position (\$62,100), offset by the reallocation of salaries to more accurately reflect current activities (\$13,400).
- b) Increase is due to an increased demand for workstation replacement due to remote working requirements (\$170,200), computer supplies due to remote working requirements (\$29,100), and uninterruptible power supply batteries (\$10,000).
- c) Increase is due to an increased demand for local and long distance phone services (\$133,000), telemetry services (\$104,400), AT&T switched ethernet (\$90,400), and the addition of upgrade of WiFi services at the Stickney WRP (\$35,000), offset by the 2020 purchase of Avaya handsets (\$50,000), Genetec Security Desk computer upgrades (\$26,000), Media Suite software licenses (\$25,000), a reduced demand for communications and cabling supplies (\$20,000), the 2020 purchase of the Genetec archiver redundancy (\$19,100), and a reduced demand for cellphone equipment and hardware (\$17,000).
- d) Increase is due to the addition of Microsoft Premier (\$87,000), an increased demand for Microsoft License Support (\$74,500), Fire Eye maintenance (\$46,600), ESRI maintenance (\$25,000), HP servers (\$25,000), the addition of Adobe subscriptions (\$25,000), Microsoft Teams Viewer (\$20,000), remote control software (\$20,000), an increased demand for Citrix licenses (\$16,100), and Adobe Acrobat Professional maintenance (\$13,300).
- e) Decrease is due to the 2020 purchase of cloud backup software (\$175,000) and the deferral of security consulting services (\$108,300).

Account Number	Account Name	LINE ITEM ANALYSIS						
		2019	2020			2021		
101 27000	Fund: Corporate Department: Information Technology	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 7,665,101	\$ 8,452,500	\$ 8,452,500	\$ 5,574,439	\$ 7,576,600	\$ 8,522,300	\$ —
601060	Compensation Plan Adjustments	164,058	273,100	273,100	67,777	174,800	268,700	—
601070	Social Security and Medicare Contributions	106,889	122,700	122,700	80,135	104,300	124,900	—
601100	Tuition and Training Payments	12,687	48,500	48,500	11,662	16,200	37,000	—
100	TOTAL PERSONAL SERVICES	7,948,735	8,896,800	8,896,800	5,734,013	7,871,900	8,952,900	—
612010	Travel	2,468	2,000	2,000	1,317	2,200	2,000	—
612030	Meals and Lodging	4,382	5,000	5,000	2,095	3,000	5,000	—
612040	Postage, Freight, and Delivery Charges	1,885	1,500	1,500	1,000	1,500	1,500	—
612050	Compensation for Personally-Owned Automobiles	1,285	1,500	1,500	830	1,000	1,500	—
612210	Communication Services	1,613,456	1,528,800	1,627,000	1,558,158	1,520,000	1,850,300	—
612330	Rental Charges	391,113	100,000	100,000	90,200	90,200	91,000	—
612430	Payments for Professional Services	268,254	1,134,100	1,022,900	798,922	612,700	1,024,300	—
612490	Contractual Services, N.O.C.	5,965	10,000	10,000	2,554	5,000	10,000	—
612810	Computer Equipment Maintenance	163,741	318,500	318,500	243,997	197,700	375,000	—
612820	Computer Software Maintenance	3,941,731	4,222,800	4,222,800	3,673,270	4,107,300	4,669,400	—
612840	Communications Equipment Maintenance (Includes Software)	598,678	674,500	612,500	583,075	588,500	743,200	—
200	TOTAL CONTRACTUAL SERVICES	6,992,958	7,998,700	7,923,700	6,955,418	7,129,100	8,773,200	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	8,857	15,500	15,500	15,500	10,500	15,500	—
623800	Computer Software	33,840	390,000	390,000	268,950	277,900	241,600	—
623810	Computer Supplies	534,137	802,900	1,127,900	1,081,157	716,600	734,000	—
623850	Communications Supplies	131,741	152,000	152,000	79,299	98,600	65,000	—
300	TOTAL MATERIALS AND SUPPLIES	708,575	1,360,400	1,685,400	1,444,906	1,103,600	1,056,100	—
634810	Computer Equipment	7,100	115,500	139,500	137,920	199,500	205,000	—
634820	Computer Software	—	97,000	97,000	91,888	92,000	—	—
634840	Communications Equipment (Includes Software)	—	24,000	—	—	—	—	—
400	TOTAL MACHINERY AND EQUIPMENT	7,100	236,500	236,500	229,808	291,500	205,000	—
TOTAL INFORMATION TECHNOLOGY		\$ 15,657,368	\$ 18,492,400	\$ 18,742,400	\$ 14,364,145	\$ 16,396,100	\$ 18,987,200	\$ —

NOTES: 1. Amounts may not add up due to rounding.

2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.

Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.

Fund: Corporate Dept: Information Technology		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
270	Executive Division					
271	Executive Section					
EX17	Director of Information Technology	1	1		1	
EX06	Secretary to Officer	1	1		1	
HP16	Senior Budget & Management Analyst	—	1		1	
TOTAL 271	Executive Section	2	3	451,944	3	451,944
275	Project Management Office Section					
HP19	Project Management Office Manager	1	1		1	
HP18	Senior Project Manager	—	1		1	
HP16	Applications Administrator #2 (Project Manager)	1	1		1	
HP16	Project Manager	1	1		1	
HP14	Business Analyst	1	1		1	
TOTAL 275	Project Management Office Section	4	5	598,178	5	608,735
TOTAL 270	Executive Division	6	8	1,050,122	8	1,060,679
280	Enterprise Infrastructure Division - MOB					
281	Enterprise Infrastructure Administration Section - MOB					
HP20	Assistant Director of Information Technology	1	2		2	
HP19	Information Technology Manager	2	2		2	
HP11	Administrative Specialist	1	1		1	
TOTAL 281	Enterprise Infrastructure Administration Section - MOB	4	5	699,760	5	723,773
282	Network Management Unit - MOB					
HP18	Senior Systems Administrator	1	1		1	
HP18	Senior Systems Administrator #1	1	1		1	
HP17	Computer Systems Administrator #2 (Systems Administrator) (New Grade HP16)	3	3		3	
HP17	Senior Systems Programmer #2 (Systems Administrator) (New Grade HP16)	1	1		1	
HP16	Systems Administrator	1	1		1	
TOTAL 282	Network Management Unit - MOB	7	7	978,379	7	989,752

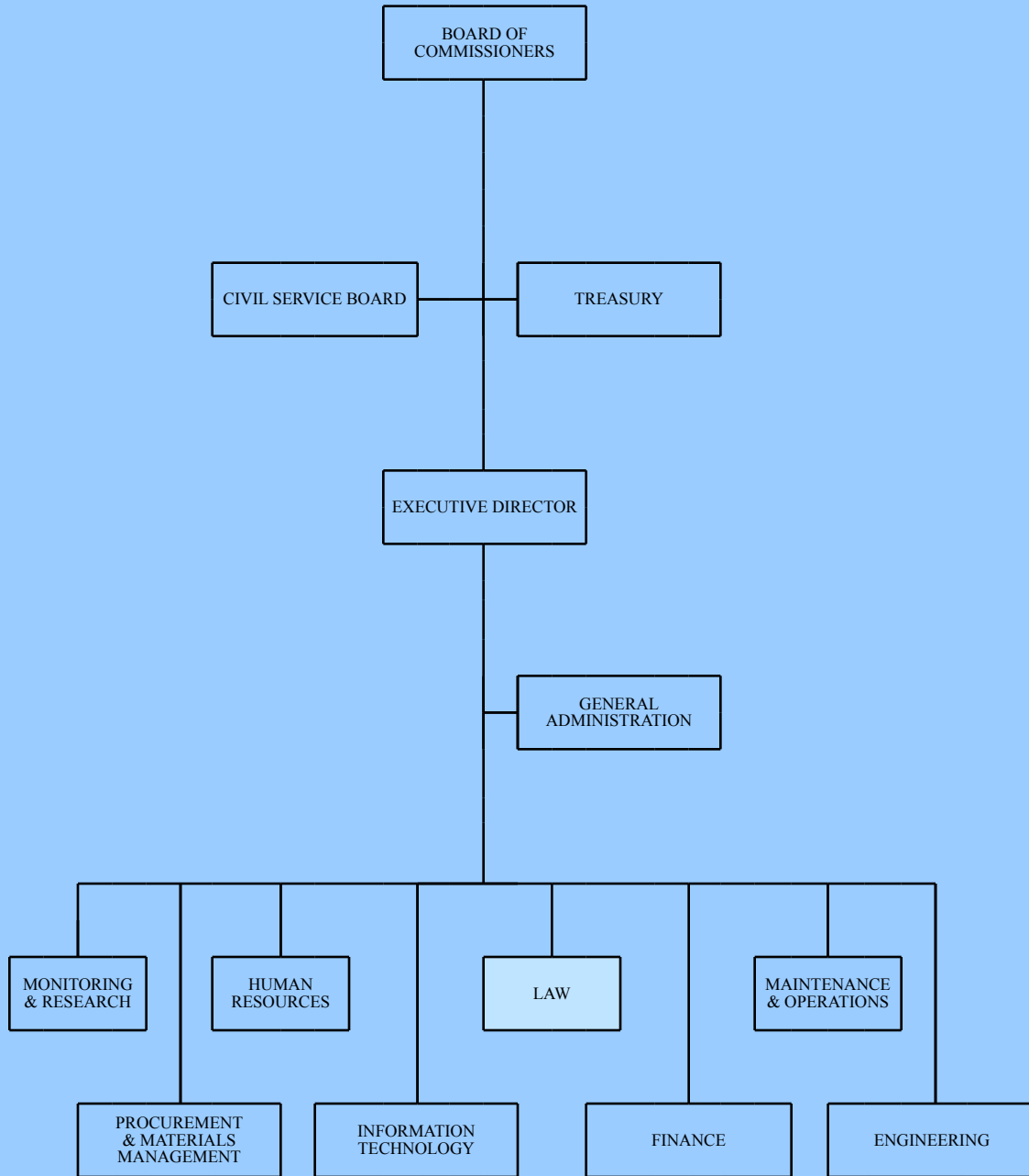
Fund: Corporate Dept: Information Technology		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
283	Network Infrastructure Unit - MOB					
HP18	Senior Network Engineer	1	1		1	
HP16	Network Engineer	4	4		4	
HP14	Network Analyst	—	1		1	
NR1541	Telecommunications Specialist #1	1	1		1	
TOTAL 283	Network Infrastructure Unit - MOB	6	7	812,650	7	829,926
285	IT Service Desk Unit - MOB					
HP15	IT Support Coordinator	1	1		1	
HP12	Systems Support Specialist II #2 (IT Support Analyst I) (New Grade HP11)	1	1		1	
HP11	IT Support Analyst I	2	2		2	
TOTAL 285	IT Service Desk Unit - MOB	4	4	293,701	4	305,926
286	Desktop Engineering Unit - MOB					
HP18	Senior Desktop Engineer	1	1		1	
HP17	Computer Systems Administrator #2 (Desktop Engineer) (New Grade HP16)	2	2		2	
HP16	Desktop Engineer	—	1		1	
HP15	Computer Systems Coordinator #2 (Desktop Analyst) (New Grade HP14)	1	1		1	
TOTAL 286	Desktop Engineering Unit - MOB	4	5	648,347	5	654,194
287	Audio Visual Services Unit - MOB					
HP16	A/V Administrator	1	2		2	
HP14	A/V Analyst	1	1		1	
TOTAL 287	Audio Visual Services Unit - MOB	2	3	305,647	3	310,680
288	IT Field Service Unit - MOB					
HP18	Senior Computer Systems Administrator #2 (IT Support Coordinator) (New Grade HP15)	1	1		1	
HP17	Computer Systems Administrator #2 (IT Support Analyst II) (New Grade HP13)	1	1		—	
HP15	Computer Systems Coordinator #2 (IT Support Analyst II) (New Grade HP13)	2	2		2	
HP13	IT Support Analyst II	4	4		5	
TOTAL 288	IT Field Service Unit - MOB	8	8	832,888	8	783,079

Fund: Corporate Dept: Information Technology		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
289	IT Security & Governance Unit - MOB					
HP18	Senior IT Security Administrator	1	2		2	
HP17	Computer Systems Administrator #2 (IT Security Analyst) (New Grade HP14)	1	—		—	
HP16	IT Security Administrator	—	1		1	
TOTAL 289	IT Security & Governance Unit - MOB	2	3	385,683	3	385,683
TOTAL 280	Enterprise Infrastructure Division - MOB	37	42	4,957,056	42	4,983,013
290	Enterprise Applications Division - MOB					
291	Enterprise Applications Administration Section - MOB					
HP19	Information Technology Manager	1	1		1	
HP19	Information Technology Manager #1	1	—		—	
HP11	Administrative Specialist	1	1		1	
TOTAL 291	Enterprise Applications Administration Section - MOB	3	2	220,520	2	224,007
292	Business Applications Unit - MOB					
HP18	Senior Applications Administrator	1	1		1	
HP17	Webmaster #1	1	1		1	
HP16	Applications Administrator	1	1		2	
HP14	Applications Analyst	1	1		1	
TOTAL 292	Business Applications Unit - MOB	4	4	531,891	5	632,053
293	ERP Support Unit - MOB					
HP18	Senior Applications Administrator #1	1	—		—	
HP17	Senior Systems Programmer #1	2	2		2	
HP16	Applications Administrator	1	1		1	
HP14	Applications Analyst	1	1		—	
TOTAL 293	ERP Support Unit - MOB	5	4	486,594	3	414,748
294	Enterprise GIS Support Unit - MOB					
HP18	Senior Applications Administrator	1	1		1	
HP16	Applications Administrator	—	—		1	
HP16	Applications Administrator #2 (GIS Analyst) (New Grade HP14)	1	1		1	
HP14	GIS Analyst	2	2		1	
TOTAL 294	Enterprise GIS Support Unit - MOB	4	4	490,394	4	487,208

Fund: Corporate Dept: Information Technology		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
295	Applications Development Unit - MOB					
HP18	Senior Applications Developer	1	1		1	
HP16	Applications Developer	1	1		1	
HP14	Applications Analyst	1	1		1	
TOTAL 295	Applications Development Unit - MOB	3	3	352,087	3	357,120
296	Enterprise Database Support Unit - MOB					
HP18	Senior Database Administrator	1	1		1	
HP16	Database Administrator	2	2		2	
TOTAL 296	Enterprise Database Support Unit - MOB	3	3	405,965	3	405,965
TOTAL 290	Enterprise Applications Division - MOB	22	20	2,487,451	20	2,521,101
TOTAL	Information Technology	65	70	8,494,630	70	8,564,792

NOTE: Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.

NOTE PAGE



Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 8, 2020

Mr. Brian A. Perkovich
Executive Director
OFFICE

Dear Sir:

Subject: 2021 Program for the Law Department

The Law Department's program for 2021, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of 2021 initiatives in alignment with and in support of the Strategic Business Plan. The budget requests include all amendments as directed by you during the Executive Director Budget Hearings in August of this year.

The narrative provides a summary of the department, 2021 major initiatives and challenges, and 2020 accomplishments. Supporting schedules of objectives, performance, and staffing levels present three years of detailed budgetary information.

Thank you for the opportunity to present the proposed Law Department budget for 2021.

Respectfully submitted,

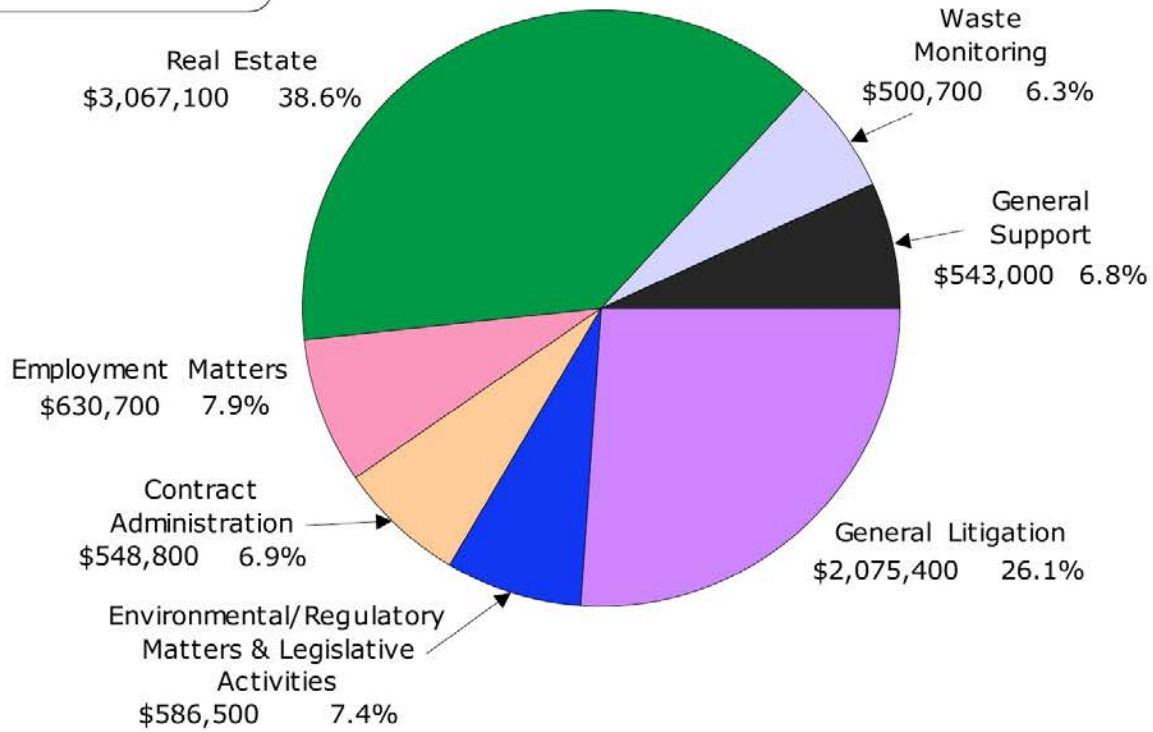


Susan T. Morakalis
General Counsel

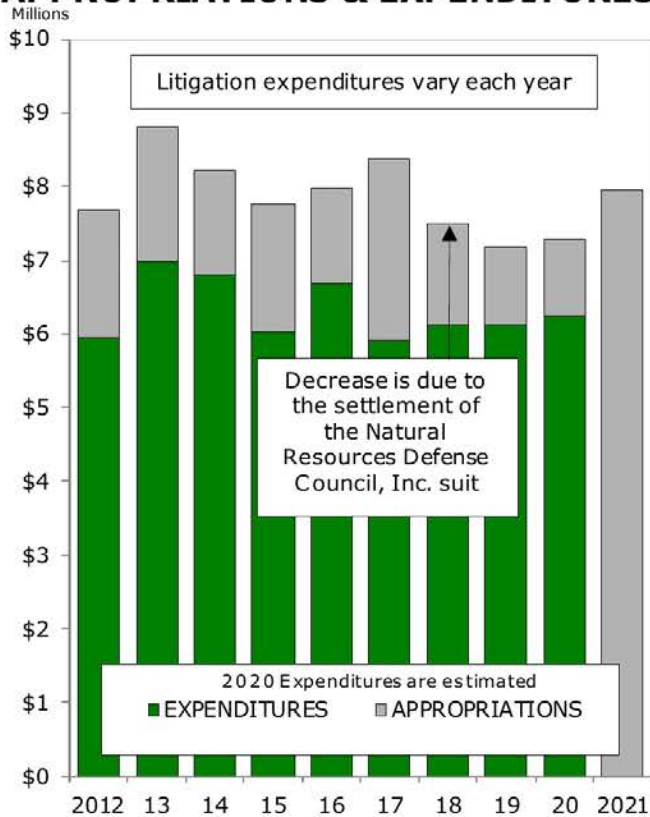
LAW

FUNCTIONS

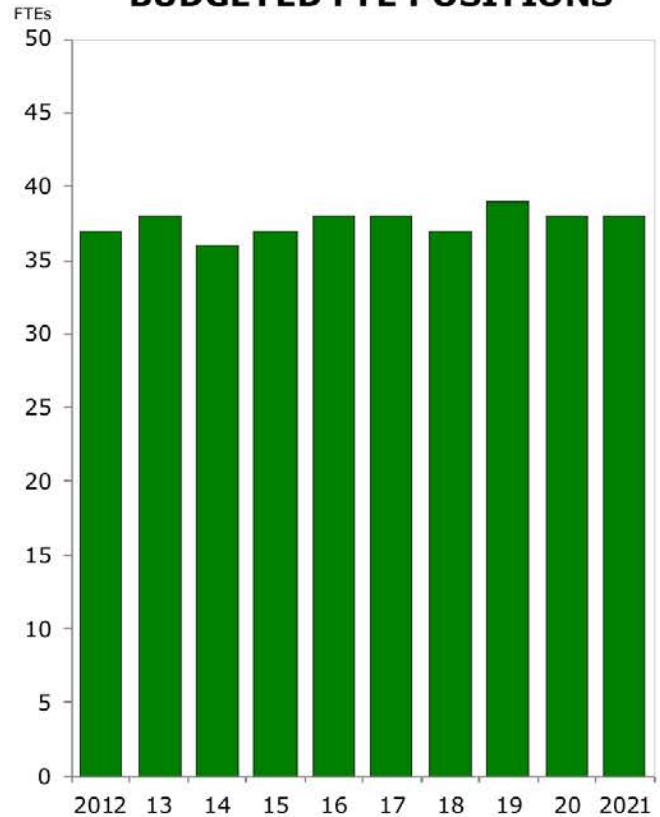
2021	\$7,952,200
2020	\$7,274,200
Increase	\$678,000



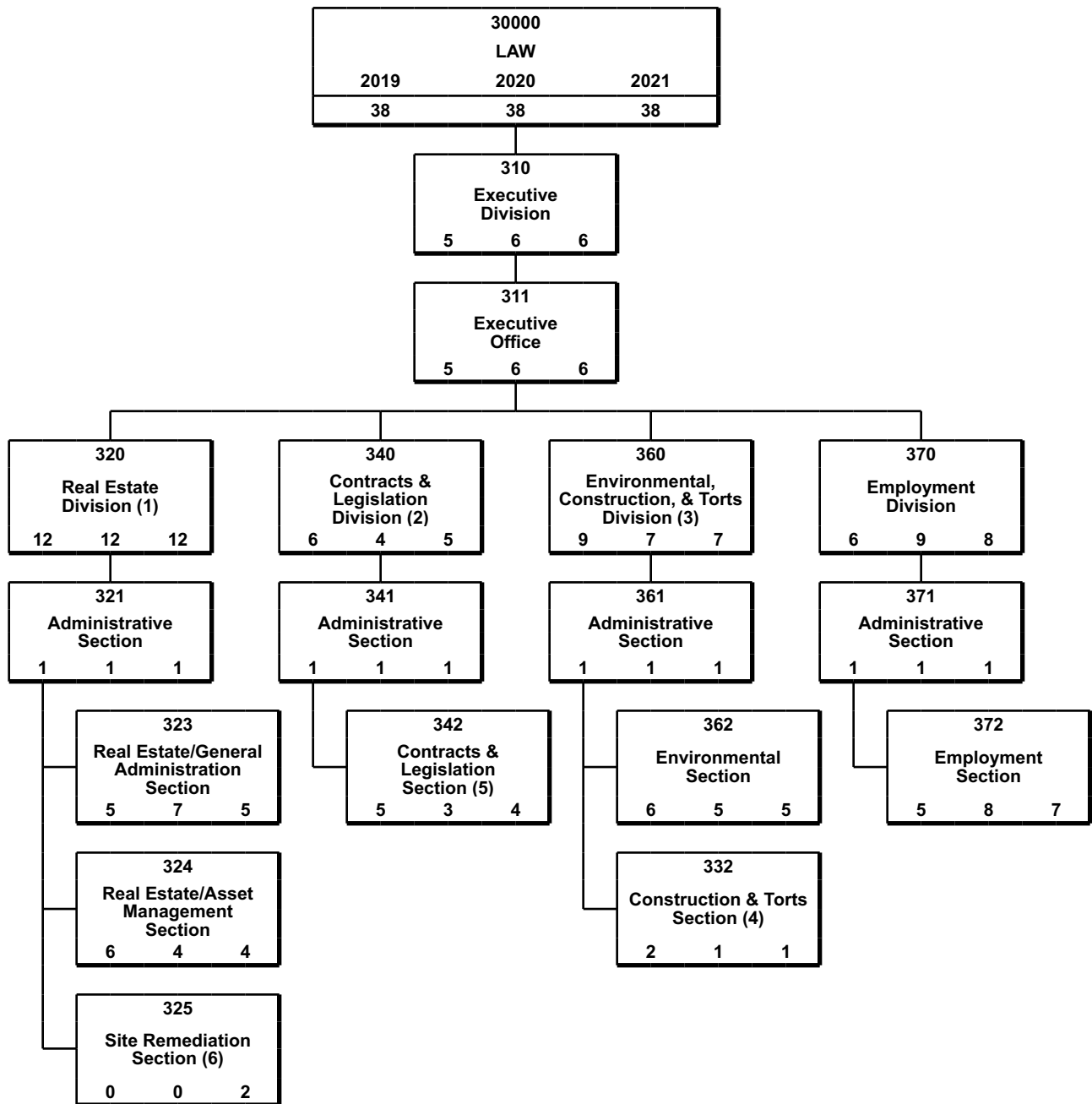
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



LAW



- (1) Effective 01/01/20, Section 320 was retitled from Real Estate/General Administration Division to Real Estate Division.
- (2) Effective 01/01/20, Section 340 was retitled from Contract & Finance Division to Contracts & Legislation Division.
- (3) Effective 01/01/20, Section 360 was retitled from Environmental, Construction, & Tort Division to Environmental, Construction, & Torts Division.
- (4) Effective 01/01/20, Section 332 was retitled from Construction & Tort Section to Construction & Torts Section.
- (5) Effective 01/01/20, Section 342 was retitled from Contract & Finance Section to Contracts & Legislation Section.
- (6) Effective 01/01/21, Section 325 positions were transferred from Section 660 in the Maintenance & Operations Department - General Division.

LAW

The mission of the Law Department is to provide high quality cost-effective legal counsel, representation, litigation and transactional services, and real estate administration services to the District.

Departmental Summary

The Law Department's primary responsibilities include:

- Providing legal counsel to the Board of Commissioners, Executive Director, and department heads;
- Working with other departments to implement initiatives;
- Ensuring compliance with laws, regulations, and ordinances applicable to the District;
- Performing all necessary legal actions regarding environmental, tort, contractual, financial, employment, municipal, and real estate matters, including litigation;
- Representing the District in administrative hearings, arbitration, and litigation at the trial and appellate levels in state and federal courts;
- Administering approximately 24,000 acres of District real estate;
- Representing the District's legislative interests with the Illinois General Assembly, including drafting, introducing, testifying on, and passing legislation as necessary, and protecting the District's interests against adversarial legislation.

Summary of 2020 Accomplishments

- Assisted in comprehensive review of the District's Ethics Ordinance and in drafting significant amendments adopted by the Board of Commissioners. The amended Ethics Ordinance contains new provisions including a code of conduct, lobbyist registration, and heightened conflict of interest requirements;
- Collaborated with the Procurement & Materials Management Department to successfully implement the Bonfire software platform to allow for the RFP process to move to an on-line platform;
- Worked with the Procurement & Materials Management Department to move the District towards the use of DocuSign as an electronic signature option for use by District personnel for a variety of signature needs;
- Implemented Board of Commissioner recommendations for Illinois General Assembly's Legislative Recommendations, resulting in early request for proposals and study session;
- Reviewed approximately 108 contracts and agreements to date;
- Processed approximately 125 Certificates of Insurance for new and ongoing contracts to date;
- Processed 250 Freedom of Information Act Requests to date;
- Handled pre-trial proceedings (motions to dismiss, discovery, motions for summary judgment) in three pending federal employment lawsuits and one pending state lawsuit alleging discrimination, constitutional violations, and a retaliatory discharge. No judgments or losses were incurred for employment claims in this period;
- Obtained dismissal of federal lawsuit by two former employees containing four federal and five state law claims alleging constitutional and statutory violations against the District and several individual defendants;
- Achieved a favorable outcome in four discharge hearings and three employee appeals before the Civil Service Board;
- Worked cooperatively with the Finance and Monitoring & Research Departments to collect outstanding user charges, fees and penalties owed pursuant to the User Charge Ordinance and Sewage and Waste Control Ordinance by demanding payment from users, recording liens, negotiating out of court settlements, and/or prosecuting collection lawsuits, including two collection action suits currently pending in Circuit Court;
- Successfully negotiated and obtained payment of \$100,000 for unpaid user charges against a property containing a lien in 2012;
- Negotiated several payment plans expected to result in payment of approximately \$250,000 in unpaid user charges;
- Pursued proofs of claim seeking to recoup unpaid user charge fees and penalties from large commercial industrial users in four newly filed Chapter 7 or 11 bankruptcy proceedings;
- Delivered winning oral argument to Illinois Appellate Court in defense of the District's Lake Michigan water allocation;
- Currently representing the District in two administrative appeals seeking to reverse decisions of the Director of Monitoring & Research concerning \$92,400 and \$11,800 in user charges owed to the District under the User Charge Ordinance respectively;
- Received three favorable Determinations from the Public Access Counselor regarding Freedom of Information Act related appeals;
- Negotiated no-payment settlement with the District's marine insurer and insurance broker for coverage of personal injury claim against the District arising from crane accident;
- Reviewed, revised, and submitted comments on intergovernmental agreements with over 24 municipalities for stormwater projects;
- Represented the District in hearings before the Illinois Pollution Control Board on time-limited water quality standards for the Chicago Area Waterway System;
- Authored a brief filed with Illinois Supreme Court defending lower court's dismissal of flooding claims against the District;

- Successfully prosecuted administrative enforcement action against a transportation company that violated the District's Watershed Management Ordinance;
- Assisted in drafting two new policies expanding outreach and data collection for lesbian, gay, bisexual, and transgender owned and operated business enterprises and business enterprises owned and operated by persons with disabilities;
- Co-authored the District's Climate Action Plan;
- Negotiated favorable settlement with contractor seeking additional compensation based on unknown conditions at jobsite.

Budget Highlights

The 2021 appropriation for the Law Department is \$7,952,200, an increase of \$678,000, or 9.3 percent, from 2020. The staffing level remains unchanged at 38 positions, which includes the transfer in of one Engineer of Site Remediation and one Site Remediation Specialist from the Maintenance & Operations Department, offset by the drop of two Investigator positions.

Significant features of the 2021 Budget are:

- Generate real estate lease and easement income at approximately \$24,500,000;
- Conduct training of District personnel on relevant legal topics including the Freedom of Information Act;
- Continue to support the Engineering Department's Stormwater Management Section in acquiring the right-of-way for flood control projects. This legal assistance includes obtaining the necessary easements, licenses, and permits, as well as negotiating Intergovernmental Agreements and filing condemnation actions, where appropriate;
- The Site Remediation Section has recently been transferred to the Law Department from the Maintenance & Operations Department and adds value by working with the real estate sections to monitor the operations of the District's tenants on leased District real estate and by assessing and remediating environmental impairments at District-owned properties that present risk to people, or the environment. This process seeks to prevent environmental impairment of District property, assure that tenants responsible for contaminating District property are held accountable for restoring it to the condition it was in at the start of the tenant's lease and allows otherwise unusable District properties to be returned to a usable state. With the transfer of the Site Remediation Section, the Law Department benefits more directly from the in-house technical environmental engineering expertise of the Site Remediation Section and the District's other departments can still request help from the Site Remediation Section in regards to technical questions regarding proper waste disposal, including hazardous waste disposal, and other on-site environmental contamination questions.

2021 Initiatives in Support of the Strategic Business Plan Include the Following:

• Add Value

The Law Department continues to administer a cost-effective real estate program. The Real Estate Division has continued to pursue a multi-pronged approach to the administration of District lands not currently required for its corporate purposes. This balanced program seeks to maximize rental income in those instances where District land is made available for private use in accordance with state law, incorporate Green Infrastructure into leases whenever possible, improve the aesthetics, and create greater opportunity for public access and use of District land located along its waterways, and ensure the protection of District lands including, but not limited to, requiring environmental remediation by District tenants.

The District's rental revenues are projected to increase \$500,000 annually over the next four years, while efforts to re-lease expired and remediated leaseholds at higher rentals continue. While maximizing rentals from private use of District land, the Real Estate Division has remained committed to improving the aesthetics, public access, and public recreational opportunities along its waterways. Toward that end, the District continues to lease some of its land, for a nominal fee, to local park districts, Forest Preserve Districts, and municipalities for the specific purpose of providing the general public with greater access to recreational opportunities along the waterways. The Real Estate Division plays an integral role in acquiring land rights necessary for the District's regional stormwater management projects.

The Law Department evaluates a variety of contracts and agreements for the acquisition of equipment, labor, software, construction, and professional services. The different categories include sole source, furnish and deliver, emergency matters, as well as maintenance. The dollar amounts of the agreements reviewed range from the thousands to the hundreds of millions. The agreements also vary in complexity. The Contracts & Legislation Division reviews approximately 200 agreements per year. The average number of workdays to review all contracts, from the fairly routine to the more complex, is approximately seven workdays. The Contracts & Legislation Division continues to work with the Procurement & Materials Management Department in an effort to streamline the procurement process for vendors while complying with the statutory provisions of the Purchasing Act. In the upcoming year, the division will be working to standardize contract documents across departments, and also working to more efficiently incorporate the use of electronic signatures through the DocuSign platform. Such consistency and efficiency will aim to decrease review time, allow for contracts to be executed, and work to begin in a shorter time period.

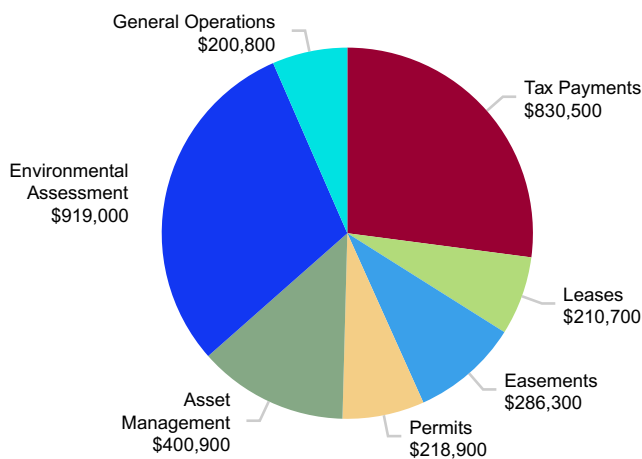
The Law Department will continue to work cooperatively with the Finance and Monitoring & Research Departments to develop a more efficient process by which to seek collection of past due user charges from tax-exempt users.

The Law Department will continue to provide timely legal services while adapting to transitioning work conditions due to the COVID-19 pandemic. The Law Department has researched, reviewed, and provided analysis of several issues and legislation specific to the pandemic and its effects. These included the Illinois Workers’ Compensation Commission’s Emergency Rule and House Bill 2455 creating a “rebuttable presumption” that COVID-19 pandemic exposure involving First Responders and other essential workers is work-related; the Families First Coronavirus Response Act and the District’s corresponding Administrative Procedure, AP 10.50.0; and various issues related to the Open Meetings Act (OMA), and Governor Pritzker’s OMA-related Executive Orders, and Senate Bill 2135, which ultimately became Public Act 101-0640, including the requirements for remote attendance by Board members and to ensure that the District complies with the new OMA exemptions in conducting its Board meetings. The Law Department has provided information to the Executive Team and technical departments on potential avenues for the COVID-19 pandemic reimbursement and potential federal stimulus available to units of local government. Attorneys also counseled technical staff on compliance with environmental regulations and permits, including regulatory impacts of the COVID-19 pandemic quarantine.

• Excellence

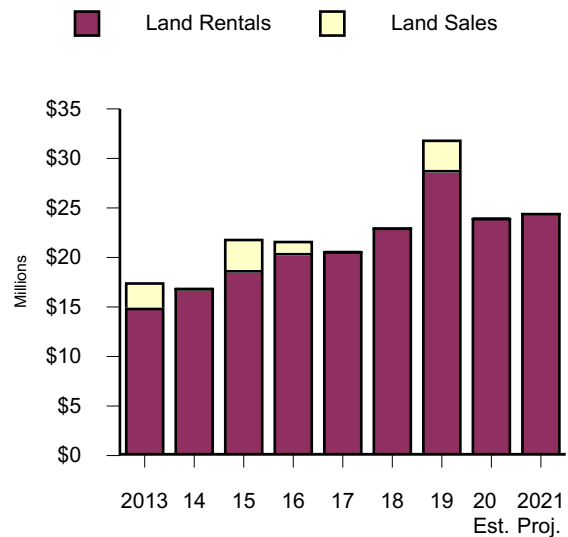
The Law Department employs multiple strategies to achieve optimal results for the District in the legal arena. The Law Department strives to minimize claim filings by ensuring the District complies with all applicable laws and continually counsels, trains, and advises management as to best practices. When potential claims do arise, the Law Department assesses the potential liability and costs and recommends actions to resolve them effectively or strengthen the District’s position. If litigation cannot be avoided, the Law Department attempts to obtain dismissal through motions to dismiss or summary judgment, to negotiate favorable settlements, or to prevail at trial. Where warranted, the Law Department will appeal cases to the highest applicable court. Its careful preparation, skill, resource management, risk management, and determination allow the District to take the most advantageous route to accomplish its goals at the lowest possible cost.

2021 Real Estate Program Budget



Total \$3,067,100

**Real Estate Income
Land Sales, Leases, Easements, & Permits**



Land Sale Details	
2013	- 326.4 acres sold in Will County
2014	- 5.9 acres sold in Cook County
2015	- 4.2 acres sold to the IL State Toll Highway Authority
2016	- 4.4 acres sold to the City of Chicago
2017	- 0.05 acres sold to the Wm. Wrigley Jr. Company
2019	- 17.2 acres sold to the IL State Toll Highway Authority
2020	- 0.30 acres sold to the City of Evanston

• Recover Resources

In 2021, the Law Department will continue the implementation of the District’s Resource Recovery Program by assisting the operating departments in the administration of the District’s Resource Recovery Ordinance. The ordinance outlines the District’s program to sell or otherwise dispose of recovered resources or renewable energy resources resulting from the operation of District

facilities. The Law Department will provide counsel and continuous support to the District's Board of Commissioners, technical staff, and financial professionals in connection with various renewable energy initiatives.

Furthering this initiative, the Law Department continues to support the District's efforts to beneficially reuse biosolids that are a byproduct of the District's wastewater treatment operations and to obtain high strength liquid waste to aid in the biological removal of phosphorus from the District's effluent water.

- **Develop Employees**

The Law Department encourages employees to attend professional conferences and seminars, as well as to complete eLearning courses and wellness programs that are beneficial to the District. In addition, staff attorneys have access to continuing legal education webinars through an economical subscription package. As a continuing legal education provider, the Law Department periodically offers accredited courses to its staff. The Law Department will utilize cross-training to afford newer attorneys the opportunity to obtain experience in legal matters outside of their assigned divisions and circulate departmental highlights to increase awareness of significant legal developments or accomplishments. The Law Department will continue to support the Human Resources Department in connection with ethics, anti-harassment, and other District-wide training, and will conduct training for District personnel on relevant legal topics including the Freedom of Information Act.

Attorneys have participated in multiple COVID-19 pandemic related webinars, including the following subjects: telecommuting, Families First Coronavirus Response Act, and critical return-to-work issues for employers. Staff participated in multiple conference calls with the Office of the Illinois Governor for COVID-19 pandemic updates pertaining to local governments. Staff will continue to stay abreast of legal developments relating to the COVID-19 pandemic.

- **Leading Partnerships**

The Law Department continues its leadership role in professional organizations. One of the Department's Division Managers continues to serve on the National Association of Clean Water Agencies' Legal Affairs Committee and is Vice-Chair of the Illinois State Bar Association Environmental Law Section. The Law Department continues to lead the Local Governmental Law Consortium that provides a network as well as continuing legal education programs for in-house local government counsel in Cook County.

The Law Department continues to work with the Maintenance & Operations Department to steer the chlorides work group that was created to bring together dischargers and other interested participants to address ways to reduce chlorides in the Chicago Area Waterway System. The work group engages in education and training and will also assist all petitioners seeking the Time Limited Water Quality Standard, formerly known as the variance-for the chlorides standard that went into effect in July 2018.

- **Information Technology**

A Geographic Information System mapping component is available on the District's website. It includes pertinent data and visuals for every parcel of real estate owned by the District.

The Law Department will continue to utilize electronic filing before the federal and state courts, the Equal Employment Opportunity Commission, and the Illinois Pollution Control Board. Additionally, during closures due to the COVID-19 pandemic, staff is able to file documents remotely with the Cook County Clerk and the Recorder of Deeds. All of the Law Department's claims data is tracked electronically within its Legal Files Document and Case Management System and is readily reported on demand to the Human Resources Department. The Law Department's electronic claims data report is able to be directly utilized and imported by the Human Resources Department's Origami Risk Management System. The Risk Management Information System (RMIS) integrates relevant case data tracked by the Law Department in its case management software, specifically for RMIS purposes. This RMIS information being tracked by the Law Department's case management software is an essential component used to analyze and report on risk and exposure data arising from the litigation of claims.

Working remotely has led to increased use of technologies, including One Drive and Microsoft Teams, particularly for purposes of document sharing and conferencing. For example, the Freedom of Information Act Team successfully used One Drive to coordinate contemporaneous document review with the Monitoring & Research and Maintenance & Operations Departments needed to prepare the District's response to an appeal filed with the Attorney General's Public Access Counselor.

30000 LAW

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:	Cost	Percent
1. Provide prosecution, defense, and appellate services in litigation. Provide other direct legal services and counseling, as necessary, to the Board of Commissioners, the Executive Director, and the Officers of the District to further the corporate purposes and protect the interests of the District.	\$ 2,075,400	26.1%
2. Handle all environmental matters and monitor all state legislation and legislative activities.	\$ 586,500	7.4%
3. Provide legal services regarding employment-related matters such as civil service matters, employment discrimination law, labor relations, and labor arbitration.	\$ 630,700	7.9%
4. Provide for the administration of all vacant and unoccupied District real estate; administer the leasing and disposition or other use of District real estate when not presently needed for its corporate purposes; assist in and administer the acquisition of right-of-way for District construction and capital improvement projects and other corporate uses; administer environmental and remediation activities; supervise real estate tax litigation; provide assistance in developing and processing the real estate agenda for meetings of the Board of Commissioners.	\$ 3,067,100	38.6%
Through its leasing and easement grant activities, the Real Estate Division will generate approximately \$25 million in income in 2021.		
5. Provide legal services to ensure the proper disposal of wastes through the sewer systems in the Chicagoland area; oversee the diversion of water from Lake Michigan for water quality services; provide legal representation, counseling, and administrative support in connection with enforcement of the Sewage and Waste Control Ordinance, Watershed Management Ordinance, and User Charge Ordinance of the District; provide legal services for flood mitigation projects contracted with other governments and stormwater-related land and easement activities.	\$ 500,700	6.3%
6. Review proposed contracts, execute awarded contracts, review bond surety, and insurance matters.	\$ 548,800	6.9%
7. All costs pertaining to the duties of the Clerk's Office, including Board proceedings, agenda and legislative actions, and executive functions of the departments, as well as process Freedom of Information Act requests for the District and participate in budget preparation and monitoring activities for the department.	\$ 543,000	6.8%
Totals	\$ 7,952,200	100.0%

MEASURABLE GOALS:	Unit of Measure	2019 Actual	2020 Estimated	2021 Proposed
1. Revise lease procedures and policies to enhance the marketability of District real estate while increasing the use of Green Infrastructure.	Millions	\$25.8	\$24.0	\$24.5
2. Conduct training on Freedom of Information Act requests.	Training Sessions	—	1	3
3. Preparation of draft Intergovernmental Agreements for technical projects within 30 days of referral.	Percentage Completed	100%	76%	100%
4. Complete the acquisition of approximately 175 properties for proposed channel improvements along Addison Creek in the municipalities of Northlake, Melrose Park, Stone Park, Westchester, Bellwood, and Broadview.	Percentage of Right of Way Acquired	30%	80%	100%

30000 LAW

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change	
Number	Name	Actual	FTEs	Dollars	Dollars	Percent
1571	Local Sewer Rehabilitation Ordinance Enforcement Activity	\$ 46,423	2021	— \$ —	\$ —	—
			2020	— \$ —		
4300	Stormwater Management	\$ —	2021	2 \$ 298,900	\$ 27,300	10.1
			2020	2 \$ 271,600		
4660	Waste Monitoring	\$ 375,908	2021	1 \$ 201,800	\$ 2,700	1.4
			2020	1 \$ 199,100		
7000	General Support (excluding program numbers 7350 - 7369 and 7604)	\$ —	2021	3 \$ 565,000	\$ 9,500	1.7
			2020	3 \$ 555,500		
7350	General Legal Matters	\$ 3,246,301	2021	20 \$ 3,739,800	\$ 55,100	1.5
			2020	20 \$ 3,684,700		
7360	Real Estate Operations	\$ 2,393,862	2021	12 \$ 3,067,100	\$ 585,700	23.6 a)
			2020	12 \$ 2,481,400		
7604	Social Security and Medicare Contributions	\$ 71,076	2021	— \$ 79,600	\$ (2,300)	(2.8)
			2020	— \$ 81,900		
Totals		\$ 6,133,570	2021	38 \$ 7,952,200	\$ 678,000	9.3%
			2020	38 \$ 7,274,200		

a) Increase is due to the transfer in of two FTE positions in the Site Remediation Section from the Maintenance & Operations Department (\$348,000) and the addition of performing Environmental Auditing and Environmental Assessment services due to the transfer in of the Site Remediation Section (\$300,000).

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PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
1571	Local Sewer Rehabilitation Ordinance Enforcement Activity	Cases	1	—	—	
		Cost	\$ 46,423	\$ —	\$ —	
		Cost/Case	\$ 46,423	\$ —	\$ —	
4300	Stormwater Management					
	Provide Legal Representation and Administrative Support for:					
4324	Watershed Management Ordinance Administration	Cost	—	40,600	47,000	a)
4344	Flood Mitigation Projects Contracted with Other Governments	Cost	\$ —	\$ 94,100	\$ 107,600	
4345	Land and Easements (Stormwater)	Cost	\$ —	\$ 136,900	\$ 144,300	
4660	Waste Monitoring					
	Provide Legal Representation and Administrative Support for:					
4662	User Charge Ordinance - Tax-Exempt Users	Cases	6	20	20	
		Cost	\$ 48,862	\$ 16,300	\$ 17,200	
		Cost/Case	\$ 8,143.67	\$ 815.00	\$ 860.00	
4663	User Charge - Large Commercial/Industrial Users	Cases	12	20	20	
		Cost	\$ 193,575	\$ 128,900	\$ 128,000	
		Cost/Case	\$ 16,131.25	\$ 6,445.00	\$ 6,400.00	
4667	Sewage and Waste Control Ordinance - Significant Industrial Users	Cases	10	12	12	
		Cost	\$ 133,471	\$ 53,900	\$ 56,600	
		Cost/Case	\$ 13,347.10	\$ 4,491.67	\$ 4,716.67	
7000	General Support (excluding program numbers 7350 - 7369 and 7604)	Cost	\$ —	\$ 555,500	\$ 565,000	
7350	General Legal Matters					
	Provide Prosecution and Defense Services to Protect the Interests of the District:					
7351	Legislative	Cost	\$ 181,514	\$ 183,800	\$ 186,500	
7352	Financial Matters	Cost	\$ 160,273	\$ 111,700	\$ 120,400	
7353	Environmental and Regulatory Matters	Cost	\$ 705,452	\$ 374,400	\$ 400,000	
7354	Contract Administration	Cost	\$ 377,669	\$ 505,100	\$ 548,800	
7355	Litigation	Cost	\$ 477,127	\$ 1,537,100	\$ 1,642,000	
7356	Employment Matters	Cost	\$ 574,454	\$ 701,000	\$ 608,700	
7359	General Legal Services	Cost	\$ 769,812	\$ 271,600	\$ 233,400	
	a) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$6,400).					

30000 LAW

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
7360	Real Estate Operations					
	Provide Administration of All District Land:					
7361	Real Estate Leases - Administration of Leases and Granting of Leases	Leases	192	179	185	
		Cost	\$ 125,213	\$ 201,500	\$ 210,700	
		Cost/Lease	\$ 652.15	\$ 1,125.70	\$ 1,138.92	
7362	Real Estate Easements - Administration of Easements and Granting of New Easements	Easements	409	394	413	
		Cost	\$ 119,758	\$ 278,000	\$ 286,300	
		Cost/Easement	\$ 292.81	\$ 705.58	\$ 693.22	
7363	Real Estate Permits - Administration of Permits and Granting of New Permits	Permits	63	81	60	b)
		Cost	\$ 108,180	\$ 212,200	\$ 218,900	
		Cost/Permit	\$ 1,717.14	\$ 2,619.75	\$ 3,648.33	c)
7367	Real Estate Asset Management - Administer Plan to Increase Revenue by Lease/Sale of Real Estate Holdings	Cost	\$ 516,152	\$ 527,000	\$ 400,900	d)
7368	Real Estate Environmental Assessment - Administer Activities Related to Environmental Assessment and Remediation of Real Estate Holdings	Cost	\$ 234,077	\$ 245,500	\$ 919,000	e)
7369	Other Real Estate Operations, Including Development of Agenda, Providing Information, Tax Litigation, and Support Services to the Board of Commissioners	Cost	\$ 607,636	\$ 262,200	\$ 200,800	f)
	Payment of Real Estate Taxes	Cost	\$ 682,846	\$ 755,000	\$ 830,500	
7604	Social Security and Medicare Contributions	Cost	\$ 71,076	\$ 81,900	\$ 79,600	
	Totals		\$ 6,133,570	\$ 7,274,200	\$ 7,952,200	
<p>b) Decrease in Real Estate Permits activity is due to the COVID-19 pandemic.</p> <p>c) Increase is due to the reduced number of permits granted due to the COVID-19 pandemic.</p> <p>d) Decrease is due to the drop of two Investigator positions (\$133,300).</p> <p>e) Increase is due to the transfer in of two FTE positions in the Site Remediation Section from the Maintenance & Operation Department (\$348,000) and the addition of performing Environmental Auditing and Environmental Assessment services (\$300,000) due to the transfer in of the Site Remediation Section.</p> <p>f) Decrease is due to the drop of two Investigator positions (\$44,400).</p>						

101 30000	Fund: Corporate Department: Law	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 4,840,864	\$ 5,274,300	\$ 5,274,300	\$ 3,604,013	\$ 4,900,600	\$ 5,510,000	\$ —
601060	Compensation Plan Adjustments	238,054	189,100	189,100	7,329	101,000	155,600	—
601070	Social Security and Medicare Contributions	71,076	81,900	81,900	52,741	68,400	79,600	—
601100	Tuition and Training Payments	13,565	16,800	16,800	4,658	16,500	15,000	—
100	TOTAL PERSONAL SERVICES	5,163,560	5,562,100	5,562,100	3,668,741	5,086,500	5,760,200	—
612010	Travel	2,572	6,400	5,400	251	3,000	5,400	—
612030	Meals and Lodging	8,599	15,800	15,800	663	10,000	13,800	—
612040	Postage, Freight, and Delivery Charges	674	700	1,700	800	600	900	—
612050	Compensation for Personally-Owned Automobiles	2,656	5,100	5,100	481	3,000	5,100	—
612090	Reprographic Services	519	17,000	17,000	10,869	7,500	17,000	—
612250	Court Reporting Services	17,373	40,000	40,000	26,845	17,700	25,000	—
612410	Governmental Service Charges	—	—	—	—	—	500	—
612430	Payments for Professional Services	146,479	744,300	744,300	605,802	268,500	1,088,000	—
612490	Contractual Services, N.O.C.	93,716	108,600	108,600	93,748	98,000	108,600	—
612520	Waste Material Disposal Charges	—	—	—	—	—	70,000	—
612780	Safety Repairs and Services	—	—	—	—	—	8,000	—
200	TOTAL CONTRACTUAL SERVICES	272,587	937,900	937,900	739,459	408,300	1,342,300	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	4,632	6,000	4,400	3,468	5,000	6,000	—
623720	Books, Maps, and Charts	9,944	13,000	14,600	14,136	11,000	13,000	—
623990	Materials and Supplies, N.O.C.	—	200	200	—	—	200	—
300	TOTAL MATERIALS AND SUPPLIES	14,576	19,200	19,200	17,604	16,000	19,200	—
667130	Taxes on Real Estate	682,846	755,000	755,000	683,599	724,000	830,500	—
700	TOTAL FIXED AND OTHER CHARGES	682,846	755,000	755,000	683,599	724,000	830,500	—
TOTAL LAW		\$ 6,133,569	\$ 7,274,200	\$ 7,274,200	\$ 5,109,403	\$ 6,234,800	\$ 7,952,200	\$ —

NOTES: 1. Amounts may not add up due to rounding.
 2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.
 Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.

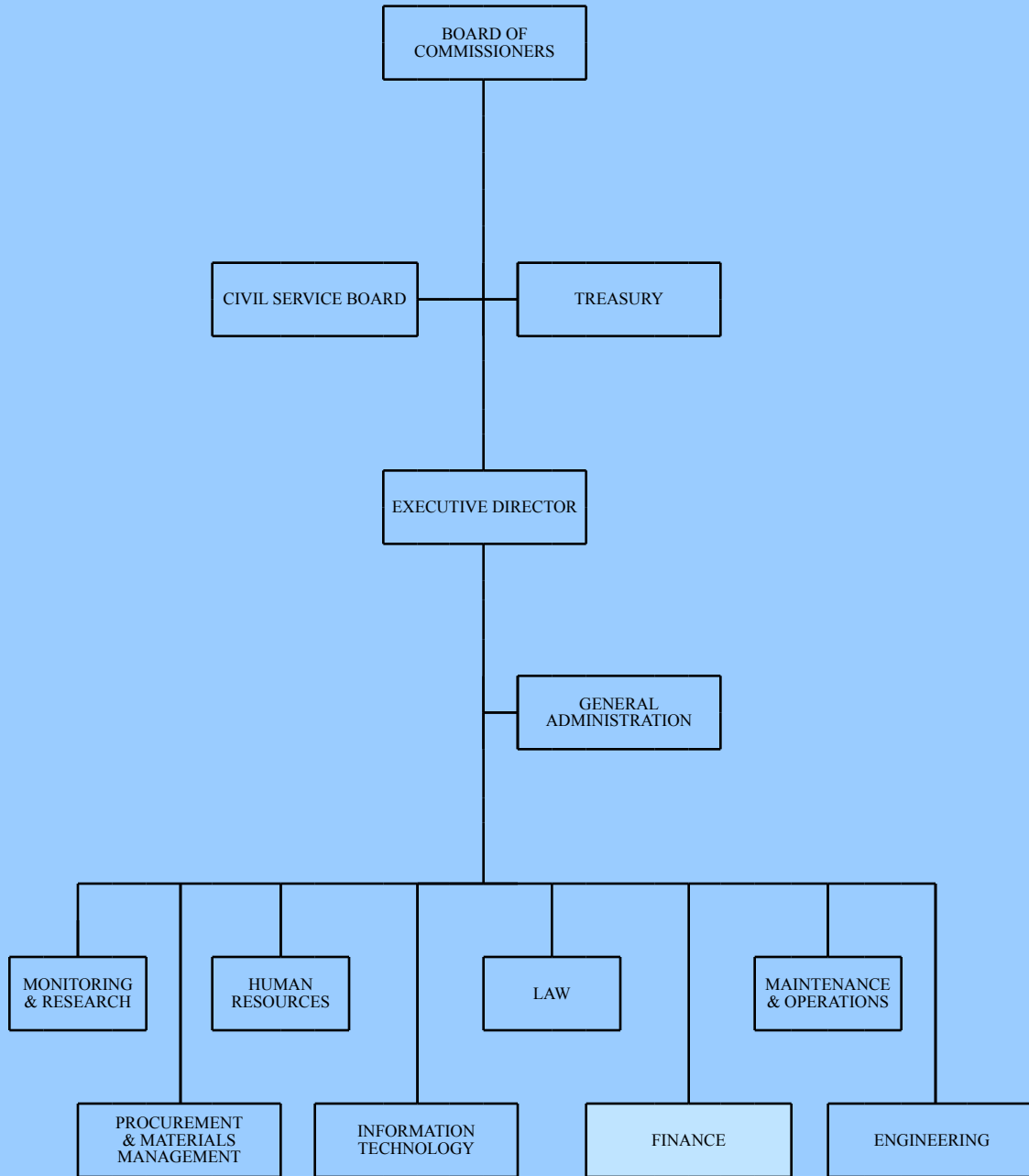
Fund: Corporate Dept: Law		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
310	Executive Division					
311	Executive Office					
EX12	General Counsel	1	1		1	
HP23	Deputy General Counsel	1	1		1	
HP22	Head Assistant Attorney	1	1		1	
HP20	Principal Attorney	—	1		1	
EX06	Secretary to Officer	1	1		1	
HP13	Senior Administrative Specialist	1	1		1	
TOTAL 311	Executive Office	5	6	1,098,714	6	1,093,558
TOTAL 310	Executive Division	5	6	1,098,714	6	1,093,558
320	Real Estate Division (formerly Real Estate / General Administration Division)					
321	Administrative Section					
HP22	Head Assistant Attorney	1	1		1	
TOTAL 321	Administrative Section	1	1	221,584	1	221,584
323	Real Estate / General Administration Section					
HP20	Principal Attorney	—	1		1	
HP18	Senior Attorney	1	1		1	
HP15	Senior Legal Assistant	2	2		2	
HP13	Investigator	—	1		—	
HP13	Investigator #1	1	1		—	
HP11	Administrative Specialist	1	1		1	
TOTAL 323	Real Estate / General Administration Section	5	7	784,577	5	628,556
324	Real Estate / Asset Management Section					
HP20	Principal Attorney	1	—		—	
HP18	Senior Attorney	2	1		1	
HP13	Legal Assistant	1	1		1	
HP13	Senior Administrative Specialist	2	2		2	
TOTAL 324	Real Estate / Asset Management Section	6	4	370,799	4	386,490

Fund: Corporate Dept: Law		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
325	Site Remediation Section					
HP20	Engineer of Site Remediation	—	—		1	
HP17	Site Remediation Specialist	—	—		1	
TOTAL 325	Site Remediation Section	—	—	—	2	349,757
TOTAL 320	Real Estate Division (formerly Real Estate / General Administration Division)	12	12	1,376,960	12	1,586,386
340	Contracts & Legislation Division (formerly Contract & Finance Division)					
341	Administrative Section					
HP22	Head Assistant Attorney	1	1		1	
TOTAL 341	Administrative Section	1	1	231,435	1	231,435
342	Contracts & Legislation Section (formerly Contract & Finance Section)					
HP20	Principal Attorney	1	1		1	
HP18	Senior Attorney	2	1		2	
HP17	Management Analyst III #2 (Senior Budget & Management Analyst) (New Grade HP16)	1	—		—	
HP15	Senior Legal Assistant	1	1		1	
TOTAL 342	Contracts & Legislation Section (formerly Contract & Finance Section)	5	3	442,614	4	575,361
TOTAL 340	Contracts & Legislation Division (formerly Contract & Finance Division)	6	4	674,049	5	806,796
360	Environmental, Construction, & Torts Division (formerly Environmental, Construction, & Tort Division)					
361	Administrative Section					
HP22	Head Assistant Attorney	1	1		1	
TOTAL 361	Administrative Section	1	1	192,027	1	201,879
362	Environmental Section					
HP20	Principal Attorney	1	1		1	
HP18	Senior Attorney	3	2		2	
HP13	Legal Assistant	1	1		1	
HP12	Secretary #2 (Administrative Specialist) (New Grade HP11)	1	1		—	
HP11	Administrative Specialist	—	—		1	
TOTAL 362	Environmental Section	6	5	582,675	5	614,376

Fund: Corporate Dept: Law		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
332	Construction & Torts Section (formerly Construction & Tort Section)					
HP20	Principal Attorney	2	—		—	
HP18	Senior Attorney	—	1		1	
TOTAL 332	Construction & Torts Section (formerly Construction & Tort Section)	2	1	117,865	1	124,088
TOTAL 360	Environmental, Construction, & Torts Division (formerly Environmental, Construction, & Tort Division)	9	7	892,566	7	940,343
370	Employment Division					
371	Administrative Section					
HP22	Head Assistant Attorney	1	1		1	
TOTAL 371	Administrative Section	1	1	231,435	1	241,288
372	Employment Section					
HP20	Principal Attorney	1	2		2	
HP18	Senior Attorney	2	4		3	
HP13	Legal Assistant	1	1		1	
HP12	Secretary #2 (Administrative Specialist) (New Grade HP11)	—	—		1	
HP11	Administrative Specialist	1	1		—	
TOTAL 372	Employment Section	5	8	1,027,308	7	869,415
TOTAL 370	Employment Division	6	9	1,258,743	8	1,110,703
TOTAL	Law	38	38	5,301,032	38	5,537,787

NOTE: Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.

NOTE PAGE



Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 8, 2020

Mr. Brian A. Perkovich
Executive Director
OFFICE

Dear Sir:

Subject: 2021 Program for the Finance Department

The Finance Department's program for 2021, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the department's 2021 initiatives in alignment with and in support of the Strategic Business Plan. The budget requests include all amendments as directed by you during the Executive Director Budget Hearings in August of this year.

The narrative provides a summary of the department, 2021 major initiatives and challenges, and 2020 accomplishments. Supporting schedules of objectives, performance, and staffing levels present three years of detailed budgetary information.

Thank you for the opportunity to present the proposed Finance Department budget for 2021.

Respectfully submitted,

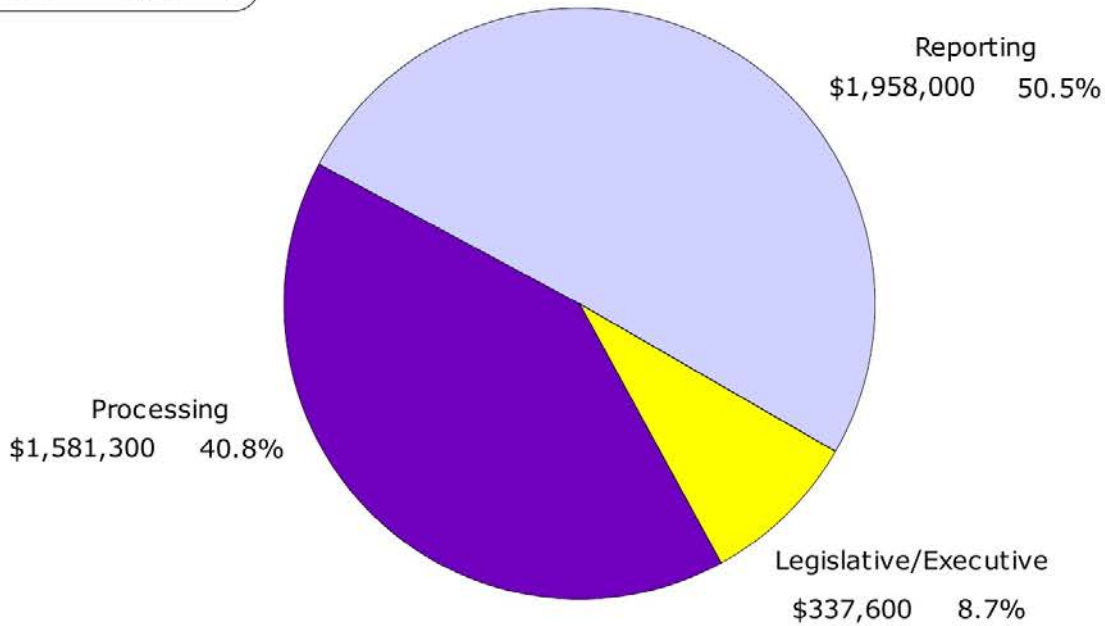


Jacqueline Torres
Clerk/Director of Finance

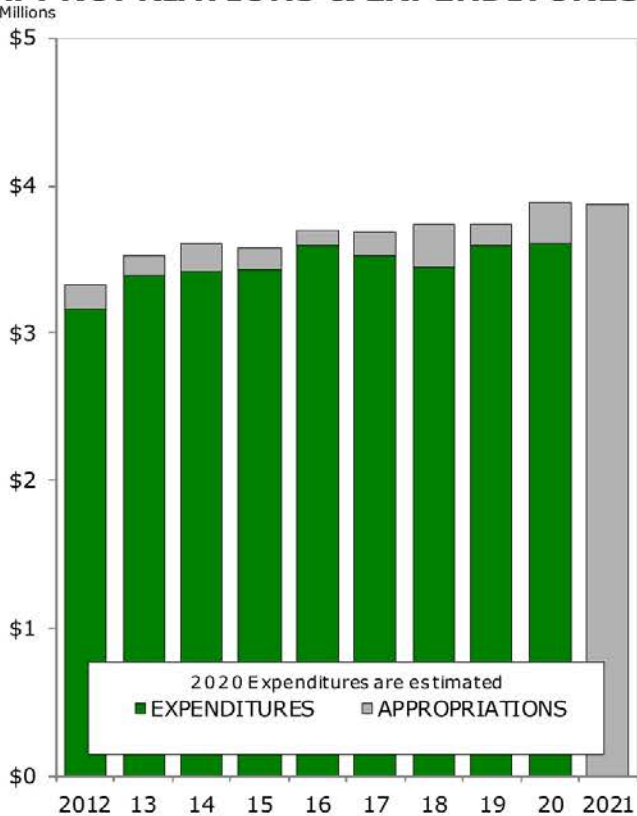
FINANCE

FUNCTIONS

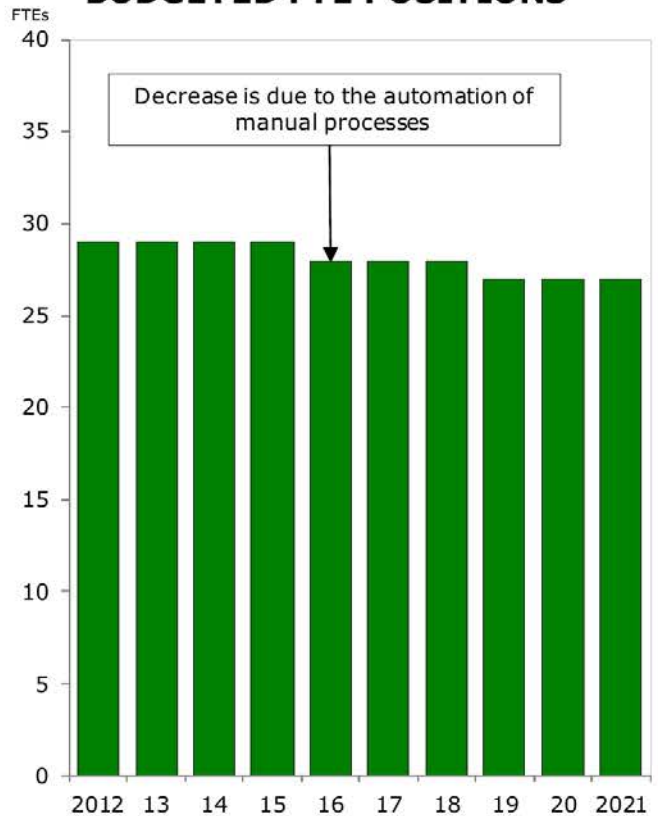
2021	\$3,876,900
2020	\$3,883,200
Decrease	(\$6,300)



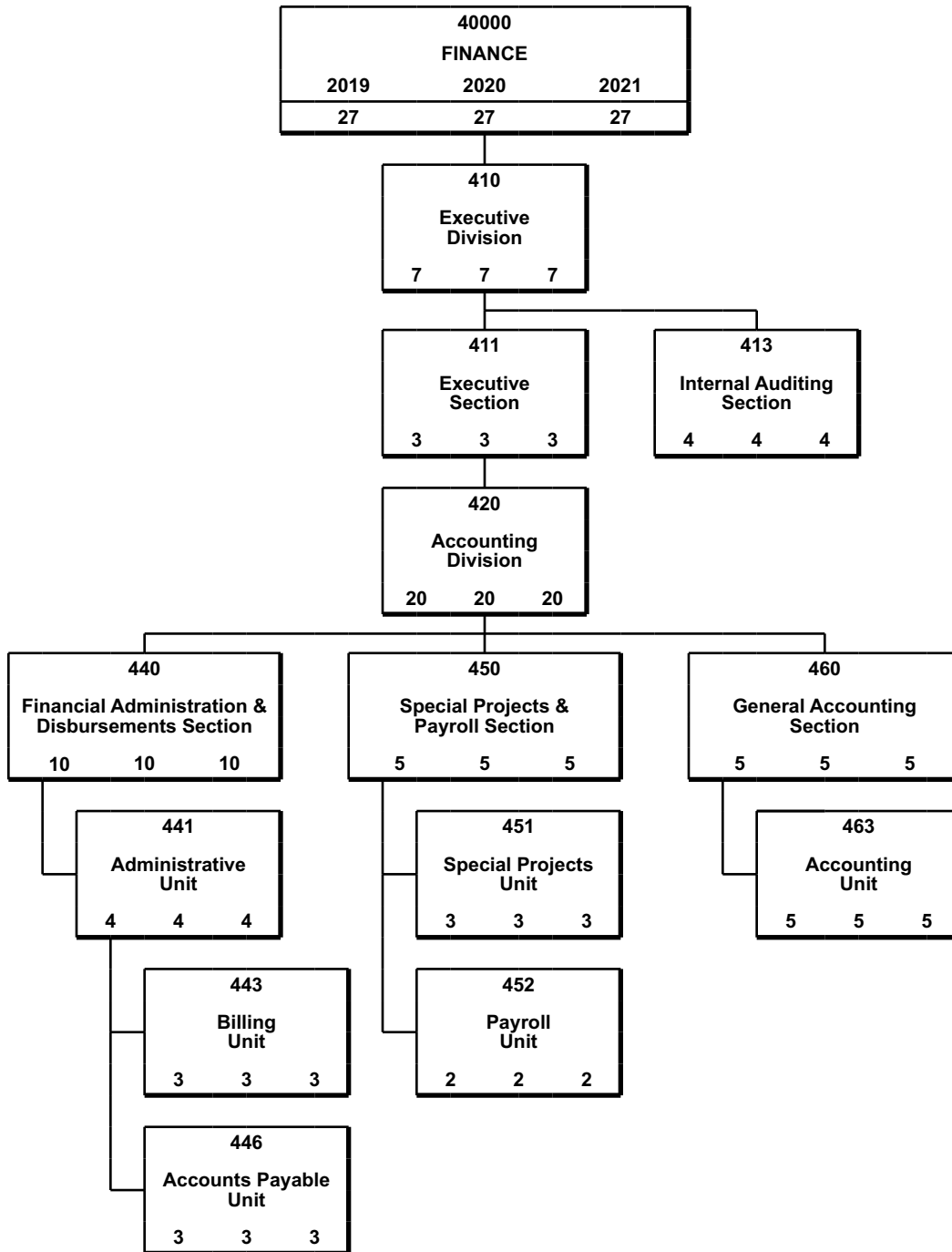
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



FINANCE



FINANCE

The mission of the Finance Department is to provide leadership in developing cost-saving strategies for transaction processing, optimize operations, provide reliable financial reports, and ensure compliance with all applicable statutes, regulations, professional standards, and policies for the benefit of District stakeholders.

Departmental Summary

The Finance Department's primary responsibilities include:

- Auditing and reporting District financial information and auditing of operational performance, compliance, and internal controls;
- Processing District financial transactions including vendor payments, payroll, billing, and collection activities;
- Creating Board of Commissioner agenda and minutes and maintaining official records of the Board's legislative actions.

Central to the Finance Department's activities is the financial reporting function which enables diverse users to readily assess the District's financial position and the results of its operations. Excellent bond ratings, external auditors' unmodified opinions, and Certificates of Achievement for Excellence in Financial Reporting demonstrate the effectiveness of District fiscal management and financial reporting excellence.

Summary of 2020 Accomplishments

- It is anticipated that the District will be presented with the Government Finance Officers Association (GFOA) Certificate of Achievement for Excellence in Financial Reporting for the 2019 Comprehensive Annual Financial Report for the 45th consecutive year;
- The District received an unmodified opinion on the fair presentation, in all material aspects, of the District's 2019 financial statements from external auditors. This achievement aids in maintaining the District's excellent bond credit rating;
- Payroll implemented SAP Concur, a cloud-based travel and employee expense reimbursement solution that improved efficiency and accountability. The system has automated the reimbursement process to include mobile workflow and upload of receipts, has removed paper forms for travel, safety, mileage and tuition reimbursements, as well as P-Card processing forms;
- During 2020, the Accounts Payable unit continued its initiative to become paperless and converted 300 vendors from check payment method to Automated Clearing House (ACH) payment method. ACH payments increased from approximately 10 percent of total payments in 2019 to over 60 percent in 2020. The move to electronic payments increases vendor satisfaction, mitigates fraud risk, and optimizes operations while reducing processing cost. Additionally, the move from paper invoices to electronic invoices increased from 75 percent in 2019 to 80 percent in 2020;
- During 2020 the Billing unit deployed DirectBillr, an online platform to receive electronic payments (e-checks and credit cards). The District can now accept electronic payments for lobbyist registration fees, local sewer permits, chemical toilet waste, and Bio-P coupons. Seventy-two percent of dollars collected for these revenue categories in 2020 was electronic versus zero percent in 2019;
- During 2020, the Internal Audit staff was redeployed to assist with critical operations including overseeing the District's FEMA COVID-19 Reimbursement Request Applications and COVID-19 pandemic management, monitoring and reviewing SAP authorization and master data changes, and assisting with heightened accounts payable initiative to become paperless by converting vendors to receive electronic payments in lieu of checks for goods and services rendered. Internal Audit staff also assisted with the implementation of SAP Concur, the paperless employee expense reimbursement solution;
- Internal audit continued to review and assess District processes, provide recommendations to improve operations, mitigate risk and suggested best practice improvements when applicable, and completed annual audit plan consisting of 12 audit projects. Internal audit projects included reviews and monitoring of internal systems' controls and procurement card expenditures, reviewing cost sharing agreements with other agencies, complex financial assessments of prospective District tenants and rental calculations for current tenants, monitoring banking authorizations and transactions, and coordination of reconciliation of employee deferred compensation transfer balances with new third party provider.

Budget Highlights

The 2021 appropriation for the Finance Department is \$3,876,900, a decrease of \$6,300, or 0.2 percent, from 2020. The staffing level remains unchanged at 27 positions.

Significant features of the 2021 Budget are:

- Implementation of Governmental Accounting Standards Board (GASB) 87, Leases, to improve accounting and financial reporting for leases by governments;
- Upgrade Workforce EmpCenter, the District's electronic time and attendance system to enhance performance and stay current with maintenance.

2021 Initiatives in Support of the Strategic Business Plan Include the Following:**• Add Value**

The Finance Department will focus on adding value at every level within the department to improve its interactions with customers. The Finance Department plans to ensure compliance with the Prompt Payment Act for District vendor payments, and ensure timely payment of payroll and other employee expenses.

• Excellence

The Finance Department will continue to focus on excellence in delivering services and achieving compliance. The Finance Department will continue to obtain an unmodified audit opinion on the District's financial statements, earn the Certificate of Excellence in Financial Reporting from the GFOA, and ensure that all applicable GASB pronouncements are implemented.

• Develop Employees

Employee recognition for excellence will be an ongoing focus for the Finance Department. Training efforts have resulted in promotions for 33 percent of staff in the last five years. The Finance Department will continue to develop a workforce that is competent, motivated, and adaptive to change. The Finance Department will continue its cross-training program for professional and support staff to ensure that institutional knowledge is retained and improved through ongoing training, the utilization of eLearning, the encouragement of tuition reimbursement programs, and the expansion of webinar opportunities.

• Leading Partnerships

The Finance Department stays current with government accounting and financial reporting standards by actively participating in GFOA conferences and training. The Finance Department also remains current with Enterprise and other financial systems by attending SAP webinars. It is equally important for the Finance Department to work closely with the operating departments to understand the changes in processes to meet the reporting needs of operations. Employees are encouraged to attend the Water Environment Federation's Technical Exhibition and Conference and partner with operating departments to support the District's mission.

• Information Technology

The Finance Department will continue to embrace information technology to reduce transaction processing costs and optimize operations. Plans are underway for the following initiatives:

- Implement a solution for data collection monitoring and ongoing updates for GASB 87, Leases;
- Continue to improve the Accounts Payable System by increasing the number of vendors paid via straight through processing and through the ACH;
- Provide online access to vendor payment information.

40000 FINANCE

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:	Cost	Percent
1. Provide for the processing of all District expenditures, which consist of vendor payments, employee wages, expenses, and fringe benefits. Vendor payments are made in compliance with the Prompt Payment Act. Provide for the accounting, billing, and collection of all revenue such as user charge, State Revolving Fund, real estate, and other miscellaneous billings.	\$ 1,581,300	40.8%
2. Provide for the external audit, general accounting, and reporting of financial information (financial statement preparation, fixed assets, cost accounting analysis, general ledger maintenance, and bank account reconciliation). Provide for the independent appraisal and analysis of departmental internal activities approved for internal audit by the Audit Committee.	\$ 1,958,000	50.5%
3. Provide for the preparation of Board meeting agendas and minutes reports and for the documentation, retention, and retrieval of all official records of the Board of Commissioners.	\$ 337,600	8.7%
Totals	\$ 3,876,900	100.0%

MEASURABLE GOALS:	2019 Actual	2020 Estimated	2021 Proposed
1. Maintain 100 percent compliance with the Prompt Payment Act.	100%	100%	100%
2. Maintain 85 percent or better collection rate for user charge and other fees.	95%	85%	85%
3. Complete 95 percent of audits proposed by the Audit Committee.	95%	95%	95%
4. Maintain an unmodified audit opinion on Financial and Single Audit statements and submit all required filings by June 30.	100%	100%	100%

PROGRAMS BY PRIORITY:		2019 Actual	Budgeted		Change		
Number	Name		FTEs	Dollars	Dollars	Percent	
4663	User Charge Ordinance - Large Commercial/Industrial Users	\$ 275,109	2021	3	\$ 287,300	\$ 4,100	1.4
			2020	3	\$ 283,200		
7394	Transaction Processing	\$ 1,139,075	2021	11	\$ 1,294,000	\$ 50,500	4.1
			2020	11	\$ 1,243,500		
7396	Reporting	\$ 1,808,280	2021	11	\$ 1,908,900	\$ (66,500)	(3.4)
			2020	11	\$ 1,975,400		
7398	Legislative/Executive	\$ 322,918	2021	2	\$ 337,600	\$ 4,700	1.4
			2020	2	\$ 332,900		
7604	Social Security and Medicare Contributions	\$ 44,276	2021	—	\$ 49,100	\$ 900	1.9
			2020	—	\$ 48,200		
Totals		\$ 3,589,658	2021	27	\$ 3,876,900	\$ (6,300)	(0.2)%
			2020	27	\$ 3,883,200		

40000 FINANCE

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated
4660	Waste Monitoring				
4663	User Charge Ordinance - Large Commercial/Industrial Users	Cost	\$ 275,109	\$ 283,200	\$ 287,300
7390	Accounting and Auditing				
7394	Transaction Processing	Transactions	76,200	77,000	74,000
		Cost	\$ 1,139,075	\$ 1,243,500	\$ 1,294,000
		Cost/Transaction	\$ 14.95	\$ 16.15	\$ 17.49
7396	Reporting	Cost	\$ 1,808,280	\$ 1,975,400	\$ 1,908,900
7398	Legislative/Executive	Cost	\$ 322,918	\$ 332,900	\$ 337,600
7604	Social Security and Medicare Contributions	Cost	\$ 44,276	\$ 48,200	\$ 49,100
		Totals	\$ 3,589,658	\$ 3,883,200	\$ 3,876,900

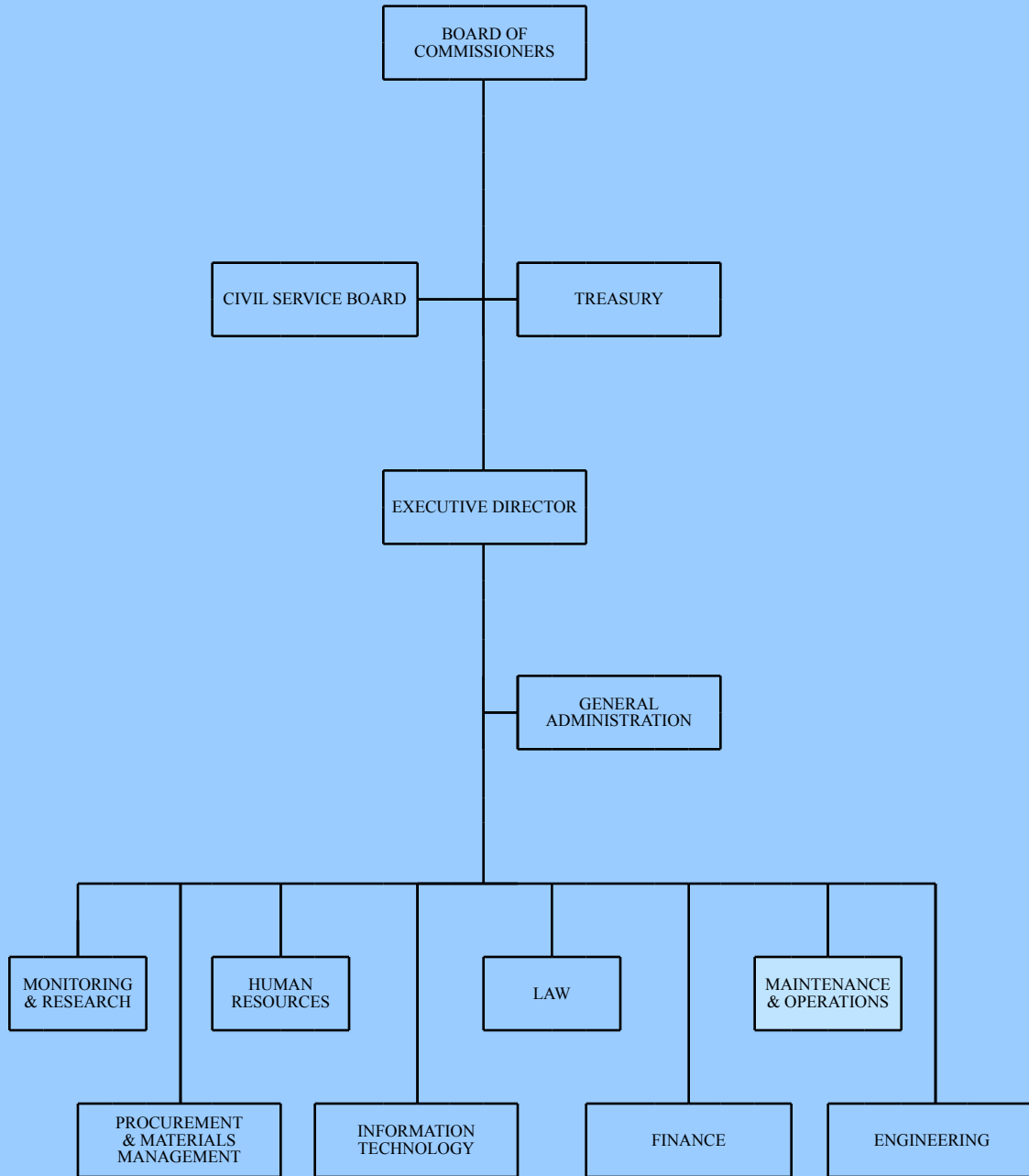
101 40000		Fund: Corporate Department: Finance		LINE ITEM ANALYSIS				
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 3,187,414	\$ 3,286,600	\$ 3,286,600	\$ 2,276,433	\$ 3,079,000	\$ 3,243,900	\$ —
601060	Compensation Plan Adjustments	859	116,600	116,600	101,782	102,000	79,900	—
601070	Social Security and Medicare Contributions	44,276	48,200	48,200	34,524	45,000	49,100	—
601100	Tuition and Training Payments	28,649	30,000	30,000	2,273	4,700	30,000	—
100	TOTAL PERSONAL SERVICES	3,261,198	3,481,400	3,481,400	2,415,012	3,230,700	3,402,900	—
612010	Travel	3,065	8,000	8,000	—	—	10,000	—
612030	Meals and Lodging	7,991	12,000	12,000	—	—	12,000	—
612040	Postage, Freight, and Delivery Charges	101	500	500	256	500	500	—
612050	Compensation for Personally-Owned Automobiles	73	200	200	109	200	200	—
612090	Reprographic Services	2,340	2,500	2,500	2,360	2,500	2,500	—
612250	Court Reporting Services	49,078	50,000	50,000	48,491	50,000	50,000	—
612340	Discount Lost	2,331	3,000	3,000	2,026	3,000	3,000	—
612430	Payments for Professional Services	252,800	307,600	307,600	264,120	296,100	370,300	—
612490	Contractual Services, N.O.C.	860	2,000	2,000	761	2,000	2,500	—
612800	Repairs to Office Furniture and Equipment	—	5,000	5,000	5,000	5,000	6,500	—
200	TOTAL CONTRACTUAL SERVICES	318,639	390,800	390,800	323,123	359,300	457,500	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	9,114	10,000	10,000	8,988	9,100	15,000	—
623720	Books, Maps, and Charts	708	500	500	500	500	1,000	—
623990	Materials and Supplies, N.O.C.	—	500	500	—	500	500	—
300	TOTAL MATERIALS AND SUPPLIES	9,822	11,000	11,000	9,488	10,100	16,500	—
TOTAL FINANCE		\$ 3,589,659	\$ 3,883,200	\$ 3,883,200	\$ 2,747,623	\$ 3,600,100	\$ 3,876,900	\$ —

NOTES: 1. Amounts may not add up due to rounding.
 2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.
 Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.

Fund: Corporate Dept: Finance		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
410	Executive Division					
411	Executive Section					
EX13	Clerk/Director of Finance	1	1		1	
HP21	Comptroller	—	—		1	
HP21	Comptroller #4	1	1		—	
EX06	Secretary to Officer	1	1		1	
TOTAL 411	Executive Section	3	3	547,325	3	493,716
413	Internal Auditing Section					
HP19	Accounting Manager #2 (New Grade HP18)	1	1		1	
HP17	Supervising Accountant #2 (Financial Analyst) (New Grade HP16)	2	2		2	
HP16	Financial Analyst	1	1		1	
TOTAL 413	Internal Auditing Section	4	4	553,266	4	537,007
TOTAL 410	Executive Division	7	7	1,100,591	7	1,030,723
420	Accounting Division					
440	Financial Administration & Disbursements Section					
441	Administrative Unit					
HP19	Accounting Manager #2 (New Grade HP18)	1	1		1	
HP17	Supervising Accountant #2 (Financial Analyst) (New Grade HP16)	1	1		1	
HP16	Financial Analyst	1	1		1	
HP13	Senior Administrative Specialist	1	1		1	
TOTAL 441	Administrative Unit	4	4	537,160	4	537,160
443	Billing Unit					
HP12	Accounting Associate	3	3		3	
TOTAL 443	Billing Unit	3	3	221,134	3	229,284
446	Accounts Payable Unit					
HP13	Accounting Clerk III #2 (Accounting Associate) (New Grade HP12)	1	1		1	
HP12	Accounting Associate	2	2		2	
TOTAL 446	Accounts Payable Unit	3	3	224,181	3	232,333
TOTAL 440	Financial Administration & Disbursements Section	10	10	982,475	10	998,777

Fund: Corporate Dept: Finance		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
450	Special Projects & Payroll Section					
451	Special Projects Unit					
HP19	Accounting Manager #2 (New Grade HP18)	1	1		1	
HP16	Financial Analyst	1	1		1	
HP14	Budget & Management Analyst	1	1		1	
TOTAL 451	Special Projects Unit	3	3	356,980	3	367,539
452	Payroll Unit					
HP16	Financial Analyst	2	2		2	
TOTAL 452	Payroll Unit	2	2	250,058	2	244,532
TOTAL 450	Special Projects & Payroll Section	5	5	607,038	5	612,071
460	General Accounting Section					
463	Accounting Unit					
HP19	Accounting Manager #2 (New Grade HP18)	1	1		1	
HP16	Financial Analyst	2	2		2	
HP13	Accounting Clerk III #2 (Accounting Associate) (New Grade HP12)	1	1		1	
HP12	Accounting Associate	1	1		1	
TOTAL 463	Accounting Unit	5	5	612,974	5	618,500
TOTAL 460	General Accounting Section	5	5	612,974	5	618,500
TOTAL 420	Accounting Division	20	20	2,202,487	20	2,229,348
TOTAL	Finance	27	27	3,303,078	27	3,260,071

NOTE: Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.



Metropolitan Water Reclamation District of Greater Chicago

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CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 8, 2020

Mr. Brian A. Perkovich
Executive Director
OFFICE

Dear Sir:

Subject: 2021 Program for the Maintenance & Operations Department

The Maintenance & Operations Department's program for 2021, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the department's 2021 initiatives in alignment with and in support of the Strategic Business Plan. The budget requests include all amendments as directed by you during the Executive Director Budget Hearings in August of this year.

The narrative provides a summary of the department, 2021 major initiatives and challenges, and 2020 accomplishments. Supporting schedules of objectives, performance, and staffing levels present three years of detailed budgetary information.

Thank you for the opportunity to present the proposed Maintenance & Operations Department budget for 2021.

Respectfully submitted,

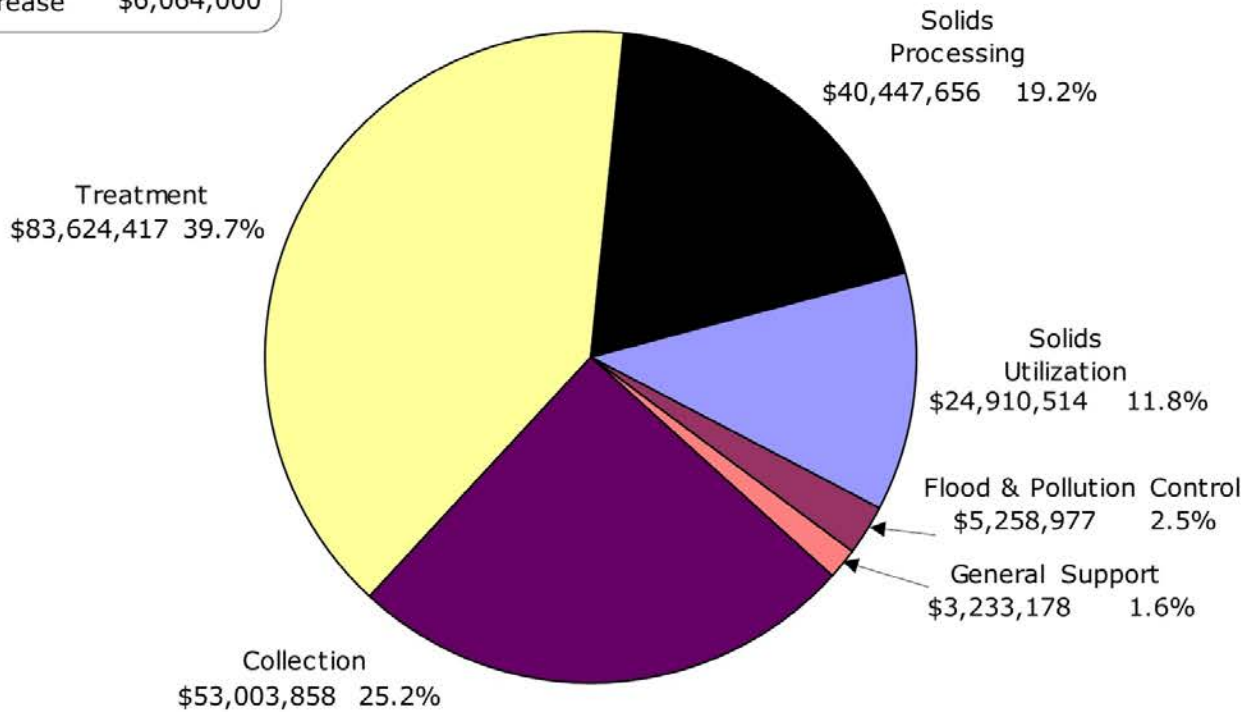


John P. Murray
Director of Maintenance & Operations

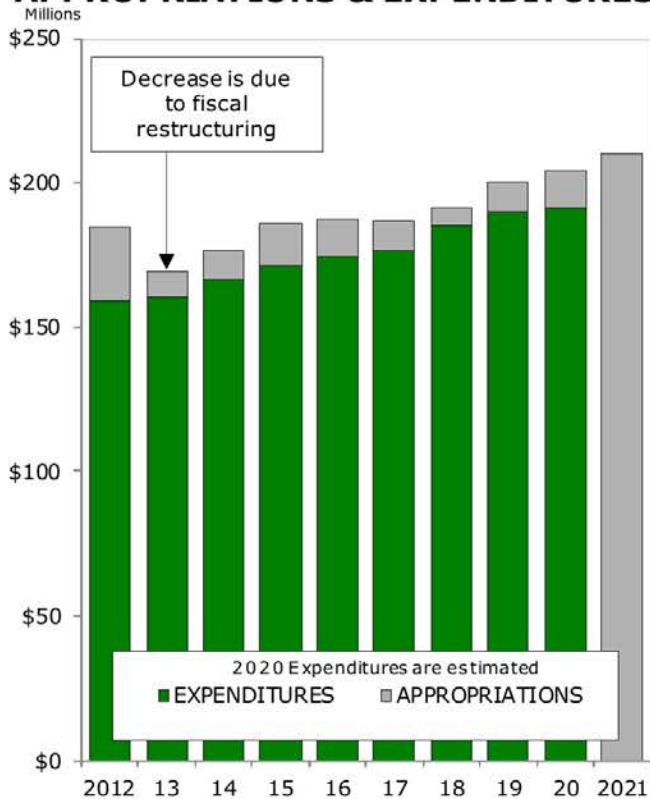
MAINTENANCE & OPERATIONS – ALL DIVISIONS

2021	\$210,478,600
2020	\$204,414,600
Increase	\$6,064,000

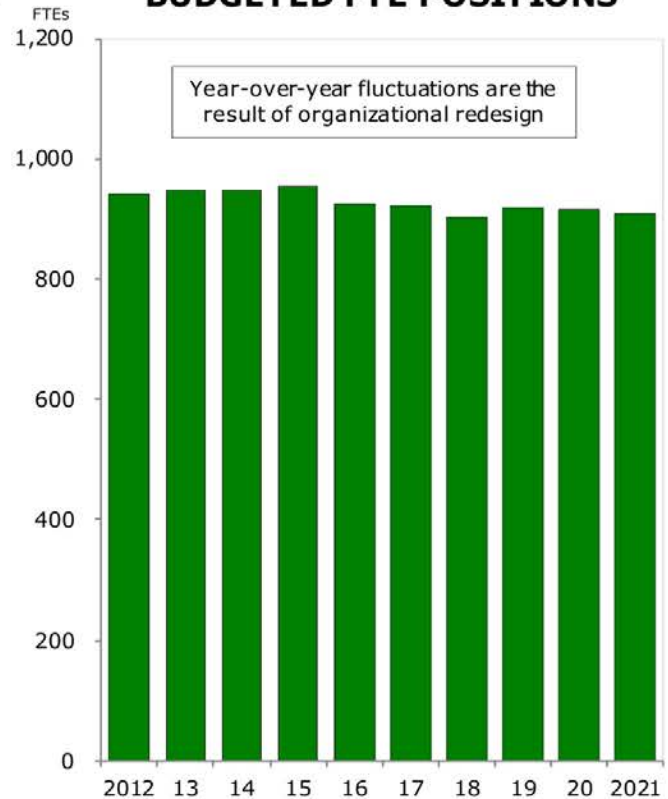
FUNCTIONS



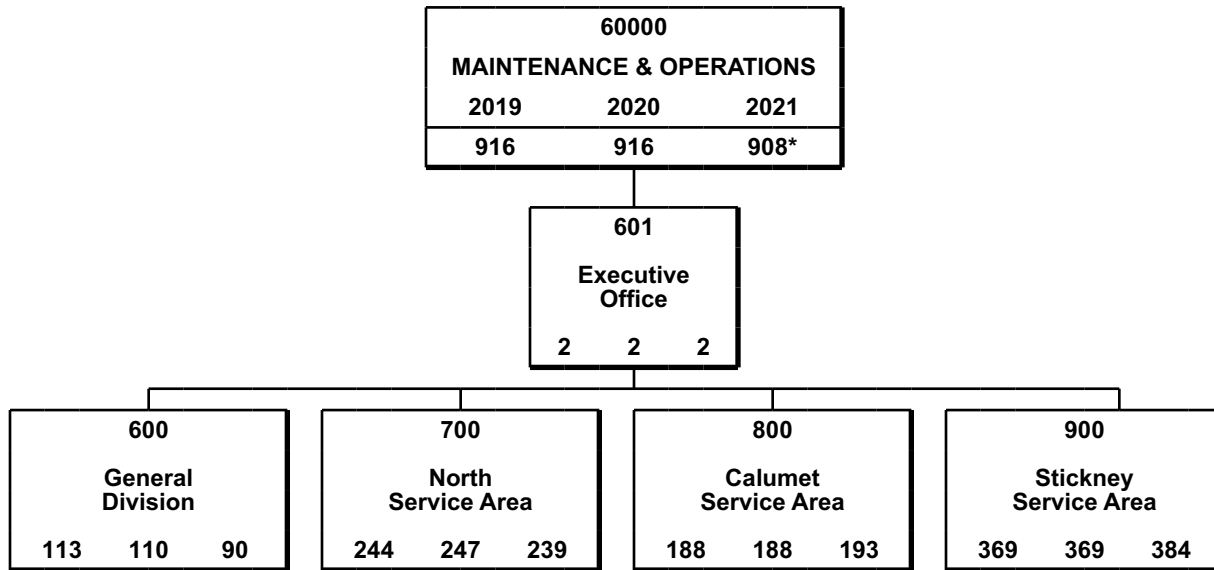
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



MAINTENANCE & OPERATIONS - ALL DIVISIONS



* The 2021 position total for the Maintenance & Operations Department is 908. There are an additional 27 positions funded by the Stormwater Management Fund, while the operations remain in the Maintenance & Operations Department.

MAINTENANCE & OPERATIONS

The mission of the Maintenance & Operations Department (M&O) is to maintain and operate the District's facilities at an optimal level and to protect our environment by collecting and treating wastewater, minimizing flooding, maintaining our waterways, and producing and beneficially reusing high quality biosolids in the most economical and environmentally sustainable manner.

Departmental Summary

M&O consists of four divisions. Three of the divisions, referred to as the Calumet Service Area, the North Service Area, and the Stickney Service Area, collectively maintain and operate the collection systems and treatment plants within the District's 882.1 square mile service area, serving a population of 5.25 million people. The Calumet and Stickney Service Areas are also responsible for the nine solids management areas. The fourth division, referred to as the General Division, maintains and operates the Lockport Powerhouse, Chicago Area Waterways, and the collection systems. The department's primary responsibilities include:

- Collecting and treating approximately 512.8 billion gallons of wastewater annually by operating seven water reclamation plants (WRPs), a 560-mile network of intercepting sewers, the Tunnel and Reservoir Plan's 109.4 miles of tunnels, and three reservoirs;
- Improving water quality in area waterways by maintaining and operating five sidestream elevated pool aeration stations and two instream aeration stations;
- Providing flood relief to Cook County by removing debris from 532 miles of small streams and rivers and maintaining 37 regional detention reservoirs;
- Processing high quality biosolids for beneficial reuse.

Summary of 2020 Accomplishments

- Amid a global pandemic, ensured that maintenance and operations functions continued uninterrupted. The department successfully accommodated the divergent needs of having select staff work on-site to maintain critical operations and having other staff work from home to slow the spread of the virus;
- Replaced the discharge valve actuator on raw sewage pump #6 at the O'Brien WRP during the pandemic;
- Managed the pickup sites at the WRPs for distribution of the District's Class A Exceptional Quality compost to businesses and the public;
- Converted the southwest aerated grit tanks at the Stickney WRP from chain and flight grit collectors to shaftless screw conveyors, which will result in less equipment downtime and lower annual maintenance costs by an estimated \$50,000;
- Completed the overhaul of blower #7 at the Stickney WRP, which included upgrading the guide vane actuator from a pneumatic model to a more reliable electro-hydraulic model;
- Installed new pumps in Battery D at the Stickney WRP, which will reduce clogging in the final tank lines and consequently reduce equipment downtime;
- Completed the first phase of the project to upgrade the distributed control system at the Calumet WRP, which is integral to process optimization;
- Replaced ultraviolet lamps in three bays of the ultraviolet disinfection facility at the O'Brien WRP. Ultraviolet technology is used as the final step in the treatment process to reduce pathogenic bacteria in the water being released from the WRP into the North Shore Channel;
- Enlisted the services of goats and sheep to clear out shrubs, trim back overgrowth, remove invasive plants, and maintain the landscape in hard-to-reach stretches of the Calumet WRP. The animals' environmentally friendly services will be expanded to additional locations in 2021;
- Replaced emergency backup generators in the North and Stickney Service Areas to provide the final level of support to key, process-critical facility equipment;
- Provided support to the Engineering Department during the construction phase of the project to replace the switchgear and motor control centers at the O'Brien WRP. The new equipment will provide a reliable source of power, which will minimize outages and equipment downtime;
- Restored the roof of the historic Lockport Powerhouse building which houses vital waterways control and hydroelectric generator equipment used to maintain and control waterway elevations and stormwater conveyance during a storm event;
- Generated 41,131,268 kilowatt hours of power at the Lockport Powerhouse in 2019, which resulted in revenues of \$1.4 million. The water flowing through the facility is harnessed by two turbines to provide a safe and environmentally hydroelectric energy source that is sold back to Commonwealth Edison. For 2020, the projected annual generation is 40,000,000 kilowatt hours of power, with corresponding annual revenues of \$1.2 million. For 2021, the projected annual generation is 26,700,000 kilowatt hours of power, with corresponding annual revenues of \$0.8 million, a reduction due to equipment downtime while infrastructure improvements are being made.

Budget Highlights

The 2021 appropriation for the M&O Corporate Fund is \$210,478,600, an increase of \$6,064,000, or 3.0 percent, from 2020. The Corporate Fund staffing level has decreased from 916 to 908 positions. The decrease is due in part to the transfer of one Engineer of Site Remediation and one Site Remediation Specialist from the M&O Department to the Law Department as the duties and responsibilities of those positions are more closely aligned with the work of the Law Department. The decrease is also explained by the drop of 10 positions: one Engineering Technician V, four Fireman-Oilers, one Maintenance Laborer Class A, two Maintenance Laborer Class A Shift positions, one Structural Ironworker, and one Treatment Plant Operator II. Offsetting the decrease is the addition of four positions: one Assistant Civil Engineer, two Associate Civil Engineers, and one Associate Process Control Engineer. An additional 20 position were transferred within the department, primarily due to the transfer of the Solids Management Section from the General Division to the Calumet and Stickney Service Areas. Five positions were transferred from the General Division to the Calumet Service Area: one Engineering Technician III, one Engineering Technician IV, two Engineering Technician V positions, and one Senior Engineer. Fourteen positions were transferred from the General Division to the Stickney Service Area: one Administrative Assistant, one Agricultural Technician I, one Agricultural Technician II, one Associate Civil Engineer, three Engineering Technician IV positions, three Engineering Technician V positions, one Maintenance Laborer Class A Shift, one Managing Engineer, one Principal Engineer, and one Senior Engineer. Also, one Assistant Electrical Engineer was transferred from the North Service Area to the General Division. An additional 27 positions are funded in the Stormwater Management Fund. The total 2021 position count is 935, compared to the total 2020 position count of 943.

The Strategic Business Plan (SBP) guides and informs the M&O Department’s activities. From a large-scale project to a routine task, each activity links to the plan. In 2021, M&O will continue to advance the SBP, its six goals, and accompanying strategies.

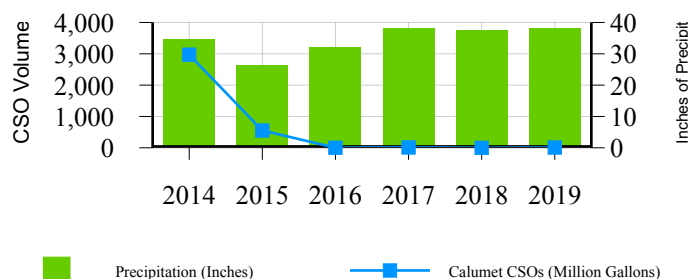
2021 Programs and Activities in Support of the Strategic Business Plan Include the Following:

- **Add Value**

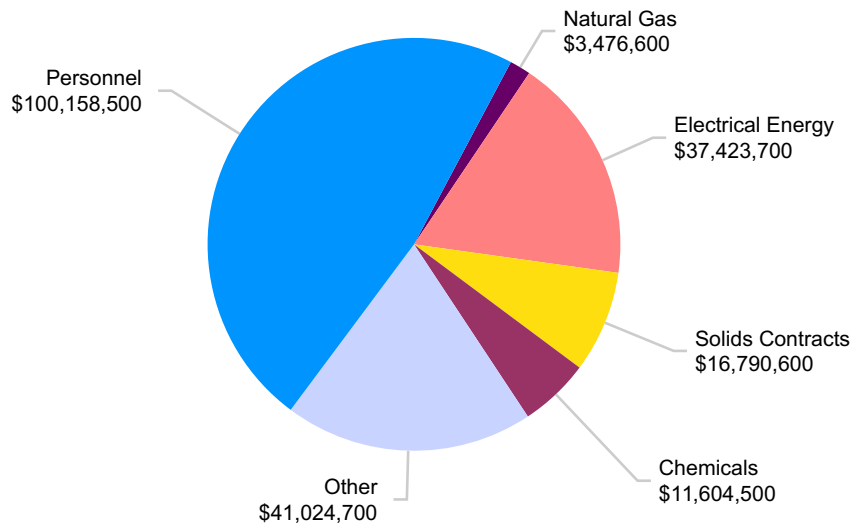
Value can be added by understanding and managing the effects of outside forces and influences, such as the COVID-19 pandemic. One of the major effects of the pandemic is the disruption to employee schedules, including time off. Due to the prolonged Stay At Home Executive Order, many employees are not taking earned vacation time as they normally would. In recognition of the unprecedented situation, the District has developed an interim leave policy for non-represented employees that allows up to three weeks (rather than the usual two weeks) of unused vacation time accrued in 2020 to be carried into fiscal year 2021, with the stipulation that all time must be used by June 30, 2021. Also, a large group of represented employees, most of whom are considered essential workers, earned additional compensation, including paid time off, for working on-site during the first two months of the Stay At Home Executive Order. This situation may create scheduling challenges in 2021; however, schedules for all employees will be approved with the goal of minimizing overtime and ensuring that all necessary work continues uninterrupted. The department will continue to evaluate the impacts of the pandemic as it plans for ongoing maintenance and operations.

The department’s employees add value daily in many ways. For instance, during a storm event, the treatment plant operators work to establish a balance such that the incoming flow from the sewers is accommodated, yet sufficient capacity for the next storm event is available. Thanks to the District’s long-term commitment to addressing combined sewer overflows (CSOs) by building a system of tunnels and reservoirs to capture combined sewage before it enters the waterways and the expertise of the employees who oversee the system, the Tunnel and Reservoir Plan (TARP) is a success. As demonstrated by the following chart, the volume of combined sewage released to the waterways in the Calumet Basin has dropped significantly from approximately three million gallons to nearly zero gallons since late 2015 when the reservoir portion of the plan was placed in service. By continuously monitoring levels in the sewers, tunnels, reservoirs, and plant capacity, operators have been able to maintain capacity in the tunnels and reservoirs to nearly eliminate CSOs in the Calumet Basin. With skilled employees and a strong infrastructure in place, this high level of performance is expected to continue.

**Calumet (Thornton) TARP System CSOs/
Precipitation Totals 2014 - 2019**

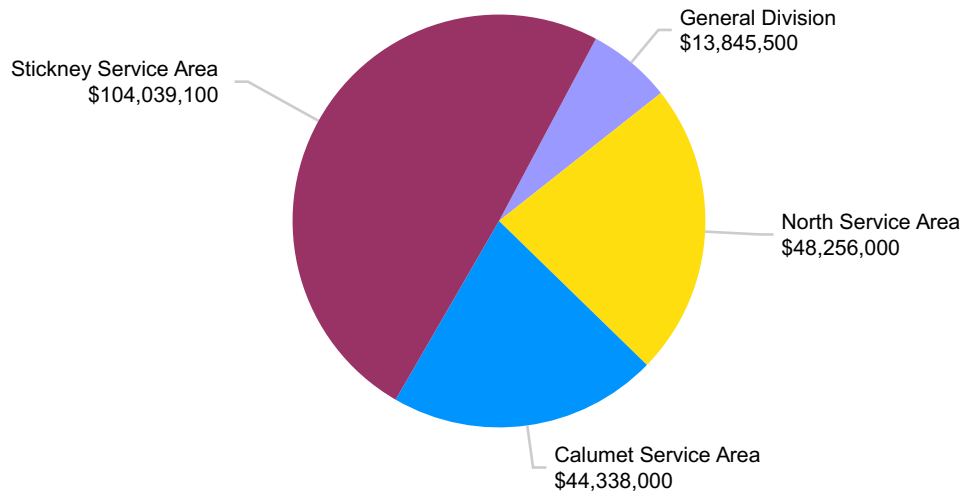


2021 Appropriations by Major Line Item



M&O Budget = \$210,478,600

2021 Appropriations by Service Area



M&O Budget = \$210,478,600

- **Excellence**

Despite the challenges of operating seven WRPs around the clock, the District is routinely honored for its exceptional performance. In recognition of decades of complete and consistent compliance of National Pollutant Discharge Elimination System permits, the National Association of Clean Water Agencies recently honored the District with Platinum Peak Performance awards at six of its WRPs, a distinction given to WRPs that have achieved 100 percent permit compliance for five consecutive years. The following facilities have earned Platinum status: the Calumet WRP for 28 years, the Lemont WRP for 23 years, the Kirie WRP for 15 years, the O'Brien WRP for 14 years, the Hanover Park WRP for 12 years, and the Egan WRP for six years. For 2019, the District achieved an overall compliance rate of 99.89 percent. These awards represent the District's enduring excellence in the face of more stringent regulatory requirements, aging infrastructure, changing weather patterns, and new demands for waterway activity.

Achieving excellence requires making the best use of available resources. In 2021, M&O will use District's trades and the specialized services of an outside contractor to rehabilitate the dewatering centrifuges at the Stickney WRP. The right balance of resources, in this case a combination of insourcing and outsourcing, improves efficiency and effectiveness.

In pursuit of excellence, the department adheres to a rigorous asset management plan to maintain its facilities at levels sufficient to meet operational and permit requirements. Preventative and predictive maintenance projects planned for 2021 include painting final tanks and applying protective coatings to various equipment to reduce the corrosion that develops in a harsh operating environment, tuning and maintaining boilers to increase operating efficiency, and installing gas monitoring equipment for workplace health and safety. As with any strong asset management program, project selection is guided by the asset or system's criticality, condition, and failure risk.

The department is working to optimize processes, another mark of excellence, by incorporating innovative equipment and systems.

- At the Lemont WRP, a second high-efficiency turbo blower will be installed to provide the WRP with 100 percent redundancy. The first turbo blower was installed in 2018 and has generated electrical energy savings of approximately \$28,000.
- At the O'Brien WRP, a water quality sensor will be installed to provide real-time monitoring for effluent leaving the UV Disinfection Facility, which will allow operators time to make necessary process changes to remain in compliance with NPDES permitting and provide high-quality effluent.
- At the Kirie WRP, an enterprise data solutions system will be installed. The system will allow daily and monthly reports to be generated automatically and provide remote "read-only" access to the District's distributed control system graphics, which will enable the decommissioning of at least five workstations with a replacement value of \$14,000 each. Other features of the system include the consolidation of plant process and analytical data, remote monitoring of plant operations through mobile devices, and programmable alarms to notify staff via e-mail or text when certain plant conditions occur. With the recent integration of the multi-network connection, the implementation can be expanded to the Egan and Hanover Park WRPs.
- Also, At the Kirie WRP, professional services will be obtained to develop and implement a process optimization platform to increase treatment efficiency by reducing chemical usage for odor control. The scope of work also includes developing models to optimize chemical usage for disinfection.

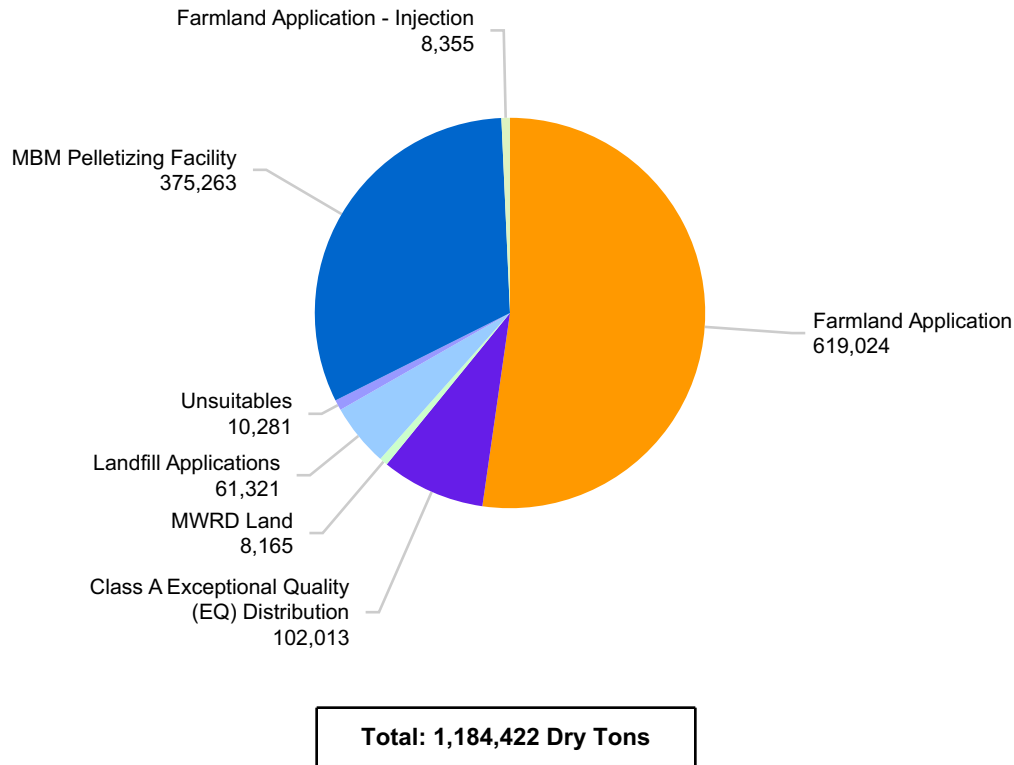
Excellence is achieved when dedicated staff work together with a common purpose, such as the efforts made to replace the discharge valve actuator on raw sewage pump #6 at the O'Brien WRP. What began as a routine replacement became more complicated when unexpected problems arose. To perform the needed repair, the WRP was shut down in late February 2020 with a large group of trades and operations staff in attendance. A series of carefully coordinated actions were taken and most of the work was completed, but the final steps were delayed until a critical piece of equipment could be sent to the Calumet WRP for machining. Then the pandemic arrived, and the work stopped, leaving the pump out of service. Without it, reaching the plant's permitted flow was challenging. When another pump developed problems, resuming the job became essential. Staff from different areas and disciplines were brought in to finish the work when most staff were at home under quarantine. The new actuator was installed, and the pump was placed back in service just before the major rainstorms in May. The project was a success thanks to the staff involved.

- **Recover Resources**

Three of the major pillars of the Resource Recovery Program are biosolids, phosphorus, and energy. M&O is pursuing programs and activities in each of these areas.

Biosolids are produced to be beneficially reused as a safe and environmentally friendly alternative to commercial fertilizer. The following chart illustrates how biosolids have been beneficially reused over the years.

Recover Resources: Biosolids Reuse (in Dry Tons) 2010 - 2019



The District has made progress in developing a biosolids market through several initiatives including the distribution of bags of compost at different venues and attendance at trade and landscaping events to showcase the Class A Exceptional Quality product. To receive the necessary bulking agents to create high-quality composted biosolids, the District has developed a yard waste acceptance program, two major elements of which are an Intergovernmental Agreement with the City of Chicago and the District’s Resource Recovery Ordinance. Free bulk distribution is also offered to area residents, non-profit organizations, golf courses, and public entities at the District’s seven WRPs. By encouraging bulk compost users to pick up material from the District’s compost generation sites, the cost to transport biosolids are reduced. The department also plans to obtain the services of a consultant to identify the most environmentally and fiscally responsible marketing and distribution approaches to beneficially reuse 60,000 dry tons of Class A Exceptional Quality biosolids from the Harlem Solids Management Area and the Calumet Solids Management Area. All these programs, actions, and initiatives are designed to cultivate a local customer base, improve product performance, and advance the goal to Recover Resources.

The Biosolids Management Program, the core function of which is recovering resources, will be reorganized in 2021 to make it even more effective. The operations and management of the Lawndale Avenue Solids Management Area and the Calumet Solids Management Area will be transferred from the General Division to the Stickney and Calumet WRPs, respectively. The restructuring will provide for a plant specific coordination of treatment plant operations, solids processing, and ultimate beneficial utilization. In addition, economies are anticipated to be realized in trucking costs as delivery to beneficial utilization sites will be local to the respective plant drainage basins, as opposed to countywide. Budgetary control of solids processing and ultimate beneficial reuse at the plant level will allow for a tailored use of funds in response to local demand for biosolids utilization.

The District is operating in an increasingly strict regulatory environment. For instance, Illinois Environmental Protection Agency regulations limiting phosphorus contained in treated effluent to 1.0 mg/L monthly average will become effective for the three largest plants by 2027, beginning with the Stickney WRP in 2021. In response, a phosphorus management strategy was adopted for the Stickney WRP in 2016, with the launch of an innovative technology developed in partnership with Ostara Nutrient Recovery Inc. (Ostara). The Ostara Pearl® Process addresses both the positive and negative aspects of phosphorus. The biological process recovers the phosphorus in a slow-release fertilizer, thereby reducing the discharge of harmful phosphate-containing materials into the water. The process uses patented fluid bed reactors (43-foot high stainless-steel vats) to extract phosphorus and ammonia from the waste stream by adding appropriate doses of magnesium chloride and caustic to form a precipitation reaction. The result is fertilizer pellets rich in phosphorus, nitrogen, and magnesium that are dried and bagged for sale.

The SBP's Recover Resources goal emphasizes the importance of reducing operational costs, one of the largest being electrical energy. Even in the face of changing conditions, such as shifting weather patterns and increased TARP pumping due to the addition of Stage 1 of the McCook Reservoir, expenditures for electrical energy have remained stable at approximately 20 percent of department expenditures. Ongoing efforts to mitigate the effects of increasing demand include purchasing electrical energy through a competitive auction at discounted rates, participating in an energy curtailment program that pays participants for using less energy during peak loads (since 1997 approximately \$16.8 million in revenue has been received), and implementing energy efficiencies. As an example, M&O staff recently completed the work identified in a 2015 Investment Grade Energy Audit, which included installing steam blankets, upgrading HVAC controls, and converting interior lighting to LED fixtures. Annual savings from implementing the energy efficiencies are estimated at \$324,000 annually, resulting in a simple payback of 15.4 years. The estimated annual unit savings for electrical energy and natural gas are 3,784,000 kWh and 114,000 therms, respectively.

- **Develop Employees**

A strong training program is increasingly important as M&O works to optimize maintenance outsourcing. To perform the maintenance function well, employees must be adequately trained. In 2021, staff will attend conferences and training sessions on a variety of topics, including electrical troubleshooting, generators and emergency power, pump repair, and programmable logic controllers.

- **Leading Partnerships**

In 2018, the District resumed its membership in the DuPage River Salt Creek Workgroup (DRSCW), which is a non-profit organization formed in 2005 by a group of local communities, WRPs, and environmental organizations to address water quality concerns and implement targeted watershed projects in the Salt Creek and the East and West Branches of the DuPage River Watersheds. The District's membership in the DRSCW proved advantageous when the National Pollutant Discharge Elimination System permits for the Hanover Park and Egan WRPs were reviewed for renewal. As a member of the DRSCW, the permit holder is required to work with other watershed members to determine the most cost-effective means of addressing low dissolved oxygen and condition impairments in the DuPage and Salt Creek watersheds. This stipulation provides environmental benefits to the watershed since the watershed projects are given priority over other construction projects. It also provides financial benefits to the District since the phosphorus limit requirements for the Egan and Hanover Park WRPs will not take effect for at least 10 years while the DRSCW projects are being implemented and their impacts on the waterway are evaluated.

- **Information Technology**

The importance of technology in a WRP continues to increase so it is critical to invest in this area. In 2021, funds are provided for upgrading the department's distributed control systems, which are vital to running a WRP efficiently and effectively. A distributed control system (DCS) is an automated control system that is distributed throughout the WRP to provide commands to process equipment. The system provides a framework for programming, simulating, and testing the distributed network, thus enabling staff to monitor and control online processes from a remote location. Hardware and software upgrades will be implemented at the Lockport Powerhouse and the Main Office Building Waterways Control Center, which will increase the reliability of the system that manages the Chicago Area Waterways, essential for navigation, stormwater conveyance, and water quality. Hardware and software upgrades will also be implemented at the O'Brien and Stickney WRPs to eliminate a portion of the network that has become obsolete. The upgrade will include the most recent security features to comply with newly instituted regulations. A two-year project to upgrade the DCS in the Calumet Service Area will also be completed in 2021. The department will continue to invest in DCS in all service areas to ensure system dependability and improved user interface. Additional DCS projects are in development.

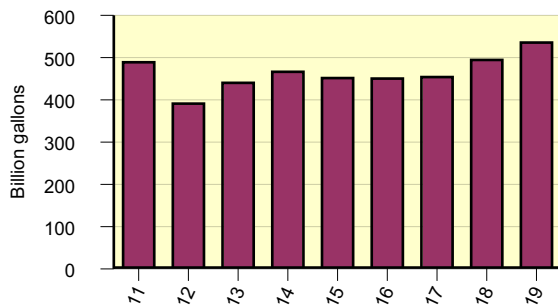
60000 M&O - ALL DIVISIONS

OBJECTIVES AND PROGRAM SUMMARY

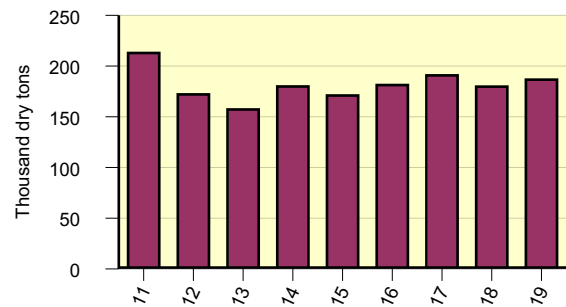
OBJECTIVES BY PRIORITY:

	Cost	Percent
1. COLLECTION & TREATMENT: The M&O Department will collect and treat approximately 512.8 billion gallons of wastewater through its seven treatment facilities and through a contract agreement with the Fox River Water Reclamation District.	\$ 136,628,275	64.9%
2. SOLIDS PROCESSING: The M&O Department will remove and process approximately 191,500 dry tons of concentrated sewage through various systems, including heated digestion, centrifuging, concentration, and aging low solids sludge and centrifuge cake in lagoons.	\$ 40,447,656	19.2%
3. SOLIDS UTILIZATION: The M&O Department will utilize approximately 100,000 dry tons of biosolids for application at final utilization sites, such as farm applications and daily and final cover at sanitary landfills.	\$ 24,910,514	11.8%
4. FLOOD & POLLUTION CONTROL: The M&O Department, in cooperation with local communities, will strive to minimize local area flooding and pollution of Lake Michigan through continuous control of the water levels in 76.1 miles of canals and 532 miles of small streams and rivers, and through the operation of 37 detention reservoirs, of which 34 are dedicated solely to stormwater retention. It will also work to maintain the quality of the waterways system and associated District properties through the activities of the debris boats and the channel maintenance crews.	\$ 5,258,977	2.5%
5. GENERAL SUPPORT: The M&O Department provides technical and administrative support for other departments indirectly related to the operational activities of Collection & Treatment, Solids Processing, Flood & Pollution Control, and Solids Utilization.	\$ 3,233,178	1.6%
Totals	\$ 210,478,600	100.0%

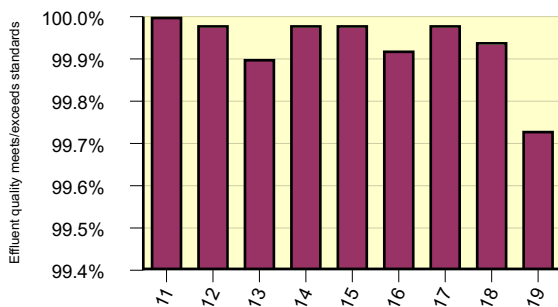
Collection & Treatment



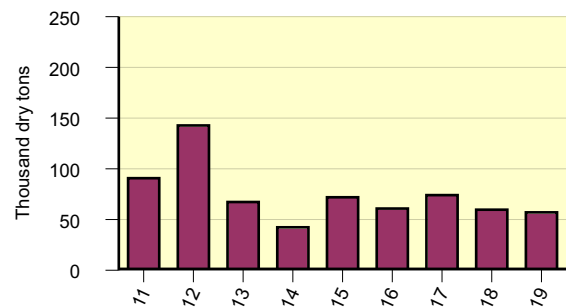
Solids Processing



NPDES System Permit Compliance



Solids Utilization



60000 M&O - ALL DIVISIONS

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change	
Number	Name	Actual	FTEs	Dollars	Dollars	Percent
1000	Collection	\$ 51,468,781	2021 245	\$ 53,003,858	\$ 835,114	1.6
			2020 247	\$ 52,168,744		
1100	Surface Interceptor Systems	\$ 4,253,943	2021 27	\$ 4,035,200	\$ 254,200	6.7
			2020 27	\$ 3,781,000		
1200	Tunnel and Reservoir System	\$ 12,802,672	2021 42	\$ 12,213,900	\$ 439,600	3.7
			2020 43	\$ 11,774,300		
1300	Pumping Station Facilities	\$ 15,793,075	2021 74	\$ 17,085,400	\$ 457,500	2.8
			2020 76	\$ 16,627,900		
1900	Collection - Indirect Costs	\$ 18,619,091	2021 102	\$ 19,669,358	\$ (316,186)	(1.6)
			2020 101	\$ 19,985,544		
2000	Treatment	\$ 70,548,260	2021 380	\$ 82,211,717	\$ 3,906,809	5.0
			2020 383	\$ 78,304,908		
2000	Pre-Treatment	\$ 3,599,034	2021 28	\$ 3,565,500	\$ 86,100	2.5
			2020 29	\$ 3,479,400		
2100	Primary Treatment	\$ 3,443,081	2021 37	\$ 3,452,000	\$ (180,200)	(5.0)
			2020 38	\$ 3,632,200		
2200	Secondary Treatment	\$ 22,422,036	2021 93	\$ 24,802,000	\$ 1,120,400	4.7
			2020 95	\$ 23,681,600		
2300	Tertiary Treatment	\$ 3,937,938	2021 17	\$ 3,800,300	\$ —	—
			2020 17	\$ 3,800,300		
2900	Treatment - Indirect Costs	\$ 37,146,171	2021 205	\$ 46,591,917	\$ 2,880,509	6.6
			2020 204	\$ 43,711,408		
3000	Solids Processing	\$ 37,630,975	2021 201	\$ 40,447,656	\$ 567,755	1.4
			2020 203	\$ 39,879,901		
3100	Thickening	\$ 6,392,835	2021 39	\$ 6,738,100	\$ (4,900)	(0.1)
			2020 39	\$ 6,743,000		
3200	Stabilization	\$ 6,506,822	2021 42	\$ 6,470,700	\$ 6,400	0.1
			2020 43	\$ 6,464,300		
3300	Dewatering	\$ 11,754,326	2021 40	\$ 12,617,000	\$ (12,400)	(0.1)
			2020 42	\$ 12,629,400		
3900	Solids Processing - Indirect Costs	\$ 12,976,992	2021 80	\$ 14,621,856	\$ 578,655	4.1
			2020 79	\$ 14,043,201		

Note: Explanations of significant changes are provided by individual division.

60000 M&O - ALL DIVISIONS

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change	
Number	Name	Actual	FTEs	Dollars	Dollars	Percent
4000	Flood & Pollution Control	\$ 4,633,164	2021 23	\$ 5,258,977	\$ 295,869	6.0
			2020 22	\$ 4,963,108		
4200	Waterways Control and Stormwater Reservoirs	\$ 2,654,567	2021 18	\$ 2,411,000	\$ 2,400	0.1
			2020 18	\$ 2,408,600		
4210	Maintenance of Waterways	\$ 162,978	2021 —	\$ 158,600	\$ (70,500)	(30.8)
			2020 —	\$ 229,100		
4300	Stormwater Management	\$ 31,983	2021 —	\$ 31,800	\$ (200)	(0.6)
			2020 —	\$ 32,000		
4400	Aeration Facilities	\$ 982,068	2021 2	\$ 1,139,000	\$ 16,600	1.5
			2020 2	\$ 1,122,400		
4900	Flood & Pollution Control - Indirect Costs	\$ 801,568	2021 3	\$ 1,518,577	\$ 347,569	29.7
			2020 2	\$ 1,171,008		
5000	Solids Utilization	\$ 20,760,600	2021 39	\$ 24,910,514	\$ 1,140,841	4.8
			2020 39	\$ 23,769,673		
5100	Solids Drying	\$ 6,022,950	2021 9	\$ 6,159,600	\$ (200)	—
			2020 10	\$ 6,159,800		
5200	Solids Distribution	\$ 10,054,336	2021 8	\$ 12,658,100	\$ 595,800	4.9
			2020 7	\$ 12,062,300		
5900	Solids Utilization - Indirect Costs	\$ 4,683,314	2021 22	\$ 6,092,814	\$ 545,241	9.8
			2020 22	\$ 5,547,573		
7000	General Support (excluding program numbers 7368 & 7604)	\$ 3,063,883	2021 20	\$ 3,233,178	\$ 8,512	0.3
			2020 20	\$ 3,224,666		
7368	Real Estate Environmental Assessment	\$ 379,756	2021 —	\$ —	\$ (730,400)	(100.0)
			2020 2	\$ 730,400		
7604	Social Security and Medicare Contributions	\$ 1,325,541	2021 —	\$ 1,412,700	\$ 39,500	2.9
			2020 —	\$ 1,373,200		
Totals		\$ 189,810,960	2021 908	\$ 210,478,600	\$ 6,064,000	3.0 %
			2020 916	\$ 204,414,600		

* The 2021 position total for the M&O Department is 935, which includes 27 positions funded by the Stormwater Management Fund.

Note: Explanations of significant changes are provided by individual division.

60000 M&O - ALL DIVISIONS

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated
1000-2900	Collection & Treatment				
	Collect and Treat Wastewater at Seven Treatment Facilities and Through a Contract Agreement with the Fox River Water Reclamation District	Mil. Gallons	538,672	496,150	512,800
		Cost	\$ 122,017,041	\$ 130,473,652	\$ 135,215,575
		Cost/Mil. Gallons	\$ 226.51	\$ 262.97	\$ 263.68
3000	Solids Processing				
	Remove and Process Solids from Concentrated Sewage Using Systems Including Heated Digestion, Centrifuging, Concentration, and Aging Low Solids Sludge and Centrifuge Cake in Lagoons	Dry Tons	187,886	188,300	191,500
		Cost	\$ 37,630,975	\$ 39,879,901	\$ 40,447,656
		Cost/Dry Ton	\$ 200.29	\$ 211.79	\$ 211.21
4000	Flood & Pollution Control				
	Operation and Maintenance of the Waterways to Minimize Area Flooding and Pollution				
4200	Minimize Area Flooding and Pollution of Lake Michigan Through the Continuous Control of Water Levels in Major Rivers and Canals	Cost	\$ 911,722	\$ 933,900	\$ 916,700
	Generate Electrical Energy at Lockport Powerhouse to Obtain Approximately \$0.8 million in Revenue	kWh	41,131,268	40,000,000	26,700,000
		Cost	\$ 546,848	\$ 556,200	\$ 532,900
		Cost/kWh	\$ 0.0133	\$ 0.0139	\$ 0.0200
		* Revenue Generated	\$ 1,386,344	\$ 1,200,000	\$ 800,000
	Minimize Diversion of Lake Michigan Water in Accordance with the U.S. Supreme Court Decree	Mil. Gal./Year Diversion	51,849	60,152	60,152
		Cost	\$ 460,162	\$ 410,300	\$ 407,900
		Cost/Mil. Gal./Year	\$ 8.88	\$ 6.82	\$ 6.78
	Operation of Detention Reservoirs	Reservoirs	37	37	37
		Cost	\$ 591,112	\$ 508,200	\$ 553,500
		Cost/Reservoir	\$ 15,976.00	\$ 13,735.14	\$ 14,959.46
4210	Maintenance of the Waterways and Canal Banks Within the Jurisdiction of the District. Activities Include Debris Removal, Insect and Rodent Control, Bridge Repairs, and Aeration Costs.	Cost	\$ 307,701	\$ 229,100	\$ 158,600
4300	Stormwater Management	Cost	\$ 31,983	\$ 32,000	\$ 31,800
4400	Aeration Facilities	Cost	\$ 982,068	\$ 1,122,400	\$ 1,139,000
4900	Flood & Pollution Control - Indirect Costs	Cost	\$ 801,568	\$ 1,171,008	\$ 1,518,577
5000	Solids Drying/Utilization				
	Utilize Biosolids for Application at Final Utilization Sites Such as the Land Reclamation Fields in Fulton County, the Fischer Farm, Daily and Final Cover at Sanitary Landfills, and Other Farm Applications	Dry Tons	58,369	100,000	100,000
		Cost	\$ 16,632,512	\$ 18,956,973	\$ 19,725,114
		Cost/Dry Ton	\$ 284.95	\$ 189.57	\$ 197.25
5271	Pelletizer Disposal	Dry Tons	35,548	40,000	40,000
	Control Management and Disposal of Solids by Private Contracts	Cost	\$ 4,128,088	\$ 4,812,700	\$ 5,185,400
		Cost/Dry Ton	\$ 116.13	\$ 120.32	\$ 129.64
7000	General Support (excluding program numbers 7368 & 7604)				
	Technical and Administrative Support for Other Departments' Activities Indirectly Related to the Operational Activities of Collection & Treatment, Solids Processing, Flood & Pollution Control, and Solids Utilization	Cost	\$ 3,063,883	\$ 3,224,666	\$ 3,233,178
7368	Real Estate Environmental Assessment	Cost	\$ 379,756	\$ 730,400	\$ —
7604	Social Security and Medicare Contributions	Cost	\$ 1,325,541	\$ 1,373,200	\$ 1,412,700
	Departmental Totals		\$ 189,810,960	\$ 204,414,600	\$ 210,478,600

Note: Explanations of significant changes are provided by individual division.

* Revenue generated not included in total costs.

Account Number	Account Name	LINE ITEM ANALYSIS						
		2019		2020			2021	
		Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
101 60000	Fund: Corporate Department: Maintenance & Operations Division: All Divisions							
601010	Salaries of Regular Employees	\$ 89,390,821	\$ 93,317,900	\$ 93,270,900	\$ 67,703,849	\$ 92,081,600	\$ 92,967,100	\$ —
601060	Compensation Plan Adjustments	5,504,676	5,857,700	5,857,700	4,214,317	5,796,900	5,671,700	—
601070	Social Security and Medicare Contributions	1,325,541	1,373,200	1,373,200	1,043,617	1,329,700	1,412,700	—
601080	Salaries of Nonbudgeted Employees	47,233	5,300	52,300	14,979	55,500	107,000	—
601100	Tuition and Training Payments	99,845	209,800	209,800	26,997	44,800	193,200	—
100	TOTAL PERSONAL SERVICES	96,368,116	100,763,900	100,763,900	73,003,759	99,308,500	100,351,700	—
612010	Travel	12,081	25,900	25,900	1,941	4,900	24,000	—
612030	Meals and Lodging	55,808	67,400	60,400	22,889	36,700	59,400	—
612040	Postage, Freight, and Delivery Charges	—	200	200	—	200	—	—
612050	Compensation for Personally-Owned Automobiles	128,483	116,100	116,100	56,302	86,100	121,100	—
612080	Motor Vehicle Operating Services	706	1,400	1,400	96	500	1,600	—
612150	Electrical Energy	38,764,073	38,361,700	38,361,700	22,885,454	37,954,800	37,423,700	—
612160	Natural Gas	2,720,031	3,391,300	3,391,300	1,296,060	3,328,400	3,476,600	—
612170	Water and Water Services	2,085,398	2,184,300	2,184,300	1,230,120	2,026,600	2,332,500	—
612210	Communication Services	—	3,000	3,000	—	—	—	—
612240	Testing and Inspection Services	111,192	190,500	190,500	182,218	132,600	244,500	—
612330	Rental Charges	146,729	172,000	172,000	141,653	153,800	143,200	—
612410	Governmental Service Charges	3,769,147	3,904,200	3,904,200	2,469,880	3,737,900	4,415,300	—
612420	Maintenance of Grounds and Pavements	460,060	1,375,800	1,357,800	1,350,279	1,120,000	1,436,800	—
612430	Payments for Professional Services	118,806	602,500	602,500	555,219	555,300	281,900	—
612490	Contractual Services, N.O.C.	482,815	573,500	573,500	519,267	447,300	572,300	—
612520	Waste Material Disposal Charges	10,550,805	12,045,600	12,740,600	12,733,833	11,342,400	12,200,600	—
612530	Farming Services	18,200	60,000	40,000	40,000	40,000	90,000	—
612590	Sludge Disposal	3,388,793	4,100,000	4,100,000	4,100,000	3,878,100	4,500,000	—
612600	Repairs to Collection Facilities	3,343,900	3,847,800	3,448,900	3,374,850	2,316,100	4,097,400	—
612620	Repairs to Waterway Facilities	41,746	72,400	72,400	68,905	65,500	77,600	—
612650	Repairs to Process Facilities	5,986,662	9,700,300	9,024,200	8,410,292	4,677,800	12,064,100	—
612670	Repairs to Railroads	398,984	396,700	396,700	371,014	376,900	642,800	—
612680	Repairs to Buildings	743,056	1,291,700	1,266,700	968,257	843,800	1,333,800	—
612760	Repairs to Material Handling and Farming Equipment	274,418	310,200	760,200	725,641	690,000	725,500	—
612780	Safety Repairs and Services	266,468	336,600	336,600	333,662	324,500	379,500	—
612790	Repairs to Marine Equipment	35,867	66,500	66,500	66,500	58,600	—	—

Account Number	Account Name	LINE ITEM ANALYSIS						
		2019		2020			2021	
		Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
101 60000	Fund: Corporate Department: Maintenance & Operations Division: All Divisions							
612820	Computer Software Maintenance	8,356	9,000	9,000	8,774	8,600	9,000	—
612860	Repairs to Vehicle Equipment	152,459	143,600	143,600	143,600	135,600	147,000	—
612990	Repairs, N.O.C.	4,545	27,500	27,500	14,900	21,200	27,500	—
200	TOTAL CONTRACTUAL SERVICES	74,069,588	83,377,700	83,377,700	62,071,606	74,364,200	86,827,700	—
623030	Metals	32,377	30,500	30,500	25,329	25,900	30,500	—
623070	Electrical Parts and Supplies	2,546,617	2,412,500	2,332,500	2,040,437	2,054,600	3,146,500	—
623090	Plumbing Accessories and Supplies	695,473	769,100	686,600	545,884	549,200	787,300	—
623110	Hardware	5,386	10,900	10,900	6,237	6,300	6,900	—
623130	Buildings, Grounds, Paving Materials, and Supplies	126,174	147,800	147,800	126,182	122,000	166,800	—
623170	Fiber, Paper, and Insulation Materials	5,335	13,500	13,500	5,300	13,000	13,500	—
623190	Paints, Solvents, and Related Materials	4,500	6,400	28,900	26,116	5,800	6,400	—
623250	Vehicle Parts and Supplies	170,487	168,000	168,000	165,604	156,400	200,000	—
623270	Mechanical Repair Parts	3,212,278	3,874,500	4,014,500	3,782,127	3,600,000	4,747,400	—
623300	Manhole Materials	18,608	5,000	5,000	3,990	4,500	70,000	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	38,715	45,300	45,300	35,529	41,800	49,800	—
623530	Farming Supplies	2,966	4,000	4,000	—	3,100	4,000	—
623560	Processing Chemicals	9,935,750	10,967,300	10,942,300	9,545,870	9,427,000	11,604,500	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	26,297	30,900	30,900	27,750	30,000	36,100	—
623660	Cleaning Supplies	1,731	2,200	2,200	1,792	2,000	6,000	—
623680	Tools and Supplies	246,301	225,200	225,200	218,220	187,300	245,100	—
623700	Wearing Apparel	245	6,600	6,600	1,950	5,900	4,100	—
623780	Safety and Medical Supplies	35,561	50,700	50,700	40,576	39,700	69,200	—
623800	Computer Software	31,766	66,000	66,000	63,796	65,200	36,300	—
623810	Computer Supplies	67,854	36,600	36,600	31,968	28,500	24,500	—
623820	Fuel	289,125	327,900	352,900	352,257	311,500	315,600	—
623840	Gases	147	600	600	600	300	600	—
623850	Communications Supplies	14,782	15,000	15,000	12,926	12,600	15,000	—
623860	Lubricants	9,071	8,200	14,300	9,082	10,700	16,200	—
623990	Materials and Supplies, N.O.C.	86,422	91,300	85,200	60,894	72,600	106,500	—
300	TOTAL MATERIALS AND SUPPLIES	17,603,970	19,316,000	19,316,000	17,130,416	16,775,900	21,708,800	—
634600	Equipment for Collection Facilities	50,476	40,000	1,000	—	—	90,000	—

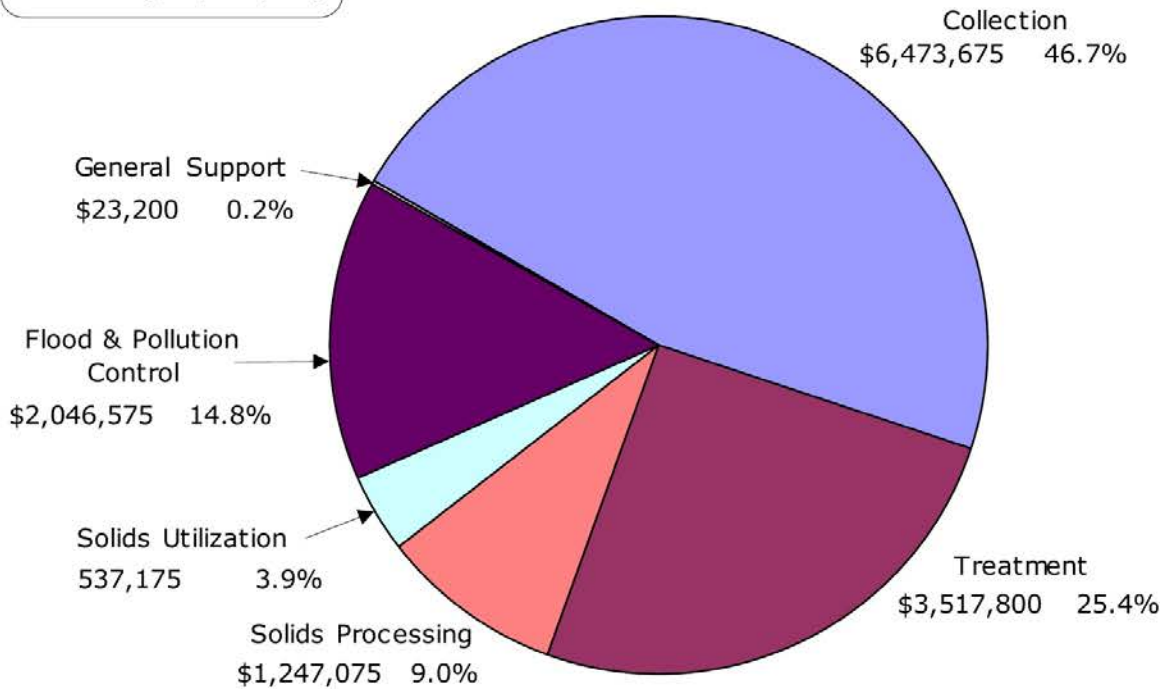
101 Fund: Corporate 60000 Department: Maintenance & Operations Division: All Divisions		LINE ITEM ANALYSIS						
Account Number	Account Name	2019	2020				2021	
		Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
634650	Equipment for Process Facilities	271,846	274,000	224,400	216,471	214,600	484,400	—
634670	Railroad Equipment	20,779	—	—	—	—	25,000	—
634760	Material Handling and Farming Equipment	292,990	44,500	60,500	60,216	44,300	333,000	—
634790	Marine Equipment	78,500	—	—	—	—	—	—
634810	Computer Equipment	138,066	—	—	—	—	—	—
634860	Vehicle Equipment	872,413	511,000	574,100	524,106	537,000	568,000	—
634990	Machinery and Equipment, N.O.C.	44,217	87,500	97,000	92,796	81,900	90,000	—
400	TOTAL MACHINERY AND EQUIPMENT	1,769,287	957,000	957,000	893,589	877,800	1,590,400	—
TOTAL MAINTENANCE & OPERATIONS		\$189,810,961	\$ 204,414,600	\$ 204,414,600	\$ 153,099,370	\$191,326,400	\$210,478,600	\$ —

NOTES: 1. Amounts may not add up due to rounding.
 2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.
 Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.
 3. For the M&O Department, Expenditure (Committed Budget plus Disbursement) may exceed Adjusted Appropriation for a specific division as funding is controlled at the M&O Overall department-level.

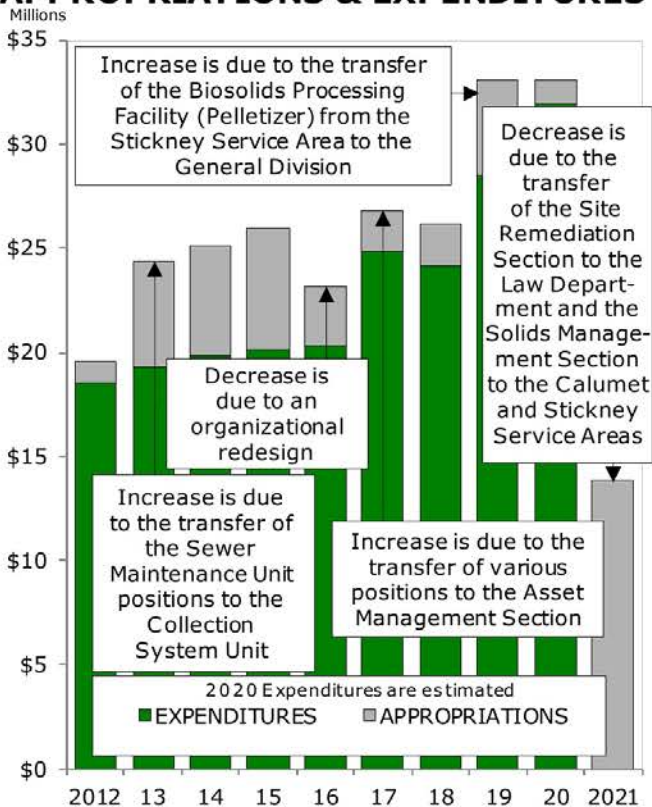
MAINTENANCE & OPERATIONS – GENERAL DIVISION

2021 \$13,845,500
 2020 \$33,059,200
 Decrease (\$19,213,700)

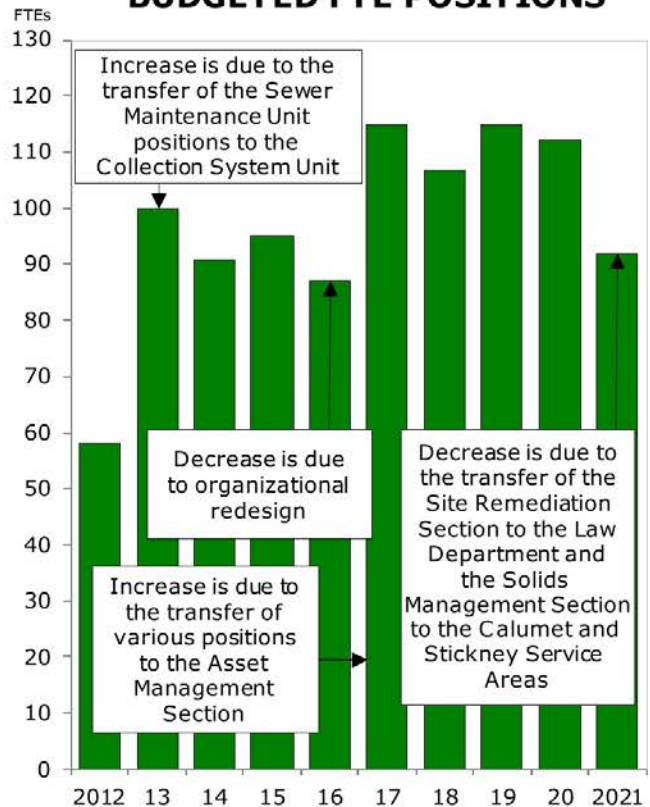
FUNCTIONS



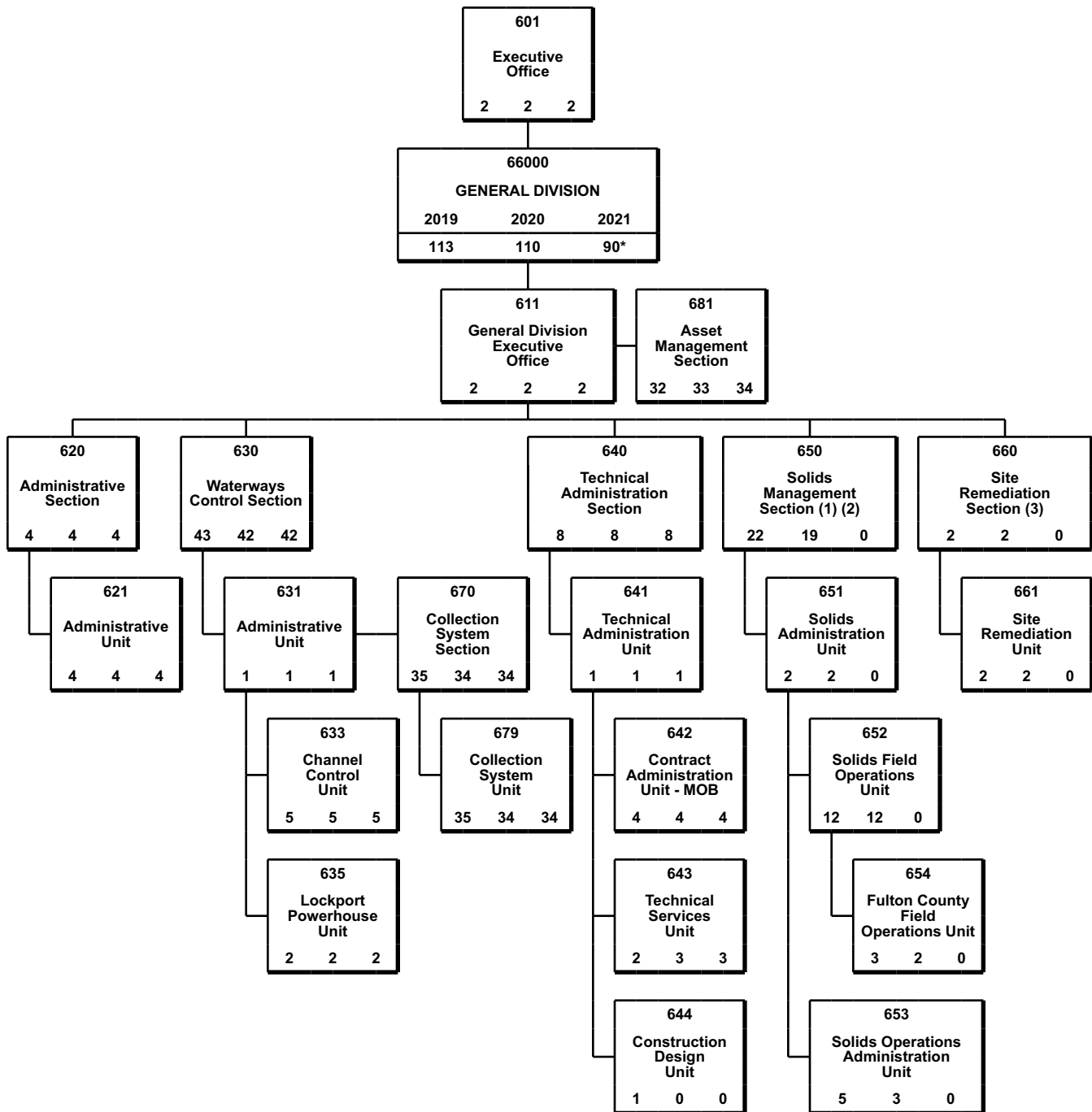
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



MAINTENANCE & OPERATIONS - GENERAL DIVISION



* In 2021, 18 positions in the General Division are funded by the Stormwater Management Fund while the operations remain in the Maintenance & Operations Department: two in Unit 634, six in Unit 636, four in Unit 639, and six in Unit 679.

- (1) Effective 01/01/21, five positions from Section 650 were transferred to Section 850 in the Maintenance & Operations - Calumet Service Area.
- (2) Effective 01/01/21, 14 positions from Section 650 were transferred to Section 950 in the Maintenance & Operations - Stickney Service Area.
- (3) Effective 01/01/21, Section 660 positions were transferred to Section 325 in the Law Department.

66000 M&O - GENERAL DIVISION

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:	Cost	Percent
1. COLLECTION & TREATMENT: The General Division provides technical and administrative support to the Maintenance & Operations Department's seven treatment facilities. It provides management and coordination of the collection system related activities.	\$ 9,991,475	72.1%
2. SOLIDS PROCESSING: The General Division provides administrative support for the removal and processing of solids from concentrated sewage through various systems including heated digestion, centrifuging, air drying, and conditioning of low solids sludge and centrifuge cake in lagoons.	\$ 1,247,075	9.0%
3. SOLIDS UTILIZATION: The General Division provides administrative support for management and coordination of biosolids processing and utilization of District-wide activities.	\$ 537,175	3.9%
4. FLOOD & POLLUTION CONTROL: The Waterways Control Section minimizes flooding and pollution of Lake Michigan through continuous control of the water levels of major rivers and canals, while limiting diversion of water from the lake in accordance with the U.S. Supreme Court Decree of 1967. In addition, the Waterways Control Section operates the Lockport Powerhouse and will generate an estimated 27 million kWh of electrical energy resulting in approximately \$0.8 million in revenue.	\$ 2,046,575	14.8%
5. GENERAL SUPPORT: The General Division provides technical and administrative support for other departments not directly related to the operational activities of Collection & Treatment, Solids Processing, Solids Utilization, and Flood & Pollution Control.	\$ 23,200	0.2%
Totals	\$ 13,845,500	100.0%

MEASURABLE GOALS:	Unit of Measure	2019 Actual	2020 Estimated	2021 Proposed
1. The operation of the Lockport Powerhouse will generate the equivalent of \$0.8 million worth of electrical energy revenue in 2021.	kWh Generated	41,131,268	40,000,000	26,700,000
	<i>* Revenue Generated</i>	<i>\$ 1,386,344</i>	<i>\$ 1,200,000</i>	<i>\$ 800,000</i>
2. The General Division will minimize diversion of Lake Michigan water in accordance with U.S. Supreme Court Decree, through control of water levels.	Mil. Gal./Yr. Diversion	51,849	60,152	60,152
3. The Solids Management Section will oversee the utilization of 0 dry tons of biosolids in 2021. (North Service Area's 1,000 dry tons of solids remain in that division.)	Dry Tons	57,600	99,000	—
<i>* Revenue generated not included in total costs.</i>				

66000 M&O - GENERAL DIVISION

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change	
Number	Name	Actual	FTEs	Dollars	Dollars	Percent
1000	Collection	\$ 5,716,000	2021 44	\$ 6,473,675	\$ 1,585	—
			2020 44	\$ 6,472,090		
1100	Surface Interceptor Systems	\$ 2,905,743	2021 20	\$ 3,015,100	\$ 266,000	9.7
			2020 20	\$ 2,749,100		
1200	Tunnel and Reservoir System	\$ 609,370	2021 7	\$ 1,009,700	\$ 2,800	0.3
			2020 7	\$ 1,006,900		
1300	Pumping Station Facilities	\$ 695,046	2021 6	\$ 690,300	\$ (22,600)	(3.2)
			2020 6	\$ 712,900		
1900	Collection - Indirect Costs	\$ 1,505,841	2021 11	\$ 1,758,575	\$ (244,615)	(12.2)
			2020 11	\$ 2,003,190		
2000	Treatment	\$ 2,905,714	2021 24	\$ 3,326,000	\$ (20,840)	(0.6)
			2020 23	\$ 3,346,840		
2000	Pre-Treatment	\$ 100,254	2021 1	\$ 123,200	\$ (2,300)	(1.8)
			2020 1	\$ 125,500		
2100	Primary Treatment	\$ 160,595	2021 2	\$ 161,400	\$ (7,000)	(4.2)
			2020 2	\$ 168,400		
2200	Secondary Treatment	\$ 380,256	2021 3	\$ 414,900	\$ 1,600	0.4
			2020 3	\$ 413,300		
2300	Tertiary Treatment	\$ 63,308	2021 1	\$ 60,300	\$ (4,700)	(7.2)
			2020 1	\$ 65,000		
2900	Treatment - Indirect Costs	\$ 2,201,301	2021 17	\$ 2,566,200	\$ (8,440)	(0.3)
			2020 16	\$ 2,574,640		
3000	Solids Processing	\$ 1,182,764	2021 8	\$ 1,247,075	\$ (83,115)	(6.2)
			2020 9	\$ 1,330,190		
3100	Thickening	\$ 231,117	2021 2	\$ 247,600	\$ 16,900	7.3
			2020 2	\$ 230,700		
3200	Stabilization	\$ 121,088	2021 1	\$ 110,900	\$ (10,100)	(8.3)
			2020 1	\$ 121,000		
3300	Dewatering	\$ 90,871	2021 —	\$ 47,000	\$ (47,700)	(50.4)
			2020 1	\$ 94,700		
3900	Solids Processing - Indirect Costs	\$ 739,688	2021 5	\$ 841,575	\$ (42,215)	(4.8)
			2020 5	\$ 883,790		

a) Increase is due to an increased demand for manhole repairs (\$100,000), collection systems cleaning (\$93,300), and manhole cover and frames (\$65,000).

b) Decrease is due to a reduced demand for two diesel step vans (\$335,000).

c) Decrease is due to a reduced demand for struvite control descaler (\$25,000) and the transfer out of one FTE position (\$22,700).

66000 M&O - GENERAL DIVISION

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
4000	Flood & Pollution Control	\$ 2,019,008	2021	13 \$ 2,046,575	\$ (69,715)	(3.3)	
			2020	12 \$ 2,116,290			
4200	Waterways Control and Stormwater Reservoirs	\$ 1,485,076	2021	10 \$ 1,451,300	\$ (47,600)	(3.2)	
			2020	10 \$ 1,498,900			
4210	Maintenance of Waterways	\$ 162,978	2021	— \$ 46,500	\$ (72,100)	(60.8)	d)
			2020	— \$ 118,600			
4300	Stormwater Management	\$ 31,983	2021	— \$ 31,800	\$ (200)	(0.6)	
			2020	— \$ 32,000			
4400	Aeration Facilities	\$ 131,421	2021	1 \$ 151,200	\$ 1,400	0.9	
			2020	1 \$ 149,800			
4900	Flood & Pollution Control - Indirect Costs	\$ 207,550	2021	2 \$ 365,775	\$ 48,785	15.4	e)
			2020	1 \$ 316,990			
5000	Solids Utilization	\$16,001,566	2021	3 \$ 537,175	\$ (18,251,015)	(97.1)	
			2020	21 \$ 18,788,190			
5100	Solids Drying	\$ 5,343,420	2021	— \$ —	\$ (5,628,400)	(100.0)	f)
			2020	5 \$ 5,628,400			
5200	Solids Distribution	\$ 9,030,859	2021	— \$ —	\$ (10,983,000)	(100.0)	g)
			2020	6 \$ 10,983,000			
5900	Solids Utilization - Indirect Costs	\$ 1,627,287	2021	3 \$ 537,175	\$ (1,639,615)	(75.3)	h)
			2020	10 \$ 2,176,790			
7000	General Support (excludes program numbers 7368 and 7604)	\$ 92,665	2021	— \$ 23,200	\$ (61,100)	(72.5)	i)
			2020	1 \$ 84,300			
7368	Real Estate Environmental Assessment	\$ 379,756	2021	— \$ —	\$ (730,400)	(100.0)	j)
			2020	2 \$ 730,400			
7604	Social Security and Medicare Contributions	\$ 181,379	2021	— \$ 191,800	\$ 900	0.5	
			2020	— \$ 190,900			
Totals		\$28,478,852	2021	92 \$ 13,845,500	\$ (19,213,700)	(58.1)%	*
			2020	112 \$ 33,059,200			

d) Decrease is due to the transfer of pontoon boat maintenance to the Stormwater Management Fund (\$66,500).

e) Increase is due to the procurement of an electrical fork lift (\$40,000).

f) Decrease is due to the transfer of the Solids Management Section to the Calumet and Stickney Service Areas (\$5,628,400).

g) Decrease is due to the transfer of the Solids Management Section to the Calumet and Stickney Service Areas (\$10,983,000).

h) Decrease is due to the transfer of the Solids Management Section to the Calumet and Stickney Service Areas (\$1,520,100).

i) Decrease is due to the transfer out of one FTE position (\$60,400).

j) Decrease is due to the transfer of the Site Remediation Section to the Law Department (\$730,400).

* The 2021 position total for the General Division is 92, with 18 positions budgeted in the Stormwater Management Fund.

66000 M&O - GENERAL DIVISION

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
1000-2900	Collection & Treatment					
	Technical and Administrative Support for Collection and Treatment Activities	Cost	\$ 8,621,714	\$ 9,818,930	\$ 9,799,675	
3000	Solids Processing					
	Technical and Administrative Support for Solids Removal and Processing	Cost	\$ 1,182,764	\$ 1,330,190	\$ 1,247,075	
4000	Flood & Pollution Control					
4200	Operation and Maintenance of the Waterways to Minimize Area Flooding and Pollution	Cost	\$ 911,722	\$ 933,900	\$ 916,700	
	Generate Electrical Energy at Lockport Powerhouse to Obtain Approximately \$0.8 million in Revenue	kWh	41,131,268	40,000,000	26,700,000	a)
		Cost	\$ 178,416	\$ 217,000	\$ 189,100	
		Cost/kWh	\$ 0.0043	\$ 0.0054	\$ 0.0071	a)
		* Revenue Generated	\$ 1,386,344	\$ 1,200,000	\$ 800,000	a)
	Minimize Diversion of Lake Michigan Water in Accordance with the U.S. Supreme Court Decree	Mil. Gal./Year	51,849	60,152	60,152	
		Cost	\$ 394,938	\$ 348,000	\$ 345,500	
		Cost/Mil. Gal./Year	\$ 7.62	\$ 5.79	\$ 5.74	
4210	Maintenance of the Waterways and Canal Banks Within the Jurisdiction of the District. Activities Include Debris Removal, Insect and Rodent Control, Bridge Repairs, and Aeration Costs	Cost	\$ 162,978	\$ 118,600	\$ 46,500	b)
4300	Stormwater Management	Cost	\$ 31,983	\$ 32,000	\$ 31,800	
4400	Aeration Facilities	Cost	\$ 131,421	\$ 149,800	\$ 151,200	
4900	Flood & Pollution Control - Indirect Costs	Cost	\$ 207,550	\$ 316,990	\$ 365,775	c)
5000	Solids Drying/Utilization					
	Management and Coordination of the Solids Utilization Program	Dry Tons	57,600	99,000	—	d)
		Cost	\$ 12,612,773	\$ 14,688,190	\$ 537,175	d)
		Cost/Dry Ton	\$ 218.97	\$ 148.37	\$ —	d)
5271	Pelletizer Disposal	Dry Tons	35,548	40,000	—	
	Control Management and Disposal of Solids by Private Contracts	Cost	\$ 3,388,793	\$ 4,100,000	\$ —	e)
		Cost/Dry Ton	\$ 95.33	\$ 102.50	\$ —	e)

- a) Decrease is due to the equipment downtime while infrastructure improvements are being made for the replacement of tailrace stop logs, headrace gates, and the equipment at the Lockport Powerhouse (\$400,000).
- b) Decrease is due to the transfer of pontoon boat maintenance to the Stormwater Management Fund (\$66,500).
- c) Increase is due to the procurement of an electrical fork lift (\$40,000).
- d) Decrease is due to the transfer of the Solids Management Section to the Calumet and Stickney Service Areas (\$14,028,300).
- e) Decrease is due to the transfer of the Solids Management Section to the Calumet and Stickney Service Areas (\$4,100,000).

66000 M&O - GENERAL DIVISION

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
7000	General Support (excludes program numbers 7368 and 7604)					
	Technical and Administrative Support for Other Departments' Activities Indirectly Related to the Operational Activities of Collection & Treatment, Solids Processing, Flood & Pollution Control, and Solids Utilization	Cost	\$ 92,665	\$ 84,300	\$ 23,200	f)
7368	Real Estate Environmental Assessment	Cost	\$ 379,756	\$ 730,400	\$ —	g)
7604	Social Security and Medicare Contributions	Cost	\$ 181,379	\$ 190,900	\$ 191,800	
Division Totals			\$ 28,478,852	\$ 33,059,200	\$ 13,845,500	
<p>f) Decrease is due to the transfer out of one FTE position (\$60,400).</p> <p>g) Decrease is due to the transfer of the Site Remediation Section to the Law Department (\$730,400).</p> <p>* Revenue generated not included in total costs.</p>						

Account Number	Account Name	LINE ITEM ANALYSIS						
		2019		2020			2021	
		Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
101 66000	Fund: Corporate Department: Maintenance & Operations Division: General							
601010	Salaries of Regular Employees	\$ 12,361,245	\$ 12,823,900	\$ 12,823,900	\$ 9,172,621	\$ 12,568,200	\$ 10,507,600	\$ —
601060	Compensation Plan Adjustments	650,579	872,000	872,000	544,594	860,000	772,100	—
601070	Social Security and Medicare Contributions	181,379	190,900	190,900	140,411	184,100	191,800	—
601080	Salaries of Nonbudgeted Employees	—	3,800	—	—	—	3,800	—
601100	Tuition and Training Payments	28,773	35,300	35,300	4,193	6,000	34,500	—
100	TOTAL PERSONAL SERVICES	13,221,976	13,925,900	13,922,100	9,861,819	13,618,300	11,509,800	—
612010	Travel	3,034	4,600	4,600	232	1,400	400	—
612030	Meals and Lodging	6,361	13,500	13,500	804	2,200	2,100	—
612040	Postage, Freight, and Delivery Charges	—	200	200	—	200	—	—
612050	Compensation for Personally-Owned Automobiles	11,669	9,100	9,100	5,776	7,600	9,100	—
612080	Motor Vehicle Operating Services	61	300	300	—	—	300	—
612150	Electrical Energy	76,135	83,000	83,000	38,171	76,300	54,000	—
612160	Natural Gas	8,469	9,300	9,300	4,382	8,100	3,800	—
612170	Water and Water Services	76,072	174,800	174,800	71,785	163,600	35,100	—
612240	Testing and Inspection Services	5,738	9,100	9,100	9,100	8,600	4,100	—
612330	Rental Charges	8,339	8,600	8,600	8,550	8,400	—	—
612410	Governmental Service Charges	16,700	17,700	17,700	14,500	17,100	15,700	—
612420	Maintenance of Grounds and Pavements	289,433	622,300	620,700	615,600	536,000	18,000	—
612430	Payments for Professional Services	100,266	583,500	583,500	536,679	536,700	87,900	—
612490	Contractual Services, N.O.C.	157,238	189,100	189,100	183,332	183,200	70,000	—
612520	Waste Material Disposal Charges	9,137,851	10,482,200	11,157,200	11,157,083	9,950,600	8,000	—
612590	Sludge Disposal	3,388,793	4,100,000	4,100,000	4,100,000	3,878,100	—	—
612600	Repairs to Collection Facilities	931,769	1,156,700	956,700	938,871	996,700	1,350,000	—
612620	Repairs to Waterway Facilities	41,746	72,400	72,400	68,905	65,500	67,600	—
612650	Repairs to Process Facilities	5,208	34,000	34,000	34,000	30,500	—	—
612680	Repairs to Buildings	13,306	18,000	18,000	17,500	17,500	12,000	—
612760	Repairs to Material Handling and Farming Equipment	223,470	230,500	680,500	659,000	633,000	—	—
612780	Safety Repairs and Services	8,053	16,500	16,500	14,500	14,500	7,500	—
612790	Repairs to Marine Equipment	35,867	66,500	66,500	66,500	58,600	—	—
612820	Computer Software Maintenance	8,356	9,000	9,000	8,774	8,600	—	—
612860	Repairs to Vehicle Equipment	57,692	49,500	49,500	49,500	45,900	42,000	—

Account Number	Account Name	LINE ITEM ANALYSIS						
		2019	2020			2021		
101	Fund: Corporate							
66000	Department: Maintenance & Operations							
	Division: General							
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
612990	Repairs, N.O.C.	2,406	3,000	3,000	800	2,600	3,000	—
200	TOTAL CONTRACTUAL SERVICES	14,614,034	17,963,400	18,886,800	18,604,344	17,251,500	1,790,600	—
623070	Electrical Parts and Supplies	8,872	17,000	17,000	7,531	9,100	26,900	—
623090	Plumbing Accessories and Supplies	14,129	30,500	30,500	26,826	28,500	5,000	—
623110	Hardware	652	2,000	2,000	2,000	1,800	2,000	—
623130	Buildings, Grounds, Paving Materials, and Supplies	20,880	33,500	33,500	29,226	30,500	23,300	—
623250	Vehicle Parts and Supplies	89,790	82,000	82,000	80,827	76,700	2,500	—
623270	Mechanical Repair Parts	34,023	144,300	144,300	143,152	108,300	101,000	—
623300	Manhole Materials	18,608	5,000	5,000	3,990	4,500	70,000	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	4,199	10,000	10,000	6,830	9,500	10,500	—
623530	Farming Supplies	2,966	4,000	4,000	—	3,100	—	—
623560	Processing Chemicals	149,810	232,000	207,000	174,193	195,400	195,000	—
623660	Cleaning Supplies	491	500	500	500	400	—	—
623680	Tools and Supplies	16,374	18,300	18,300	16,532	16,900	30,000	—
623700	Wearing Apparel	—	6,000	6,000	1,950	5,300	3,500	—
623780	Safety and Medical Supplies	7,121	15,000	15,000	14,626	13,300	25,000	—
623810	Computer Supplies	941	13,400	11,000	8,598	5,800	—	—
623820	Fuel	161,416	174,500	217,000	216,899	195,500	—	—
623860	Lubricants	1,615	2,000	2,000	—	1,800	—	—
623990	Materials and Supplies, N.O.C.	26,307	22,400	22,400	16,682	19,400	2,400	—
300	TOTAL MATERIALS AND SUPPLIES	558,193	812,400	827,500	750,362	725,800	497,100	—
634760	Material Handling and Farming Equipment	—	6,500	—	—	6,300	48,000	—
634790	Marine Equipment	78,500	—	—	—	—	—	—
634860	Vehicle Equipment	—	351,000	336,100	325,614	336,100	—	—
634990	Machinery and Equipment, N.O.C.	6,150	—	—	—	—	—	—
400	TOTAL MACHINERY AND EQUIPMENT	84,650	357,500	336,100	325,614	342,400	48,000	—
TOTAL GENERAL DIVISION		\$ 28,478,853	\$ 33,059,200	\$ 33,972,500	\$ 29,542,139	\$ 31,938,000	\$ 13,845,500	\$ —

NOTES: 1. Amounts may not add up due to rounding.
 2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.
 Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.
 3. For the M&O Department, Expenditure (Committed Budget plus Disbursement) may exceed Adjusted Appropriation for a specific division as funding is controlled at the M&O Overall department-level.

Fund: Corporate Dept: Maintenance & Operations Division: General		POSITION ANALYSIS				
		2019	2020		2021	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
601	Executive Office					
EX14	Director of Maintenance & Operations	1	1		1	
EX06	Secretary to Officer	1	1		1	
TOTAL 601	Executive Office	2	2	382,517	2	354,119
611	General Division Executive Office					
HP22	Assistant Director of Maintenance & Operations	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 611	General Division Executive Office	2	2	284,483	2	297,823
620	Administrative Section					
621	Administrative Unit					
HP18	Supervising Budget & Management Analyst	1	1		1	
HP16	Senior Budget & Management Analyst	1	1		1	
HP14	Budget & Management Analyst	2	2		2	
TOTAL 621	Administrative Unit	4	4	491,383	4	491,383
TOTAL 620	Administrative Section	4	4	491,383	4	491,383
630	Waterways Control Section					
631	Administrative Unit					
HP20	Managing Engineer	1	1		1	
TOTAL 631	Administrative Unit	1	1	168,874	1	177,536
633	Channel Control Unit					
NR6271	Systems Dispatcher	5	5		5	
TOTAL 633	Channel Control Unit	5	5	611,104	5	611,104
634	Channel Maintenance Unit					
	(* Number of positions budgeted and funded by the Stormwater Management Fund appears below position count)					
HP18	Principal Engineer	—	—		—	
		(*1)	(*1)		(*1)	
HP15	Associate Civil Engineer	—	—		—	
		(*1)	(*1)		(*1)	
TOTAL 634	Channel Maintenance Unit	—	—	—	—	—
TOTAL	Stormwater Management Fund Positions	(*2)	(*2)		(*2)	

Fund: Corporate Dept: Maintenance & Operations Division: General		POSITION ANALYSIS				
		2019	2020		2021	
				Proposed by the Executive Director		
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
635	Lockport Powerhouse Unit					
NR7394	Powerhouse Mechanic Leadman	1	1		1	
NR7393	Powerhouse Mechanic	1	1		1	
TOTAL 635	Lockport Powerhouse Unit	2	2	253,302	2	253,302
636	Boat Operations Unit					
	(* Number of positions budgeted and funded by the Stormwater Management Fund appears below position count)					
HP14	Engineering Technician V	—	—		—	
		(*2)	(*2)		(*2)	
HP12	Engineering Technician IV	—	—		—	
		(*2)	(*2)		(*2)	
NR8650	Maintenance Laborer Class A Shift	—	—		—	
		(*2)	(*2)		(*2)	
TOTAL 636	Boat Operations Unit	—	—	—	—	—
TOTAL	Stormwater Management Fund Positions	(*6)	(*6)		(*6)	
639	Channel Maintenance Unit					
	(* Number of positions budgeted and funded by the Stormwater Management Fund appears below position count)					
HP15	Associate Civil Engineer	—	—		—	
			(*1)		(*1)	
HP14	Engineering Technician V	—	—		—	
		(*1)	(*1)		(*1)	
HP14	Engineering Technician V #4	—	—		—	
		(*1)				
NR8650	Maintenance Laborer Class A Shift	—	—		—	
		(*2)	(*2)		(*2)	
TOTAL 639	Channel Maintenance Unit	—	—	—	—	—
TOTAL	Stormwater Management Fund Positions	(*4)	(*4)		(*4)	
670	Collection System Section					
679	Collection System Unit					
	(* Number of positions budgeted and funded by the Stormwater Management Fund appears below position count)					
HP17	Senior Engineer	1	1		1	
HP15	Associate Civil Engineer #1	1	—		—	
HP14	Engineering Technician V	6	6		6	
HP11	Engineering Technician III	1	1		1	

Fund: Corporate Dept: Maintenance & Operations Division: General		POSITION ANALYSIS				
		2019	2020		2021	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
NR8331	Laborer Foreman	6 (*1)	6 (*1)		6 (*1)	
NR8650	Maintenance Laborer Class A Shift	14 (*4)	14 (*4)		14 (*4)	
PR6473	Truck Driver	6 (*1)	6 (*1)		6 (*1)	
TOTAL 679	Collection System Unit	35	34	3,103,123	34	3,106,878
TOTAL	Stormwater Management Fund Positions	(*6)	(*6)		(*6)	
TOTAL 670	Collection System Section	35	34	3,103,123	34	3,106,878
TOTAL	Stormwater Management Fund Positions	(*6)	(*6)		(*6)	
TOTAL 630	Waterways Control Section	43	42	4,136,404	42	4,148,820
TOTAL	Stormwater Management Fund Positions	(*18)	(*18)		(*18)	
640	Technical Administration Section					
641	Technical Administration Unit					
HP20	Managing Engineer	1	1		1	
TOTAL 641	Technical Administration Unit	1	1	168,874	1	177,536
642	Contract Administration Unit - MOB					
HP18	Principal Engineer	1	1		1	
HP17	Senior Mechanical Engineer	1	1		1	
HP15	Associate Civil Engineer	1	1		1	
HP12	Administrative Assistant #2 (Administrative Specialist) (New Grade HP11)	1	1		1	
TOTAL 642	Contract Administration Unit - MOB	4	4	505,775	4	511,623
643	Technical Services Unit					
HP18	Principal Engineer	—	1		1	
HP17	Senior Engineer	1	1		1	
HP15	Associate Civil Engineer	1	1		1	
TOTAL 643	Technical Services Unit	2	3	413,639	3	407,791
644	Construction Design Unit					
HP18	Principal Engineer	1	—		—	
TOTAL 644	Construction Design Unit	1	—	—	—	—
TOTAL 640	Technical Administration Section	8	8	1,088,289	8	1,096,950

Fund: Corporate Dept: Maintenance & Operations Division: General		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
650	Solids Management Section					
651	Solids Administration Unit					
HP20	Managing Engineer	1	1		—	
HP12	Administrative Assistant #2 (Administrative Specialist) (New Grade HP11)	1	1		—	
TOTAL 651	Solids Administration Unit	2	2	283,511	—	—
652	Solids Field Operations Unit					
HP18	Principal Engineer	1	1		—	
HP17	Senior Engineer	1	1		—	
HP15	Associate Civil Engineer	1	1		—	
HP14	Engineering Technician V	3	4		—	
HP14	Engineering Technician V #4	2	1		—	
HP12	Engineering Technician IV	3	3		—	
HP11	Engineering Technician III	1	1		—	
TOTAL 652	Solids Field Operations Unit	12	12	1,251,920	—	—
653	Solids Operations Administration Unit					
HP17	Senior Engineer	1	1		—	
HP15	Associate Civil Engineer	1	—		—	
HP12	Engineering Technician IV #4	1	1		—	
NR8651	Maintenance Laborer Class A	1	1		—	
NR8652	Maintenance Laborer Class B #1	1	—		—	
TOTAL 653	Solids Operations Administration Unit	5	3	322,282	—	—
654	Fulton County Field Operations Unit					
HP12	Agricultural Technician II	1	1		—	
HP11	Agricultural Technician I	1	1		—	
HP11	Administrative Specialist	1	—		—	
TOTAL 654	Fulton County Field Operations Unit	3	2	158,551	—	—
TOTAL 650	Solids Management Section	22	19	2,016,264	—	—

Fund: Corporate Dept: Maintenance & Operations Division: General		POSITION ANALYSIS				
		2019	2020		2021	
				Proposed by the Executive Director		
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
660	Site Remediation Section					
661	Site Remediation Unit					
HP20	Engineer of Site Remediation	1	1		—	
HP17	Site Remediation Specialist	1	1		—	
TOTAL 661	Site Remediation Unit	2	2	343,910	—	—
TOTAL 660	Site Remediation Section	2	2	343,910	—	—
681	Asset Management Section					
HP20	Managing Engineer	1	1		1	
HP18	Principal Electrical Engineer	1	1		1	
HP18	Principal Engineer	1	1		1	
HP18	Principal Mechanical Engineer	3	3		3	
HP17	Senior Electrical Engineer	5	5		5	
HP17	Senior Engineer	1	1		1	
HP17	Senior Mechanical Engineer	4	4		4	
HP15	Associate Electrical Engineer	7	7		7	
HP15	Associate Mechanical Engineer	5	5		5	
HP14	Assistant Electrical Engineer	—	—		1	
HP14	Assistant Mechanical Engineer	2	3		3	
HP14	Assistant Mechanical Engineer #2 (Engineering Technician IV) (New Grade HP12)	1	—		—	
HP14	Engineering Technician V	1	2		2	
TOTAL 681	Asset Management Section	32	33	4,209,639	34	4,277,499
TOTAL	Maintenance & Operations General Division	115	112	12,952,888	92	10,666,593
TOTAL	Stormwater Management Fund Positions	(*18)	(*18)		(*18)	

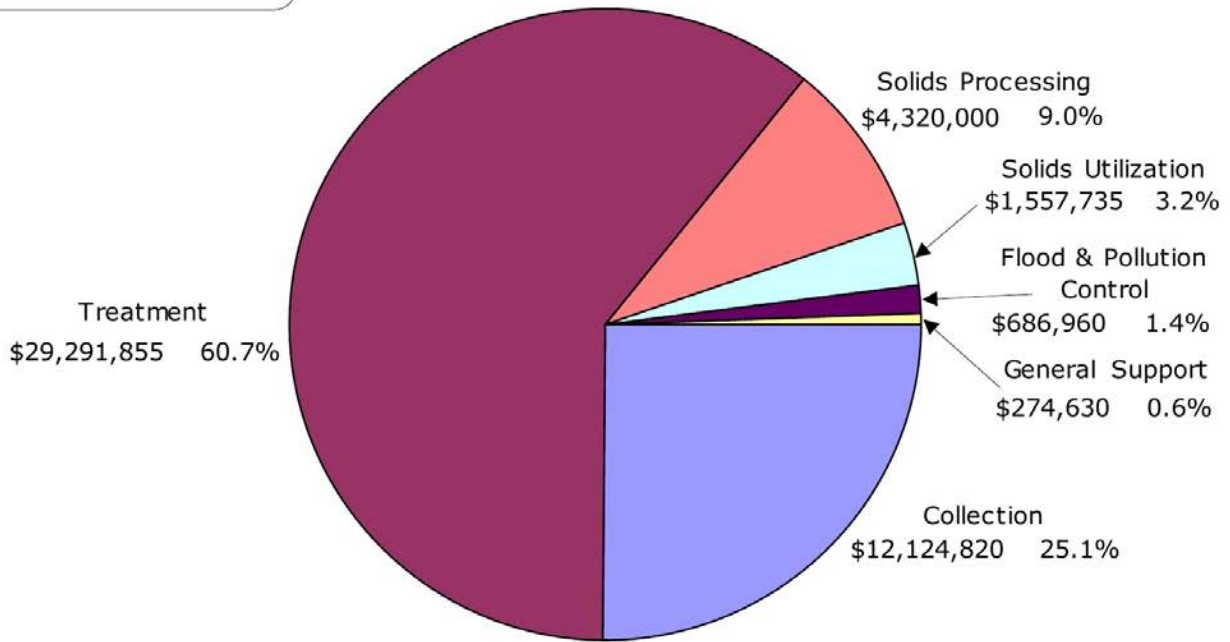
NOTES: 1. Eighteen positions budgeted in Sections 634, 636, 639, and 679 are funded by the Stormwater Management Fund while the operations remain in the Maintenance & Operations Department.

2. Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.

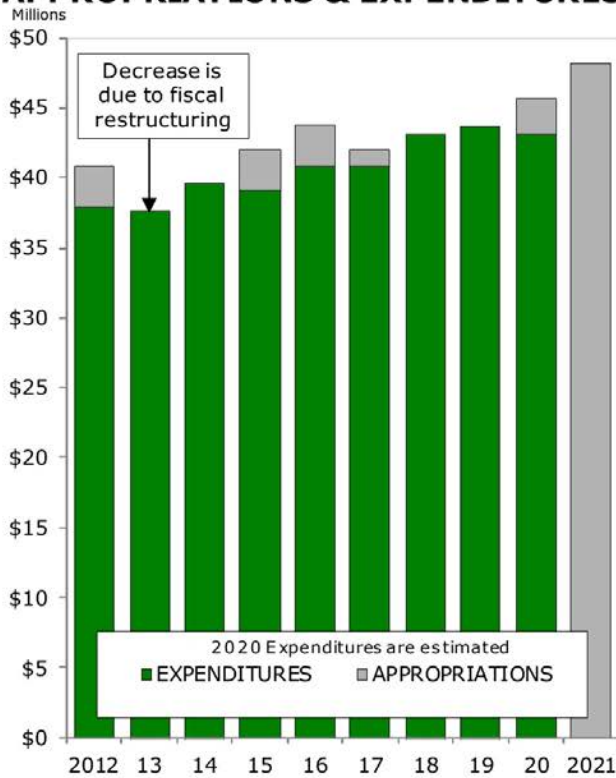
MAINTENANCE & OPERATIONS – NORTH SERVICE AREA

2021	\$48,256,000
2020	\$45,642,200
Increase	\$2,613,800

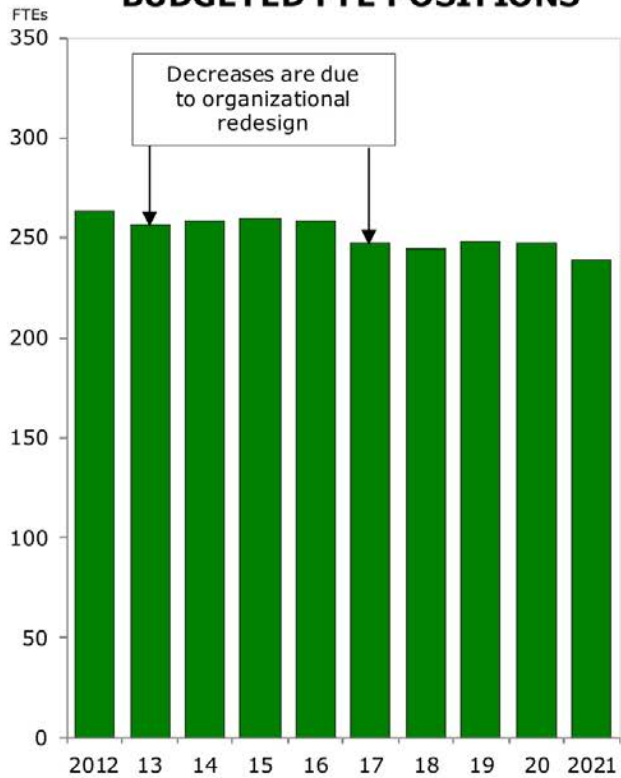
FUNCTIONS



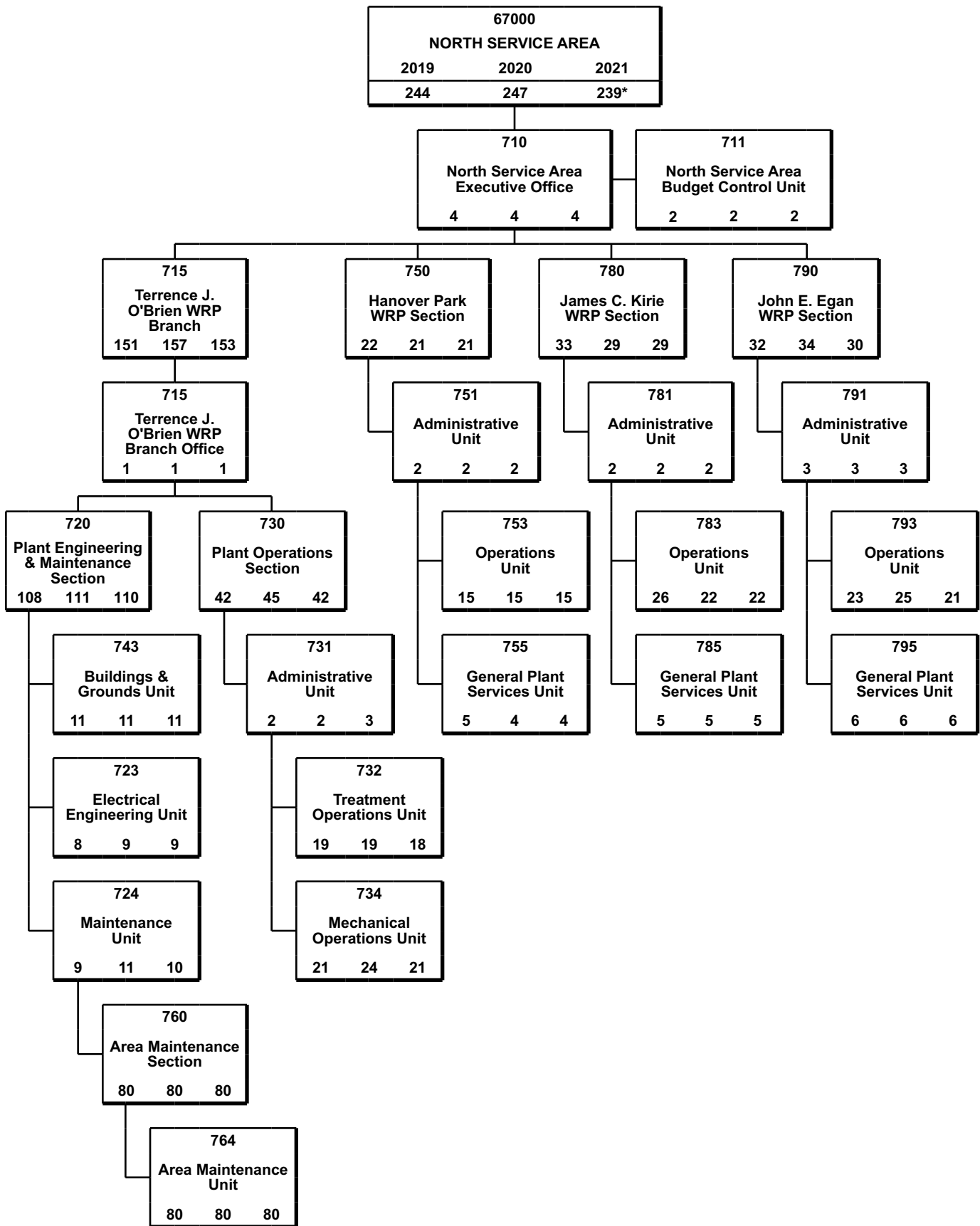
APPROPRIATIONS & EXPENDITURES



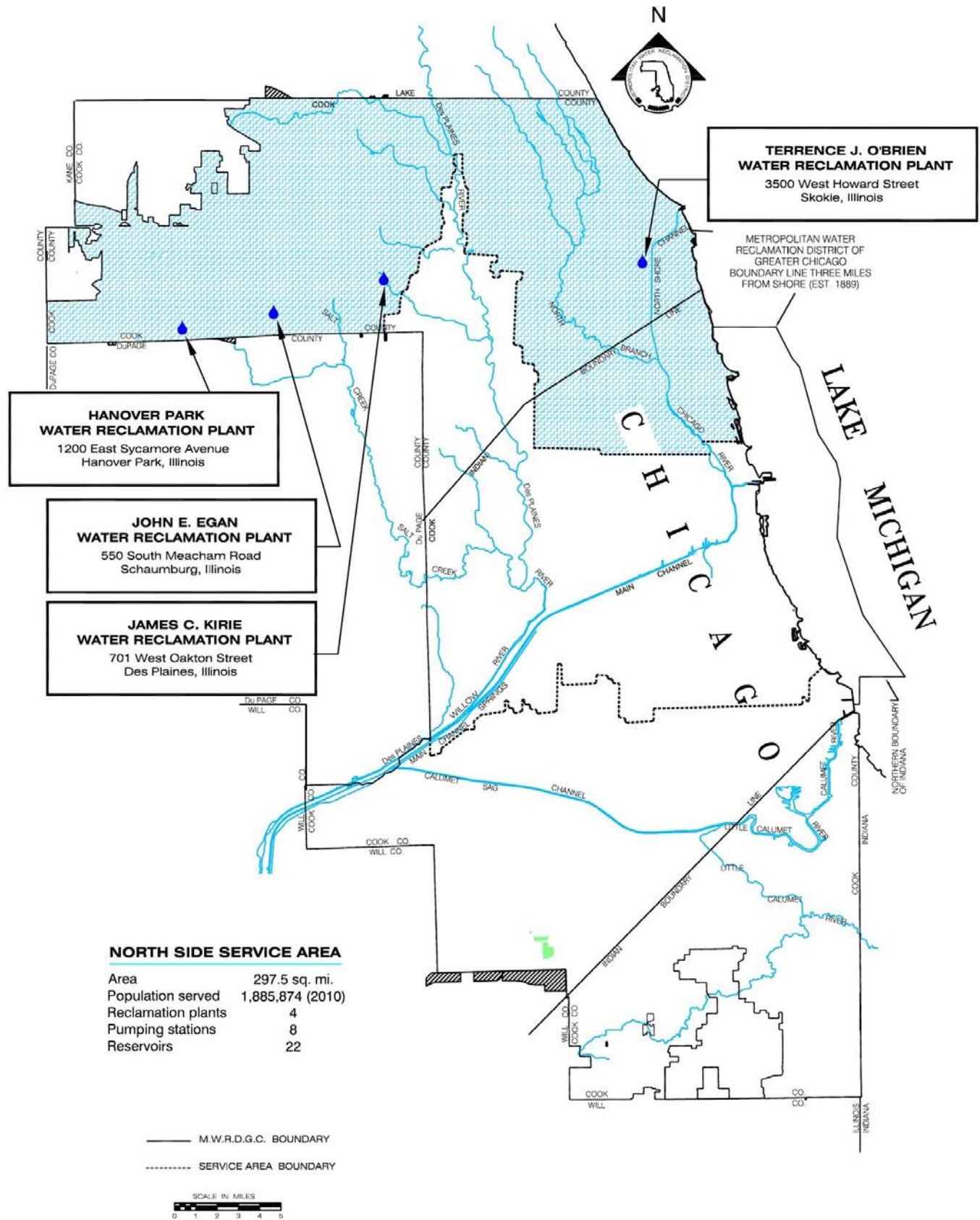
BUDGETED FTE POSITIONS



MAINTENANCE & OPERATIONS - NORTH SERVICE AREA



* In 2021, there are no positions funded by the Stormwater Management Fund.



67000 M&O - NORTH SERVICE AREA

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:				Cost	Percent	
1. COLLECTION & TREATMENT: The North Service Area will collect and treat approximately 121.8 billion gallons of wastewater through its treatment facilities and a contract agreement with the Fox River Water Reclamation District.				\$41,416,675	85.8%	
	Design:	Flows ^	CBOD *	SS *		
Terrence J. O'Brien Water Reclamation Plant (WRP)		333 MGD	10 mg/L	12 mg/L		
John E. Egan Water Reclamation Plant		30 MGD	10 mg/L	12 mg/L		
Hanover Park Water Reclamation Plant		12 MGD	10 mg/L	12 mg/L		
James C. Kirie Water Reclamation Plant		52 MGD	4 mg/L	5 mg/L		
Fox River Water Reclamation District		4 MGD	—	—		
^ In millions of gallons per day (MGD).						
* National Pollutant Discharge Elimination System monthly effluent quality standards in milligrams per liter:						
CBOD - Carbonaceous Biochemical Oxygen Demand						
SS - Suspended Solids						
2. SOLIDS PROCESSING: The North Service Area will remove 59,300 dry tons and process 15,800 dry tons of concentrated sewage through various systems including heated digestion, centrifuging, concentration, and centrifuge cake in lagoons at CALSMA** and LASMA**.				\$ 4,320,000	9.0%	
3. SOLIDS UTILIZATION: The North Service Area will provide support to utilize 1,000 dry tons of biosolids for the Fischer Farm in Hanover Park and other agricultural applications.				\$ 1,557,735	3.2%	
4. FLOOD & POLLUTION CONTROL: The North Service Area will work to prevent local area flooding and control diversion of water from Lake Michigan through the operation of 22 detention reservoirs in cooperation with local communities and by assisting in the operation of the Wilmette Controlling Works and the North Shore Channel. The North Service Area will also work to maintain the quality of the waterways system and associated District property by utilizing debris boats and channel maintenance crews.				\$ 686,960	1.4%	
5. GENERAL SUPPORT: The North Service Area will provide technical and administrative support for other departments not directly related to the operational activities of Collection & Treatment, Solids Processing, Solids Utilization, and Flood & Pollution Control.				\$ 274,630	0.6%	
				Totals	\$48,256,000	100.0%
**CALSMA - Calumet Solids Management Area and LASMA - Lawndale Avenue Solids Management Area						

MEASURABLE GOALS:		2019	2020	2021
	Unit of Measure	Actual	Estimated	Proposed
1. The North Service Area will collect and treat approximately 121.8 billion gallons of wastewater in 2021.	Billion Gallons	126.6	121.8	121.8
2. The North Service Area will remove 59,300 dry tons and process 15,800 dry tons of concentrated sewage.	Dry Tons Process Solids	15,606	15,800	15,800
3. The North Service Area will obtain 100 percent permit compliance in 2021 for National Pollutant Discharge Elimination System effluent limits.	Percent	100.00%	100.00%	100.00%
4. The North Service Area will provide support to utilize 1,000 dry tons of biosolids in 2021.	Dry Tons	769	1,000	1,000

67000 M&O - NORTH SERVICE AREA

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
1000	Collection	\$11,636,738	2021	66 \$ 12,124,820	\$ 308,650	2.6	
			2020	68 \$ 11,816,170			
1100	Surface Interceptor Systems	\$ 351,335	2021	3 \$ 327,800	\$ (600)	(0.2)	
			2020	3 \$ 328,400			
1200	Tunnel and Reservoir System	\$ 2,132,600	2021	13 \$ 1,805,200	\$ 325,100	22.0	a)
			2020	13 \$ 1,480,100			
1300	Pumping Station Facilities	\$ 4,628,658	2021	25 \$ 5,168,100	\$ 115,700	2.3	
			2020	27 \$ 5,052,400			
1900	Collection - Indirect Costs	\$ 4,524,145	2021	25 \$ 4,823,720	\$ (131,550)	(2.7)	
			2020	25 \$ 4,955,270			
2000	Treatment	\$25,235,039	2021	147 \$ 28,917,755	\$ 2,183,350	8.2	
			2020	151 \$ 26,734,405			
2000	Pre-Treatment	\$ 916,158	2021	6 \$ 847,400	\$ 7,300	0.9	
			2020	7 \$ 840,100			
2100	Primary Treatment	\$ 556,426	2021	6 \$ 579,900	\$ (39,300)	(6.3)	
			2020	6 \$ 619,200			
2200	Secondary Treatment	\$ 8,256,803	2021	42 \$ 8,869,800	\$ 77,200	0.9	
			2020	44 \$ 8,792,600			
2300	Tertiary Treatment	\$ 1,856,722	2021	11 \$ 1,682,800	\$ 8,400	0.5	
			2020	11 \$ 1,674,400			
2900	Treatment - Indirect Costs	\$13,648,930	2021	82 \$ 16,937,855	\$ 2,129,750	14.4	b)
			2020	83 \$ 14,808,105			

a) Increase is due to the procurement of cellular telemetry units (\$320,000).

b) Increase is due to an upgrade of the distributed control system (\$850,000), the procurement of a data solutions system (\$318,300), an increased demand for power distribution cleaning (\$175,000), a projected increase in payments to the Fox River WRD (\$128,900), an increased demand for pumps and compressors (\$116,400) and non-stock process equipment parts (\$103,000), the reconditioning of circuit breakers (\$100,000), an increased demand for use of personnel vehicles within the plants (\$98,000), the distributed control system service agreement and parts (\$97,400), data solutions system updates (\$66,500), and distributed control system technical assistance (\$55,600).

67000 M&O - NORTH SERVICE AREA

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change	
Number	Name	Actual	FTEs	Dollars	Dollars	Percent
3000	Solids Processing	\$ 4,412,684	2021 21	\$ 4,320,000	\$ (212,550)	(4.7)
			2020 23	\$ 4,532,550		
3100	Thickening	\$ 547,519	2021 5	\$ 725,100	\$ 94,500	15.0
			2020 5	\$ 630,600		
3200	Stabilization	\$ 798,609	2021 5	\$ 761,800	\$ (34,300)	(4.3)
			2020 6	\$ 796,100		
3300	Dewatering	\$ 1,284,030	2021 5	\$ 863,200	\$ (378,100)	(30.5)
			2020 6	\$ 1,241,300		
3900	Solids Processing - Indirect Costs	\$ 1,782,526	2021 6	\$ 1,969,900	\$ 105,350	5.7
			2020 6	\$ 1,864,550		
4000	Flood & Pollution Control	\$ 683,965	2021 2	\$ 686,960	\$ 97,100	16.5
			2020 2	\$ 589,860		
4200	Waterways Control and Stormwater Reservoirs	\$ 352,423	2021 2	\$ 322,000	\$ 44,100	15.9
			2020 2	\$ 277,900		
4400	Aeration Facilities	\$ 218,463	2021 —	\$ 220,800	\$ 35,400	19.1
			2020 —	\$ 185,400		
4900	Flood & Pollution Control - Indirect Costs	\$ 113,079	2021 —	\$ 144,160	\$ 17,600	13.9
			2020 —	\$ 126,560		
5000	Solids Utilization	\$ 1,078,191	2021 2	\$ 1,557,735	\$ 236,400	17.9
			2020 2	\$ 1,321,335		
5200	Solids Distribution	\$ 170,840	2021 —	\$ 368,500	\$ 113,800	44.7
			2020 —	\$ 254,700		
5900	Solids Utilization - Indirect Costs	\$ 907,351	2021 2	\$ 1,189,235	\$ 122,600	11.5
			2020 2	\$ 1,066,635		
7000	General Support (excluding program number 7604)	\$ 267,391	2021 1	\$ 274,630	\$ (11,450)	(4.0)
			2020 1	\$ 286,080		
7604	Social Security and Medicare Contributions	\$ 347,071	2021 —	\$ 374,100	\$ 12,300	3.4
			2020 —	\$ 361,800		
Totals		\$43,661,079	2021 239	\$48,256,000	\$ 2,613,800	5.7%
			2020 247	\$45,642,200		

c) Increase is due to an increased demand for polymer used for gravity belt thickeners (\$120,300).

d) Decrease is due to a reduced demand for polymer for dewatering centrifuges at the Egan WRP (\$200,000) and the drop of one FTE position (\$72,600).

e) Increase is due to an increased demand for electrical energy for stormwater detention reservoirs (\$43,900).

f) Increase is due to an increased demand for blower parts at the Webster and Devon Aeration Stations (\$45,000).

g) Increase is due to an increased demand for biosolids injection and farming services at Fischer Farm (\$95,000).

* The 2021 position total for the North Service Area is 239, with no positions budgeted in the Stormwater Management Fund.

67000 M&O - NORTH SERVICE AREA

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
1000-2900	Collection & Treatment					
	Collect and Treat Wastewater at Treatment Facilities and Through a Contract Agreement with the Fox River Water Reclamation District					
	Terrence J. O'Brien Water Reclamation Plant	Mil. Gallons	93,531	85,000	90,000	
		Cost	\$ 20,456,436	\$ 21,851,523	\$ 23,648,554	a)
		Cost/Mil. Gallons	\$ 218.71	\$ 257.08	\$ 262.76	
	John E. Egan Water Reclamation Plant	Mil. Gallons	9,910	9,050	9,050	
		Cost	\$ 5,772,312	\$ 5,829,552	\$ 5,888,533	
		Cost/Mil. Gallons	\$ 582.47	\$ 644.15	\$ 650.67	
	Hanover Park Water Reclamation Plant	Mil. Gallons	3,510	3,950	3,950	
		Cost	\$ 2,682,603	\$ 2,724,710	\$ 2,721,305	
		Cost/Mil. Gallons	\$ 764.27	\$ 689.80	\$ 688.94	
	James C. Kirie Water Reclamation Plant	Mil. Gallons	17,404	15,000	16,600	
		Cost	\$ 6,302,637	\$ 6,426,390	\$ 6,807,983	b)
		Cost/Mil. Gallons	\$ 362.14	\$ 428.43	\$ 410.12	
	Fox River Water Reclamation District	Mil. Gallons	2,219	2,150	2,200	
		Cost	\$ 1,657,789	\$ 1,718,400	\$ 1,976,200	c)
		Cost/Mil. Gallons	\$ 747.09	\$ 799.26	\$ 898.27	
3000	Solids Processing					
	Remove 59,300 Dry Tons of Solids, Transfer 42,500 Dry Tons to the Stickney WRP and Process 15,800 Dry Tons from Concentrated Sewage Through Various Systems	Dry Tons	15,606	13,800	15,800	
		Cost	\$ 4,412,684	\$ 4,532,550	\$ 4,320,000	d)
		Cost/Dry Ton	\$ 282.76	\$ 328.45	\$ 273.42	d)
	a) Increase is due to an upgrade of the distributed control system (\$850,000), an increased demand for power distribution cleaning (\$175,000) and chains and sprockets (\$170,000), the rehabilitation of rotating assemblies (\$140,000), the reconditioning of circuit breakers (\$100,000), an increased demand for electrical energy for electrical systems and subsystems (\$98,300), chlorine analyzers (\$78,500), and distributed control system technical assistance (\$55,600).					
	b) Increase is due to the procurement of cellular telemetry units (\$320,000) and a data solutions system (\$318,300), offset by 2020 purchases of a dump truck with snow plow (\$160,000) and chains, sprockets, and appurtenances (\$90,000).					
	c) Increase is due to a projected increase in payments to the Fox River WRD (\$257,800).					
	d) Decrease is due to a reduced demand for polymer (\$79,700) and for ferric chloride at the Egan WRP (\$60,000).					

67000 M&O - NORTH SERVICE AREA

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
4000	Flood & Pollution Control					
	Operation and Maintenance of the Waterways to Minimize Area Flooding and Pollution					
4200	Minimize Area Flooding and Pollution of Lake Michigan Through the Continuous Control of Water Levels in Major Rivers and Canals and the Operation of Detention Reservoirs	Reservoirs	22	22	22	
		Cost	\$ 352,423	\$ 277,900	\$ 322,000	e)
		Cost/Reservoir	\$ 16,019.23	\$ 12,631.82	\$ 14,636.36	e)
4400	Aeration Facilities	Cost	\$ 218,463	\$ 185,400	\$ 220,800	f)
4900	Flood & Pollution Control - Indirect Costs	Cost	\$ 113,079	\$ 126,560	\$ 144,160	
5000	Solids Utilization					
	Utilize Biosolids for Application at Final Utilization Sites Such as the Fischer Farm in Hanover Park and Other Farm Application Sites	Dry Tons	769	1,000	1,000	
		Cost	\$ 1,078,191	\$ 1,321,335	\$ 1,557,735	g)
		Cost/Dry Ton	\$ 1,402.07	\$ 1,321.34	\$ 1,557.74	g)
7000	General Support (excluding program number 7604)					
	Technical and Administrative Support for Other Departments' Activities Indirectly Related to the Operational Activities of Collection & Treatment, Solids Processing, Flood & Pollution Control, and Solids Utilization	Cost	\$ 267,391	\$ 286,080	\$ 274,630	
7604	Social Security and Medicare Contributions	Cost	\$ 347,071	\$ 361,800	\$ 374,100	
		Division Totals	\$ 43,661,079	\$ 45,642,200	\$ 48,256,000	

e) Increase is due to an increased demand in electrical energy for stormwater detention reservoirs (\$43,900).
 f) Increase is due to an increased demand for blower parts at the Webster and Devon Aeration Stations (\$45,000).
 g) Increase is due to a projected increase in payments to the Fox River WRD (\$128,900) and an increased demand for biosolids injection and farming services at Fischer Farm (\$95,000).

Account Number	Account Name	LINE ITEM ANALYSIS						
		2019		2020			2021	
		Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
101 67000	Fund: Corporate Department: Maintenance & Operations Division: North Service Area							
601010	Salaries of Regular Employees	\$ 23,527,568	\$ 24,580,600	\$ 24,533,600	\$ 17,886,926	\$ 24,290,900	\$ 24,257,300	\$ —
601060	Compensation Plan Adjustments	1,415,732	1,355,300	1,355,300	738,955	1,164,200	1,325,400	—
601070	Social Security and Medicare Contributions	347,071	361,800	361,800	269,127	348,300	374,100	—
601080	Salaries of Nonbudgeted Employees	—	—	—	—	—	101,700	—
601100	Tuition and Training Payments	29,246	52,400	52,400	12,103	19,000	37,900	—
100	TOTAL PERSONAL SERVICES	25,319,617	26,350,100	26,303,100	18,907,111	25,822,400	26,096,400	—
612010	Travel	8,474	10,900	10,900	915	2,000	13,200	—
612030	Meals and Lodging	22,373	17,400	10,400	7,553	9,000	20,800	—
612050	Compensation for Personally-Owned Automobiles	20,328	22,000	22,000	8,593	12,800	22,000	—
612080	Motor Vehicle Operating Services	165	500	500	16	100	500	—
612150	Electrical Energy	8,249,617	8,260,700	8,260,700	4,760,183	8,065,100	8,084,000	—
612160	Natural Gas	643,003	678,100	678,100	262,982	584,000	691,100	—
612170	Water and Water Services	77,081	75,800	75,800	33,913	64,900	81,700	—
612240	Testing and Inspection Services	33,033	43,700	43,700	41,364	26,400	76,400	—
612330	Rental Charges	865	2,400	2,400	1,883	1,200	2,400	—
612410	Governmental Service Charges	3,565,031	3,693,300	3,693,300	2,284,592	3,532,000	4,208,900	—
612420	Maintenance of Grounds and Pavements	15,105	115,100	111,400	111,386	24,300	130,400	—
612490	Contractual Services, N.O.C.	1,669	1,500	1,500	1,288	1,300	500	—
612520	Waste Material Disposal Charges	470,147	569,600	589,600	584,731	525,000	646,000	—
612530	Farming Services	18,200	60,000	40,000	40,000	40,000	90,000	—
612600	Repairs to Collection Facilities	145,918	342,100	366,300	360,024	319,500	179,300	—
612650	Repairs to Process Facilities	1,232,289	1,679,900	1,704,900	1,573,954	739,300	3,503,100	—
612680	Repairs to Buildings	197,921	320,900	295,900	278,037	187,100	352,000	—
612760	Repairs to Material Handling and Farming Equipment	13,196	27,700	27,700	20,771	12,000	35,700	—
612780	Safety Repairs and Services	64,981	85,000	75,000	75,000	65,800	97,100	—
612860	Repairs to Vehicle Equipment	19,912	16,000	16,000	16,000	15,000	24,400	—
200	TOTAL CONTRACTUAL SERVICES	14,799,307	16,022,600	16,026,100	10,463,185	14,226,800	18,259,500	—
623030	Metals	8,977	10,000	10,000	6,629	9,000	10,000	—
623070	Electrical Parts and Supplies	1,119,678	900,000	900,000	892,961	850,000	1,436,200	—
623090	Plumbing Accessories and Supplies	204,559	173,900	173,900	172,063	173,900	198,900	—
623130	Buildings, Grounds, Paving Materials, and Supplies	21,400	21,600	24,200	23,783	22,600	30,200	—

101 67000	Fund: Corporate Department: Maintenance & Operations Division: North Service Area	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623190	Paints, Solvents, and Related Materials	1,267	2,300	2,300	584	2,100	2,300	—
623250	Vehicle Parts and Supplies	13,996	12,000	12,000	12,000	11,700	17,000	—
623270	Mechanical Repair Parts	639,556	745,000	945,000	890,302	869,300	928,600	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	11,990	14,300	14,300	13,615	12,900	15,300	—
623560	Processing Chemicals	926,538	878,900	778,900	761,666	675,000	755,800	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	23,371	27,100	27,100	25,051	26,400	27,500	—
623660	Cleaning Supplies	—	—	—	—	—	2,000	—
623680	Tools and Supplies	77,144	59,500	59,500	56,946	45,900	76,500	—
623780	Safety and Medical Supplies	10,775	14,000	15,500	13,665	10,200	22,500	—
623800	Computer Software	16,224	4,500	1,300	660	2,000	4,800	—
623810	Computer Supplies	28,678	13,200	15,600	15,294	12,700	14,500	—
623820	Fuel	13,059	16,000	14,600	14,182	12,000	19,100	—
623850	Communications Supplies	14,782	15,000	15,000	12,926	12,600	15,000	—
623860	Lubricants	3,777	3,000	3,000	1,590	1,700	3,000	—
623990	Materials and Supplies, N.O.C.	6,532	6,200	6,200	5,768	6,200	6,500	—
300	TOTAL MATERIALS AND SUPPLIES	3,142,303	2,916,500	3,018,400	2,919,685	2,756,200	3,585,700	—
634600	Equipment for Collection Facilities	50,476	40,000	1,000	—	—	65,000	—
634650	Equipment for Process Facilities	145,738	115,000	98,900	95,813	92,900	151,400	—
634760	Material Handling and Farming Equipment	—	38,000	60,500	60,216	38,000	—	—
634810	Computer Equipment	138,066	—	—	—	—	—	—
634860	Vehicle Equipment	65,571	160,000	204,500	198,492	200,900	98,000	—
400	TOTAL MACHINERY AND EQUIPMENT	399,851	353,000	364,900	354,521	331,800	314,400	—
TOTAL NORTH SERVICE AREA		\$ 43,661,078	\$ 45,642,200	\$ 45,712,500	\$ 32,644,502	\$ 43,137,200	\$ 48,256,000	\$ —

NOTES: 1. Amounts may not add up due to rounding.
 2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.
 Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.
 3. For the M&O Department, Expenditure (Committed Budget plus Disbursement) may exceed Adjusted Appropriation for a specific division as funding is controlled at the M&O Overall department-level.

Fund: Corporate Dept: Maintenance & Operations Division: North Service Area		POSITION ANALYSIS				
		2019	2020		2021	
				Proposed by the Executive Director		
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
710	North Service Area Executive Office					
HP22	Assistant Director of Maintenance & Operations	1	1		1	
HP20	Managing Engineer	1	1		1	
HP14	Engineering Technician V	1	1		1	
HP12	Secretary #1	—	—		1	
HP12	Secretary #2 (Administrative Specialist) (New Grade HP11)	1	1		—	
TOTAL 710	North Service Area Executive Office	4	4	650,946	4	591,831
711	North Service Area Budget Control Unit					
HP16	Senior Budget & Management Analyst	1	1		1	
HP14	Budget & Management Analyst	1	1		1	
TOTAL 711	North Service Area Budget Control Unit	2	2	214,560	2	220,087
715	Terrence J. O'Brien Water Reclamation Plant Branch					
715	Terrence J. O'Brien Water Reclamation Plant Branch Office					
HP21	Engineer of Treatment Plant Operations 1 #2 (Managing Engineer) (New Grade HP20)	1	1		—	
HP20	Managing Engineer	—	—		1	
TOTAL 715	Terrence J. O'Brien Water Reclamation Plant Branch Office	1	1	220,843	1	151,553
720	Plant Engineering & Maintenance Section					
743	Buildings & Grounds Unit					
HP14	Engineering Technician V	1	1		1	
HP09	Administrative Clerk	1	1		1	
NR8331	Laborer Foreman	1	1		1	
NR8651	Maintenance Laborer Class A	3	3		3	
NR8652	Maintenance Laborer Class B	5	5		5	
TOTAL 743	Buildings & Grounds Unit	11	11	775,555	11	778,142
723	Electrical Engineering Unit					
HP15	Associate Process Control Engineer	—	1		1	
NR6251	Chief Electrical Operator	1	1		1	
NR6233	Electrical Operator II	5	5		5	

Fund: Corporate Dept: Maintenance & Operations Division: North Service Area		POSITION ANALYSIS				
		2019	2020		2021	
				Proposed by the Executive Director		
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
NR6232	Electrical Operator I	2	2		2	
TOTAL 723	Electrical Engineering Unit	8	9	934,738	9	934,738
724	Maintenance Unit					
HP19	Master Mechanic	1	1		1	
HP18	Principal Electrical Engineer	—	1		1	
HP17	Assistant Master Mechanic	4	4		4	
HP17	Senior Electrical Engineer	2	1		1	
HP15	Associate Civil Engineer #2 (Engineering Technician IV) (New Grade HP12)	—	1		1	
HP15	Associate Process Control Engineer	—	1		1	
HP14	Assistant Electrical Engineer	1	1		—	
HP11	Administrative Specialist	1	1		1	
TOTAL 724	Maintenance Unit	9	11	1,414,561	10	1,317,333
760	Area Maintenance Section					
764	Area Maintenance Unit					
PR5933	Architectural Ironworker	2	2		2	
PR5353	Bricklayer	1	1		1	
PR5153	Carpenter	2	2		2	
PR7425	Electrical Instrument & Testing Mechanic Foreman	1	1		1	
PR7424	Electrical Instrument & Testing Mechanic Leadman	1	1		1	
PR7423	Electrical Instrument & Testing Mechanic	12	12		12	
PR7347	Electrical Mechanic Foreman	1	1		1	
PR7349	Electrical Mechanic Sub-Foreman	1	1		1	
PR7343	Electrical Mechanic	14	14		14	
PR6453	Hoisting Engineer	1	1		1	
PR7579	Machinist Foreman	1	1		1	
PR7575	Machinist Leadman	1	1		1	
PR7573	Machinist	16	16		16	
PR5553	Painter	2	2		2	

Fund: Corporate Dept: Maintenance & Operations Division: North Service Area		POSITION ANALYSIS				
		2019	2020		2021	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
PR7779	Pipefitter Foreman	1	1		1	
PR7775	Pipefitter Leadman	1	1		1	
PR7773	Pipefitter	12	12		12	
PR5753	Plumber	2	2		2	
PR5975	Structural Ironworker Leadman	1	1		1	
PR5973	Structural Ironworker	2	2		2	
PR6473	Truck Driver	5	5		5	
TOTAL 764	Area Maintenance Unit	80	80	8,289,861	80	8,461,253
TOTAL 760	Area Maintenance Section	80	80	8,289,861	80	8,461,253
TOTAL 720	Plant Engineering & Maintenance Section	108	111	11,414,715	110	11,491,466
730	Plant Operations Section					
731	Administrative Unit					
HP19	Assistant Engineer of Treatment Plant Operations II #2 (Principal Engineer) (New Grade HP18)	1	—		—	
HP18	Principal Engineer	—	1		1	
HP15	Associate Civil Engineer	—	—		1	
HP12	Engineering Technician IV	1	1		1	
TOTAL 731	Administrative Unit	2	2	227,341	3	324,363
732	Treatment Operations Unit					
HP16	Treatment Plant Operator III	1	1		1	
HP14	Treatment Plant Operator II	8	8		8	
HP12	Treatment Plant Operator I	4	4		4	
NR8650	Maintenance Laborer Class A Shift	4	4		3	
NR8651	Maintenance Laborer Class A	2	2		2	
TOTAL 732	Treatment Operations Unit	19	19	1,736,613	18	1,673,327
734	Mechanical Operations Unit					
HP17	Chief Operating Engineer I	1	1		1	
HP16	Assistant Chief Operating Engineer	1	1		1	
NR6810	Fireman-Oiler	6	6		6	

Fund: Corporate Dept: Maintenance & Operations Division: North Service Area		POSITION ANALYSIS				
		2019	2020		2021	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
NR6810	Fireman-Oiler #1	—	3		—	
NR6832	Operating Engineer II	8	8		8	
NR6831	Operating Engineer I	5	5		5	
TOTAL 734	Mechanical Operations Unit	21	24	2,481,467	21	2,216,427
TOTAL 730	Plant Operations Section	42	45	4,445,421	42	4,214,117
TOTAL 715	Terrence J. O'Brien Water Reclamation Plant Branch	151	157	16,080,979	153	15,857,136
750	Hanover Park Water Reclamation Plant Section					
751	Administrative Unit					
HP20	Managing Engineer	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 751	Administrative Unit	2	2	277,487	2	280,975
753	Operations Unit					
HP17	Senior Engineer	—	1		1	
HP17	Senior Mechanical Engineer	1	—		—	
HP16	Treatment Plant Operator III	1	1		1	
HP14	Treatment Plant Operator II	6	7		7	
HP14	Treatment Plant Operator II #4	1	—		—	
HP12	Treatment Plant Operator I	5	5		5	
NR6810	Fireman-Oiler	1	1		1	
TOTAL 753	Operations Unit	15	15	1,451,118	15	1,461,862
755	General Plant Services Unit					
HP14	Engineering Technician V	1	1		1	
NR8651	Maintenance Laborer Class A	2	2		2	
NR8652	Maintenance Laborer Class B	1	1		1	
NR8652	Maintenance Laborer Class B #1	1	—		—	
TOTAL 755	General Plant Services Unit	5	4	324,909	4	324,909
TOTAL 750	Hanover Park Water Reclamation Plant Section	22	21	2,053,514	21	2,067,746

Fund: Corporate Dept: Maintenance & Operations Division: North Service Area		POSITION ANALYSIS				
		2019	2020		2021	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
780	James C. Kirie Water Reclamation Plant Section					
781	Administrative Unit					
HP20	Managing Engineer	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 781	Administrative Unit	2	2	258,363	2	270,513
783	Operations Unit					
HP17	Senior Engineer	1	1		1	
HP16	Assistant Chief Operating Engineer	1	1		1	
HP16	Treatment Plant Operator III	1	1		1	
HP14	Treatment Plant Operator II	6	7		7	
HP14	Treatment Plant Operator II #4	1	—		—	
HP12	Treatment Plant Operator I	4	2		2	
NR6810	Fireman-Oiler	2	1		1	
NR8650	Maintenance Laborer Class A Shift	3	3		3	
NR8650	Maintenance Laborer Class A Shift #1	1	—		—	
NR6831	Operating Engineer I	6	6		6	
TOTAL 783	Operations Unit	26	22	2,247,556	22	2,267,542
785	General Plant Services Unit					
HP14	Engineering Technician V	1	1		1	
NR8651	Maintenance Laborer Class A	3	3		3	
NR8652	Maintenance Laborer Class B	1	1		1	
TOTAL 785	General Plant Services Unit	5	5	407,048	5	386,920
TOTAL 780	James C. Kirie Water Reclamation Plant Section	33	29	2,912,967	29	2,924,976
790	John E. Egan Water Reclamation Plant Section					
791	Administrative Unit					
HP20	Managing Engineer	1	1		1	
HP18	Principal Engineer	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 791	Administrative Unit	3	3	438,920	3	438,920

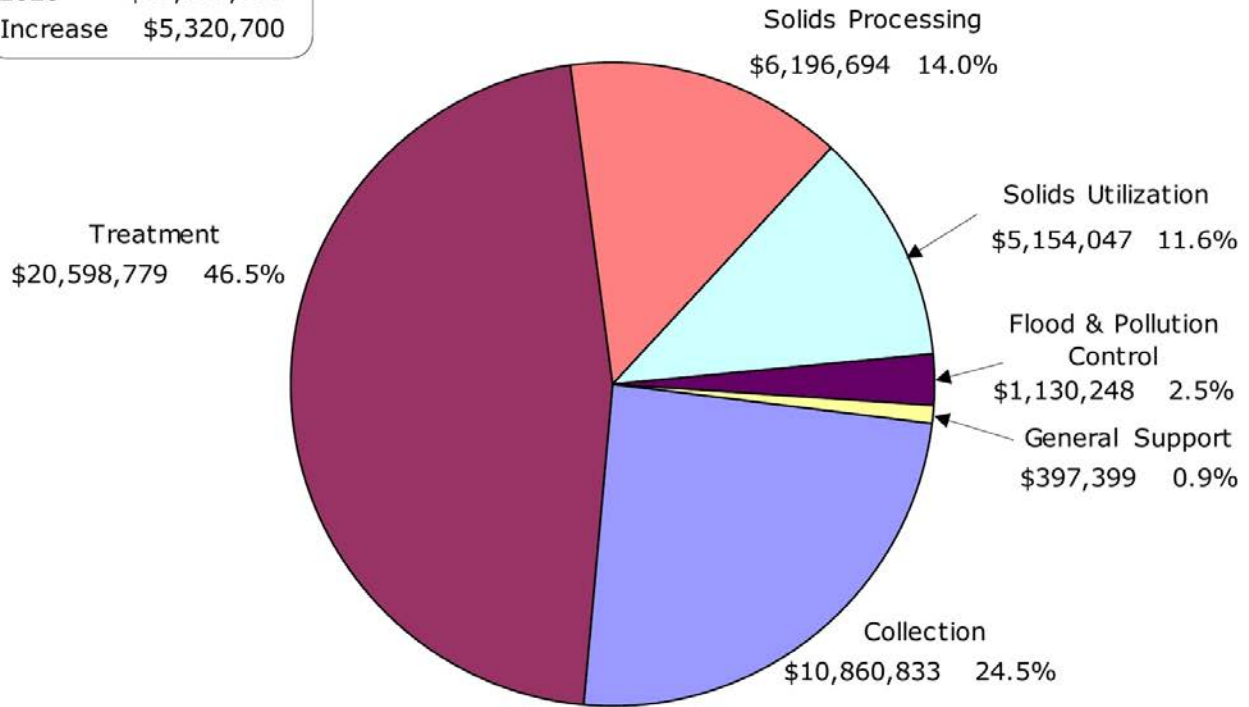
Fund: Corporate Dept: Maintenance & Operations Division: North Service Area		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
793	Operations Unit					
HP16	Assistant Chief Operating Engineer	1	1		1	
HP16	Treatment Plant Operator III	1	1		1	
HP14	Treatment Plant Operator II	7	7		7	
HP14	Treatment Plant Operator II #1	—	1		—	
HP12	Treatment Plant Operator I	4	4		4	
NR6810	Fireman-Oiler	2	2		1	
NR8650	Maintenance Laborer Class A Shift	1	1		—	
NR8651	Maintenance Laborer Class A	—	1		—	
NR6832	Operating Engineer II	1	1		1	
NR6831	Operating Engineer I	6	6		6	
TOTAL 793	Operations Unit	23	25	2,357,365	21	2,047,922
795	General Plant Services Unit					
NR8331	Laborer Foreman	1	1		1	
NR8651	Maintenance Laborer Class A	4	4		4	
NR8652	Maintenance Laborer Class B	1	1		1	
TOTAL 795	General Plant Services Unit	6	6	477,818	6	477,818
TOTAL 790	John E. Egan Water Reclamation Plant Section	32	34	3,274,102	30	2,964,660
TOTAL	Maintenance & Operations North Service Area	244	247	25,187,068	239	24,626,435

NOTES: 1. There are no positions budgeted for the Stormwater Management Fund.
 2. Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.

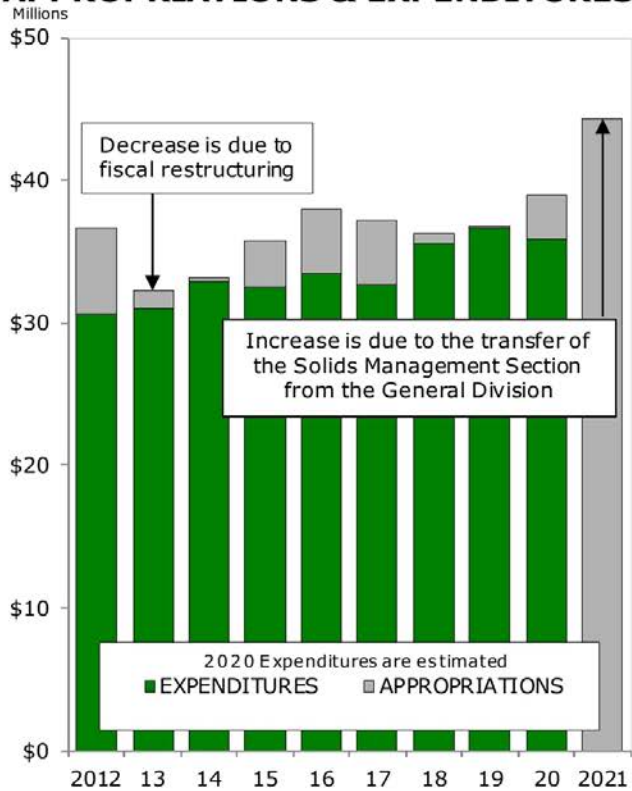
MAINTENANCE & OPERATIONS – CALUMET SERVICE AREA

2021	\$44,338,000
2020	\$39,017,300
Increase	\$5,320,700

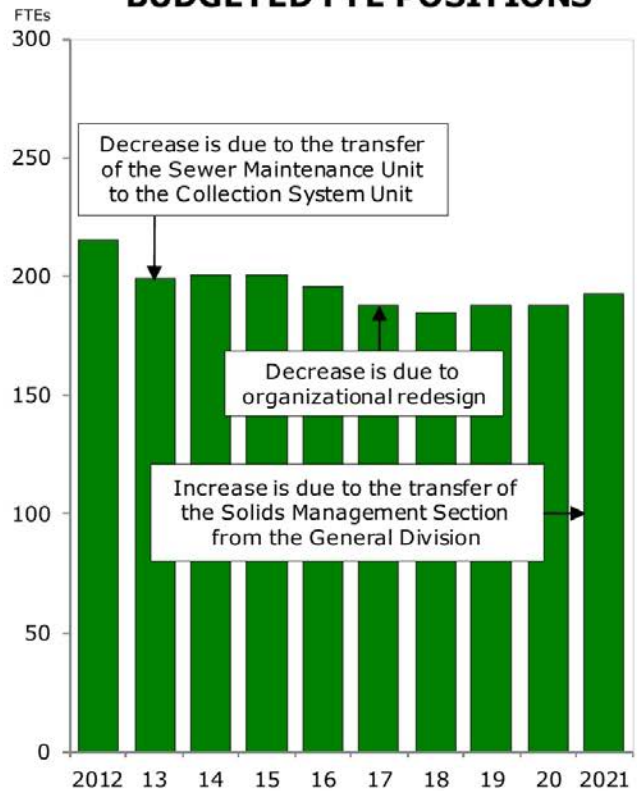
FUNCTIONS



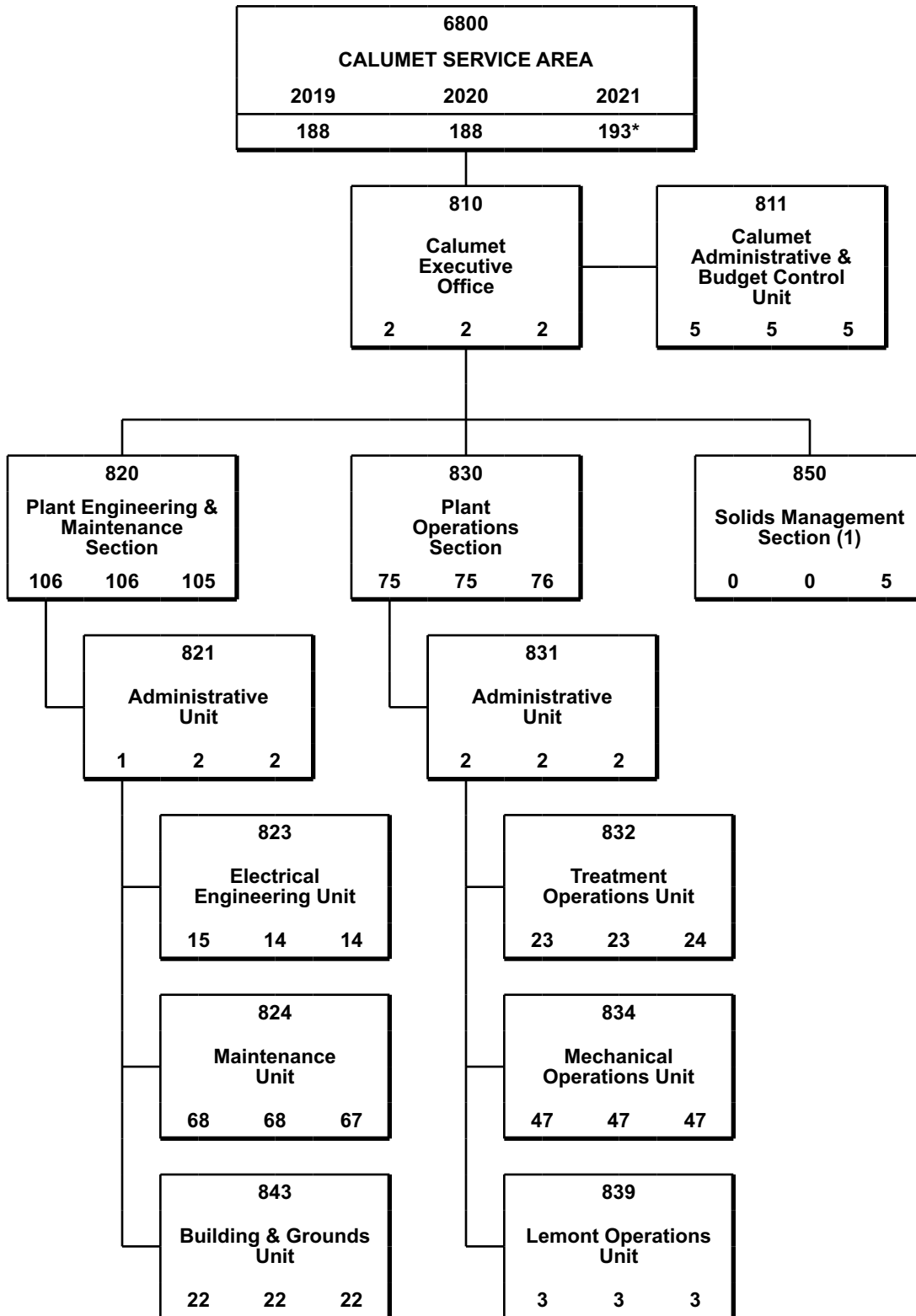
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS

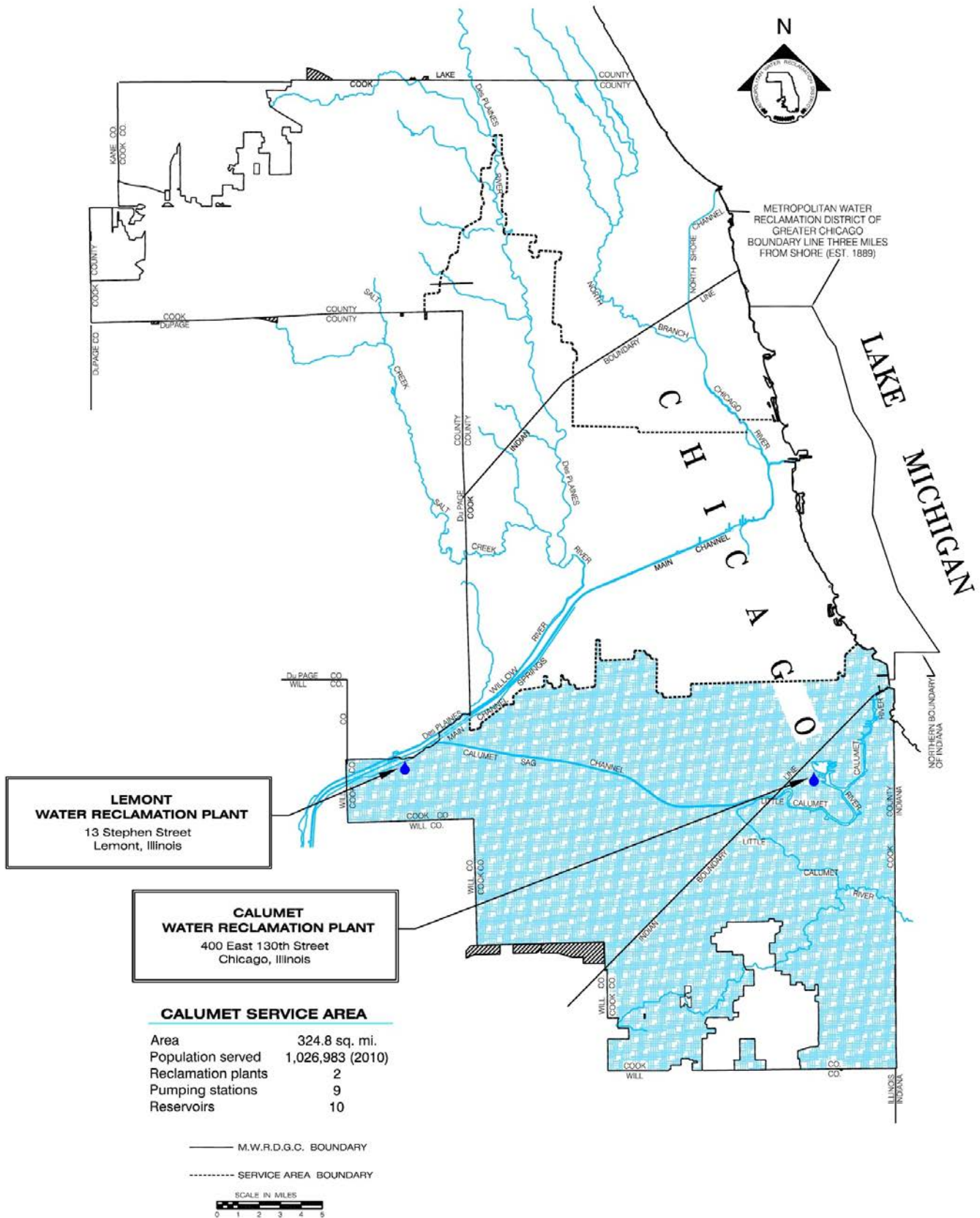


MAINTENANCE & OPERATIONS - CALUMET SERVICE AREA



* In 2021, there are no positions funded by the Stormwater Management Fund.

(1) Effective 01/01/21, Section 850 positions were transferred from Section 650 in the Maintenance & Operations - General Division.



68000 M&O - CALUMET SERVICE AREA

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:		Cost	Percent
1.	COLLECTION & TREATMENT: The Calumet Service Area will collect and treat approximately 101.0 billion gallons of wastewater through its Calumet and Lemont treatment facilities.	\$31,459,612	71.0%
	Design: Flows ^ CBOD * SS *		
	Calumet Water Reclamation Plant	354 MGD	10 mg/L 15 mg/L
	Lemont Water Reclamation Plant	2.3 MGD	20 mg/L 25 mg/L
	^ In millions of gallons per day (MGD).		
	* National Pollutant Discharge Elimination System monthly effluent quality standards in milligrams per liter:		
	CBOD - Carbonaceous Biochemical Oxygen Demand		
	SS - Suspended Solids		
2.	SOLIDS PROCESSING: The Calumet Service Area will remove and process 35,000 dry tons of concentrated sewage through various systems including heated digestion, centrifuging, concentration, and aging low solids sludge and centrifuge cake in lagoons.	\$ 6,196,694	14.0%
3.	SOLIDS UTILIZATION: The Calumet Service Area will utilize approximately 23,000 dry tons of biosolids for application at final utilization sites such as daily and final cover in sanitary landfills.	\$ 5,154,047	11.6%
4.	FLOOD & POLLUTION CONTROL: The Calumet Service Area will work to prevent local area flooding through the operation of 10 detention reservoirs, in cooperation with local communities. It will also work to maintain the quality of the waterways system and associated District property, in cooperation with the channel maintenance and debris boat crews.	\$ 1,130,248	2.5%
5.	GENERAL SUPPORT: The Calumet Service Area will provide technical and administrative support for other departments not directly related to the operational activities of Collection & Treatment, Solids Processing, Solids Utilization, and Flood & Pollution Control.	\$ 397,399	0.9%
Totals		<u>\$44,338,000</u>	<u>100.0%</u>

MEASURABLE GOALS:		2019	2020	2021
		Actual	Estimated	Proposed
		Unit of Measure		
1.	The Calumet Service Area will collect and treat approximately 101.0 billion gallons of wastewater in 2021.	Billion Gallons	113.3	101.0
2.	The Calumet Service Area will remove and process solids from 35,000 dry tons of concentrated sewage.	Dry Tons Process Solids	33,203	35,000
3.	The Calumet Service Area will obtain 100 percent permit compliance in 2021 for National Pollutant Discharge Elimination System effluent limits.	Percent	100.00%	100.00%
4.	The Calumet Service Area will utilize 23,000 dry tons of biosolids in 2021.	Dry Tons	15,660	23,000

68000 M&O - CALUMET SERVICE AREA

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
1000	Collection	\$11,515,738	2021	56 \$ 10,860,833	\$ 474,199	4.6	
			2020	56 \$ 10,386,634			
1100	Surface Interceptor Systems	\$ 483,629	2021	4 \$ 475,300	\$ (3,400)	(0.7)	
			2020	4 \$ 478,700			
1200	Tunnel and Reservoir System	\$ 4,153,426	2021	10 \$ 3,358,000	\$ 66,200	2.0	
			2020	10 \$ 3,291,800			
1300	Pumping Station Facilities	\$ 2,757,425	2021	15 \$ 3,047,400	\$ 283,400	10.3	a)
			2020	15 \$ 2,764,000			
1900	Collection - Indirect Costs	\$ 4,121,258	2021	27 \$ 3,980,133	\$ 127,999	3.3	
			2020	27 \$ 3,852,134			
2000	Treatment	\$16,594,823	2021	83 \$ 20,316,079	\$ 385,711	1.9	
			2020	84 \$ 19,930,368			
2000	Pre-Treatment	\$ 465,304	2021	4 \$ 508,700	\$ 4,100	0.8	
			2020	4 \$ 504,600			
2100	Primary Treatment	\$ 1,097,925	2021	11 \$ 1,087,600	\$ (31,200)	(2.8)	
			2020	12 \$ 1,118,800			
2200	Secondary Treatment	\$ 5,559,535	2021	22 \$ 6,894,400	\$ 714,600	11.6	b)
			2020	22 \$ 6,179,800			
2300	Tertiary Treatment	\$ 2,001,409	2021	5 \$ 2,041,800	\$ (3,900)	(0.2)	
			2020	5 \$ 2,045,700			
2900	Treatment - Indirect Costs	\$ 7,470,650	2021	41 \$ 9,783,579	\$ (297,889)	(3.0)	c)
			2020	41 \$ 10,081,468			

a) Increase is due to the addition of services to rehabilitate rotating assemblies (\$300,000), offset by a reduced demand for pump parts (\$30,000).

b) Increase is due to the addition of a carbon source for the Sidestream Enhanced Biological Phosphorus Removal pilot study at the Calumet WRP (\$250,000), an increased demand for services to paint final tanks (\$160,000), the procurement of a turbo blower at the Lemont WRP (\$160,000), an increased demand for services to recondition process blower motors (\$79,000), and electrical energy for blowers and air mains at the Calumet WRP (\$62,600).

c) Decrease is due to a reduced demand for repairs and alterations to plant facilities in the Calumet Service Area (\$1,000,000), offset by an increased demand for services to furnish, deliver, and install gas monitoring equipment (\$240,000), the procurement of a replacement carry deck crane (\$116,900), the addition of services to recondition circuit breakers (\$100,000), the addition of services to rehabilitate asphalt and concrete pavement (\$95,000), an increased demand to replace HVAC coils at various locations (\$83,000), and natural gas at various Calumet WRP facilities (\$57,400).

68000 M&O - CALUMET SERVICE AREA

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
3000	Solids Processing	\$ 6,010,073	2021 39	\$ 6,196,694	\$ 197,216	3.3	
			2020 39	\$ 5,999,478			
3100	Thickening	\$ 687,609	2021 7	\$ 667,200	\$ 2,100	0.3	
			2020 7	\$ 665,100			
3200	Stabilization	\$ 1,672,173	2021 9	\$ 1,728,900	\$ 11,100	0.6	
			2020 9	\$ 1,717,800			
3300	Dewatering	\$ 282,024	2021 3	\$ 290,800	\$ 26,200	9.9	
			2020 3	\$ 264,600			
3900	Solids Processing - Indirect Costs	\$ 3,368,267	2021 20	\$ 3,509,794	\$ 157,816	4.7	d)
			2020 20	\$ 3,351,978			
4000	Flood & Pollution Control	\$ 999,719	2021 2	\$ 1,130,248	\$ (4,944)	(0.4)	
			2020 2	\$ 1,135,192			
4200	Waterways Control and Stormwater Reservoirs	\$ 207,120	2021 1	\$ 199,000	\$ (100)	(0.1)	
			2020 1	\$ 199,100			
4400	Aeration Facilities	\$ 632,184	2021 1	\$ 767,000	\$ (20,200)	(2.6)	
			2020 1	\$ 787,200			
4900	Flood & Pollution Control - Indirect Costs	\$ 160,415	2021 —	\$ 164,248	\$ 15,356	10.3	
			2020 —	\$ 148,892			
5000	Solids Utilization	\$ 927,135	2021 10	\$ 5,154,047	\$ 4,244,796	466.8	
			2020 4	\$ 909,251			
5100	Solids Drying	\$ 65,327	2021 2	\$ 2,385,300	\$ 2,332,700	4,434.8	e)
			2020 —	\$ 52,600			
5200	Solids Distribution	\$ 65,327	2021 2	\$ 1,680,000	\$ 1,627,400	3,093.9	f)
			2020 —	\$ 52,600			
5900	Solids Utilization - Indirect Costs	\$ 796,481	2021 6	\$ 1,088,747	\$ 284,696	35.4	g)
			2020 4	\$ 804,051			
7000	General Support (excluding program number 7604)	\$ 331,479	2021 3	\$ 397,399	\$ 14,822	3.9	
			2020 3	\$ 382,577			
7604	Social Security and Medicare Contributions	\$ 263,811	2021 —	\$ 282,700	\$ 8,900	3.3	
			2020 —	\$ 273,800			
Totals		\$36,642,778	2021 193	\$ 44,338,000	\$ 5,320,700	13.6%	*
			2020 188	\$ 39,017,300			

- d) Increase is due to the procurement of a replacement carry deck crane (\$88,400), an increased demand for chains, sprockets, and appurtenances (\$29,500), and the procurement of three replacement utility vehicles (\$14,900).
- e) Increase is due to the transfer of the Solids Management Section from the General Division (\$2,331,800).
- f) Increase is due to the transfer of the Solids Management Section from the General Division (\$1,626,500).
- g) Increase is due to the transfer of the Solids Management Section from the General Division (\$249,400).

* The 2021 position total for the Calumet Service Area is 193, with no positions budgeted in the Stormwater Management Fund.

68000 M&O - CALUMET SERVICE AREA

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
1000-2900	Collection & Treatment					
	Collect and Treat Wastewater at the Calumet and Lemont Water Reclamation Plants					
	Calumet Water Reclamation Plant	Mil. Gallons	112,188	95,000	100,000	
		Cost	\$ 27,607,448	\$ 29,871,132	\$ 30,532,602	a)
		Cost/Mil. Gallons	\$ 246.08	\$ 314.43	\$ 305.33	
	Lemont Water Reclamation Plant	Mil. Gallons	1,077	1,000	1,000	
		Cost	\$ 503,113	\$ 445,870	\$ 644,310	b)
		Cost/Mil. Gallons	\$ 467.14	\$ 445.87	\$ 644.31	b)
3000	Solids Processing					
	Remove and Process Solids from Concentrated Sewage Through Various Systems Including Heated Digestion, Centrifuging, Concentration, and Aging Low Solids Sludge and Centrifuge Cake in Lagoons	Dry Tons	33,203	35,000	35,000	
		Cost	\$ 6,010,073	\$ 5,999,478	\$ 6,196,694	c)
		Cost/Dry Ton	\$ 181.01	\$ 171.41	\$ 177.05	
4000	Flood & Pollution Control					
	Operation and Maintenance of the Waterways to Minimize Area Flooding and Pollution					
4200	Minimize Area Flooding and Pollution of Lake Michigan Through the Continuous Control of Water Levels in Major Rivers and Canals and the Operation of Detention Reservoirs	Reservoirs	10	10	10	
		Cost	\$ 207,120	\$ 199,100	\$ 199,000	
		Cost/Reservoir	\$ 20,712.00	\$ 19,910.00	\$ 19,900.00	
4400	Aeration Facilities	Cost	\$ 632,184	\$ 787,200	\$ 767,000	
4900	Flood & Pollution Control - Indirect Costs	Cost	\$ 160,415	\$ 148,892	\$ 164,248	
5000	Solids Utilization					
	Utilize Biosolids for Application at Final Utilization Sites, such as for Daily and Final Cover in Sanitary Landfills	Dry Tons	15,660	23,000	23,000	
		Cost	\$ 927,135	\$ 909,251	\$ 5,154,047	d)
		Cost/Dry Ton	\$ 59.20	\$ 39.53	\$ 224.09	d)
7000	General Support (excluding program number 7604)					
	Technical and Administrative Support for Other Departments' Activities Indirectly Related to the Operational Activities of Collection and Treatment, Solids Processing, Flood & Pollution Control, and Solids Utilization	Cost	\$ 331,479	\$ 382,577	\$ 397,399	
7604	Social Security and Medicare Contributions	Cost	\$ 263,811	\$ 273,800	\$ 282,700	
	Division Totals		\$ 36,642,778	\$ 39,017,300	\$ 44,338,000	

- a) Increase is due to the addition of services to rehabilitate rotating assemblies (\$300,000), the addition of a carbon source for the Sidestream Enhanced Biological Phosphorus Removal pilot study (\$250,000), an increased demand for services to furnish, deliver, and install gas monitoring equipment (\$240,000), the procurement of a replacement carry deck crane (\$173,900), an increased demand for services to paint final tanks (\$160,000), the addition of services to recondition circuit breakers (\$100,000), the addition of services to rehabilitate asphalt and concrete pavement (\$95,000), an increased demand to replace HVAC coils at various locations (\$83,000), an increased demand for services to recondition process blower motors (\$79,000), an increased demand for electrical energy for blowers and air mains (\$62,600), an increased demand for natural gas at various Calumet WRP facilities (\$57,400), and the addition of grazing vegetation control services (\$25,000), offset by a reduced demand for repairs and alterations to plant facilities in the Calumet Service Area (\$1,000,000).
- b) Increase is due to the procurement of a turbo blower at the Lemont WRP (\$160,000) and related piping for installation (\$20,000).
- c) Increase is due to the procurement of a replacement carry deck crane (\$88,400), an increased demand for chain, sprockets, and appurtenances (\$29,500), the reallocation of salaries to more accurately reflect current activities (\$25,000), and the procurement of three replacement utility vehicles (\$14,900).
- d) Increase is due to the transfer of the Solids Management Section from the General Division (\$4,207,700).

Account Number	Account Name	LINE ITEM ANALYSIS						
		2019	2020			2021		
101 68000	Fund: Corporate Department: Maintenance & Operations Division: Calumet Service Area	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 17,872,466	\$ 18,660,100	\$ 18,660,100	\$ 13,630,246	\$ 18,493,500	\$ 19,162,700	\$ —
601060	Compensation Plan Adjustments	960,723	1,085,900	1,085,900	935,510	1,085,900	1,145,700	—
601070	Social Security and Medicare Contributions	263,811	273,800	273,800	211,452	248,100	282,700	—
601080	Salaries of Nonbudgeted Employees	47,233	—	46,700	9,379	52,300	—	—
601100	Tuition and Training Payments	7,860	30,600	30,600	800	7,000	34,300	—
100	TOTAL PERSONAL SERVICES	19,152,092	20,050,400	20,097,100	14,787,387	19,886,800	20,625,400	—
612010	Travel	—	5,000	5,000	—	500	5,000	—
612030	Meals and Lodging	6,505	10,000	10,000	3,220	4,000	10,000	—
612050	Compensation for Personally-Owned Automobiles	50,732	40,000	40,000	22,593	38,700	45,000	—
612080	Motor Vehicle Operating Services	348	300	300	—	200	500	—
612150	Electrical Energy	10,088,589	9,791,400	9,791,400	5,908,723	9,607,000	9,792,700	—
612160	Natural Gas	697,975	681,300	681,300	525,530	733,900	731,700	—
612170	Water and Water Services	350,996	390,500	390,500	192,794	332,000	390,500	—
612210	Communication Services	—	3,000	3,000	—	—	—	—
612240	Testing and Inspection Services	35,869	73,300	73,300	71,345	39,600	70,000	—
612330	Rental Charges	269	15,000	15,000	400	1,000	5,400	—
612410	Governmental Service Charges	97,536	103,000	103,000	97,788	98,600	100,000	—
612420	Maintenance of Grounds and Pavements	49,169	87,900	118,900	118,817	78,500	247,500	—
612490	Contractual Services, N.O.C.	3,589	10,500	10,500	381	2,600	14,500	—
612520	Waste Material Disposal Charges	330,576	410,800	410,800	409,539	320,400	4,013,900	—
612600	Repairs to Collection Facilities	100,273	101,500	101,500	70,600	52,400	383,700	—
612620	Repairs to Waterway Facilities	—	—	—	—	—	10,000	—
612650	Repairs to Process Facilities	1,508,293	3,503,400	3,408,900	3,132,254	1,625,000	3,095,900	—
612680	Repairs to Buildings	337,185	481,300	481,300	409,605	231,700	484,800	—
612760	Repairs to Material Handling and Farming Equipment	37,752	52,000	52,000	45,870	45,000	84,300	—
612780	Safety Repairs and Services	15,254	20,000	36,000	36,000	30,000	24,800	—
612860	Repairs to Vehicle Equipment	52,112	53,500	53,500	53,500	52,000	53,500	—
612990	Repairs, N.O.C.	100	8,000	8,000	1,000	3,100	8,000	—
200	TOTAL CONTRACTUAL SERVICES	13,763,122	15,841,700	15,794,200	11,099,959	13,296,200	19,571,700	—
623030	Metals	11,407	10,100	10,100	8,300	7,100	10,100	—
623070	Electrical Parts and Supplies	427,581	387,300	387,300	383,075	350,000	528,300	—
623090	Plumbing Accessories and Supplies	141,740	226,100	143,600	101,532	136,800	219,800	—
623110	Hardware	1,491	2,800	2,800	2,800	1,300	2,800	—

101 68000	Fund: Corporate Department: Maintenance & Operations Division: Calumet Service Area	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623130	Buildings, Grounds, Paving Materials, and Supplies	36,697	52,500	49,900	38,317	31,500	56,600	—
623190	Paints, Solvents, and Related Materials	940	2,800	25,300	24,433	2,500	2,800	—
623250	Vehicle Parts and Supplies	29,011	36,000	36,000	36,000	32,200	62,500	—
623270	Mechanical Repair Parts	541,782	527,100	827,100	716,212	577,400	632,200	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	8,046	10,000	10,000	6,696	8,800	10,000	—
623560	Processing Chemicals	1,510,389	1,555,900	1,555,900	1,540,963	1,320,100	1,845,700	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	2,126	3,000	3,000	1,958	2,900	3,000	—
623660	Cleaning Supplies	458	1,000	1,000	605	900	2,000	—
623680	Tools and Supplies	36,563	48,300	48,300	47,571	31,500	39,000	—
623780	Safety and Medical Supplies	17,511	20,300	18,800	11,625	15,200	20,300	—
623810	Computer Supplies	4,758	—	—	—	—	—	—
623820	Fuel	46,158	50,000	41,800	41,760	30,000	68,800	—
623860	Lubricants	497	2,000	2,000	1,091	700	2,000	—
623990	Materials and Supplies, N.O.C.	26,162	31,000	31,000	18,642	22,800	38,000	—
300	TOTAL MATERIALS AND SUPPLIES	2,843,317	2,966,200	3,193,900	2,981,580	2,571,700	3,543,900	—
634650	Equipment for Process Facilities	61,378	159,000	125,500	120,658	121,700	239,000	—
634760	Material Handling and Farming Equipment	292,990	—	—	—	—	285,000	—
634860	Vehicle Equipment	524,119	—	33,500	—	—	48,000	—
634990	Machinery and Equipment, N.O.C.	5,761	—	—	—	—	25,000	—
400	TOTAL MACHINERY AND EQUIPMENT	884,248	159,000	159,000	120,658	121,700	597,000	—
TOTAL CALUMET SERVICE AREA		\$ 36,642,779	\$ 39,017,300	\$ 39,244,200	\$ 28,989,584	\$ 35,876,400	\$ 44,338,000	\$ —

NOTES: 1. Amounts may not add up due to rounding.
 2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.
 Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.
 3. For the M&O Department, Expenditure (Committed Budget plus Disbursement) may exceed Adjusted Appropriation for a specific division as funding is controlled at the M&O Overall department-level.

Fund: Corporate Dept: Maintenance & Operations Division: Calumet Service Area		POSITION ANALYSIS				
		2019	2020		2021	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
810	Calumet Executive Office					
HP22	Assistant Director of Maintenance & Operations	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 810	Calumet Executive Office	2	2	308,895	2	318,747
811	Calumet Administrative & Budget Control Unit					
HP14	Budget & Management Analyst	2	2		2	
HP12	Secretary #2 (Administrative Specialist) (New Grade HP11)	1	1		1	
HP11	Administrative Specialist	1	1		1	
HP09	Administrative Clerk	1	1		1	
TOTAL 811	Calumet Administrative & Budget Control Unit	5	5	425,324	5	432,944
820	Plant Engineering & Maintenance Section					
821	Administrative Unit					
HP20	Managing Engineer	1	1		1	
HP14	Engineering Technician V	—	1		1	
TOTAL 821	Administrative Unit	1	2	298,202	2	311,896
823	Electrical Engineering Unit					
HP15	Associate Process Control Engineer	2	2		2	
HP14	Engineering Technician V	1	—		—	
NR6251	Chief Electrical Operator	1	1		1	
NR6233	Electrical Operator II	5	5		5	
NR6232	Electrical Operator I	6	6		6	
TOTAL 823	Electrical Engineering Unit	15	14	1,445,162	14	1,445,162
824	Maintenance Unit					
HP19	Master Mechanic	1	1		1	
HP18	Master Mechanic I #1	1	—		—	
HP17	Assistant Master Mechanic	3	3		3	
PR5353	Bricklayer	1	1		1	
PR5155	Carpenter Leadman	1	1		1	
PR5153	Carpenter	2	2		2	

Fund: Corporate Dept: Maintenance & Operations Division: Calumet Service Area		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
PR7425	Electrical Instrument & Testing Mechanic Foreman	1	1		1	
PR7423	Electrical Instrument & Testing Mechanic	7	7		7	
PR7347	Electrical Mechanic Foreman	1	1		1	
PR7349	Electrical Mechanic Sub-Foreman	1	1		1	
PR7343	Electrical Mechanic	10	10		10	
PR6453	Hoisting Engineer	3	3		3	
PR7579	Machinist Foreman	1	1		1	
PR7573	Machinist	10	10		10	
PR5553	Painter	2	2		2	
PR7779	Pipefitter Foreman	1	1		1	
PR7773	Pipefitter	9	9		9	
PR5753	Plumber	2	2		2	
PR5975	Structural Ironworker Leadman	1	1		1	
PR5973	Structural Ironworker	5	5		5	
PR5973	Structural Ironworker #1	—	1		—	
PR6479	Truck Driver Foreman	1	1		1	
PR6473	Truck Driver	4	4		4	
TOTAL 824	Maintenance Unit	68	68	7,186,504	67	7,232,345
843	Buildings & Grounds Unit					
HP14	Engineering Technician V	1	1		1	
HP12	Engineering Technician IV	1	1		1	
NR8331	Laborer Foreman	2	2		2	
NR8651	Maintenance Laborer Class A	8	8		8	
NR8652	Maintenance Laborer Class B	10	10		10	
TOTAL 843	Buildings & Grounds Unit	22	22	1,595,841	22	1,585,776
TOTAL 820	Plant Engineering & Maintenance Section	106	106	10,525,709	105	10,575,180
830	Plant Operations Section					
831	Administrative Unit					
HP21	Engineer of Treatment Plant Operations 1 #2 (Managing Engineer) (New Grade HP20)	1	1		—	
HP20	Managing Engineer	—	—		1	

Fund: Corporate Dept: Maintenance & Operations Division: Calumet Service Area		POSITION ANALYSIS				
		2019	2020		2021	
				Proposed by the Executive Director		
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP18	Principal Engineer	1	1		1	
TOTAL 831	Administrative Unit	2	2	382,276	2	328,955
832	Treatment Operations Unit					
HP15	Associate Civil Engineer	—	—		1	
HP16	Treatment Plant Operator III	1	1		1	
HP14	Treatment Plant Operator II	7	7		7	
HP14	Treatment Plant Operator II #4	1	1		1	
HP12	Treatment Plant Operator I	5	5		5	
NR8650	Maintenance Laborer Class A Shift	8	8		8	
NR8651	Maintenance Laborer Class A	1	1		1	
TOTAL 832	Treatment Operations Unit	23	23	2,103,194	24	2,188,007
834	Mechanical Operations Unit					
HP17	Chief Operating Engineer I	1	1		1	
HP16	Assistant Chief Operating Engineer	2	2		2	
NR6810	Fireman-Oiler	5	5		5	
NR8650	Maintenance Laborer Class A Shift	7	7		7	
NR6832	Operating Engineer II	12	12		12	
NR6831	Operating Engineer I	18	18		18	
PR6473	Truck Driver	2	2		2	
TOTAL 834	Mechanical Operations Unit	47	47	4,819,830	47	4,829,100
839	Lemont Operations Unit					
HP14	Treatment Plant Operator II	1	1		1	
HP12	Treatment Plant Operator I	2	2		2	
TOTAL 839	Lemont Operations Unit	3	3	282,570	3	286,647
TOTAL 830	Plant Operations Section	75	75	7,587,870	76	7,632,708
850	Solids Management Section					
HP17	Senior Engineer	—	—		1	
HP14	Engineering Technician V	—	—		2	
HP12	Engineering Technician IV	—	—		1	

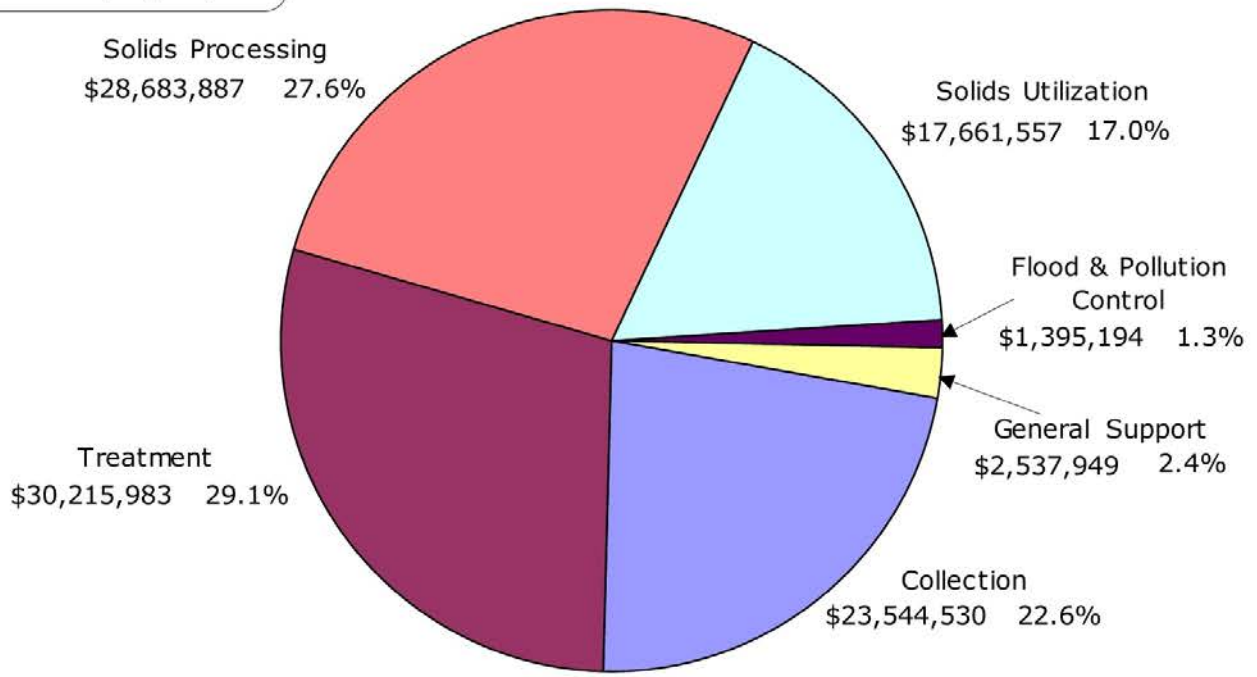
Fund: Corporate Dept: Maintenance & Operations Division: Calumet Service Area		POSITION ANALYSIS				
		2019	2020		2021	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP11	Engineering Technician III	—	—		1	
TOTAL 850	Solids Management Section	—	—	—	5	495,093
TOTAL	Maintenance & Operations Calumet Service Area	188	188	18,847,797	193	19,454,672

NOTES: 1. There are no positions budgeted for the Stormwater Management Fund.
 2. Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.

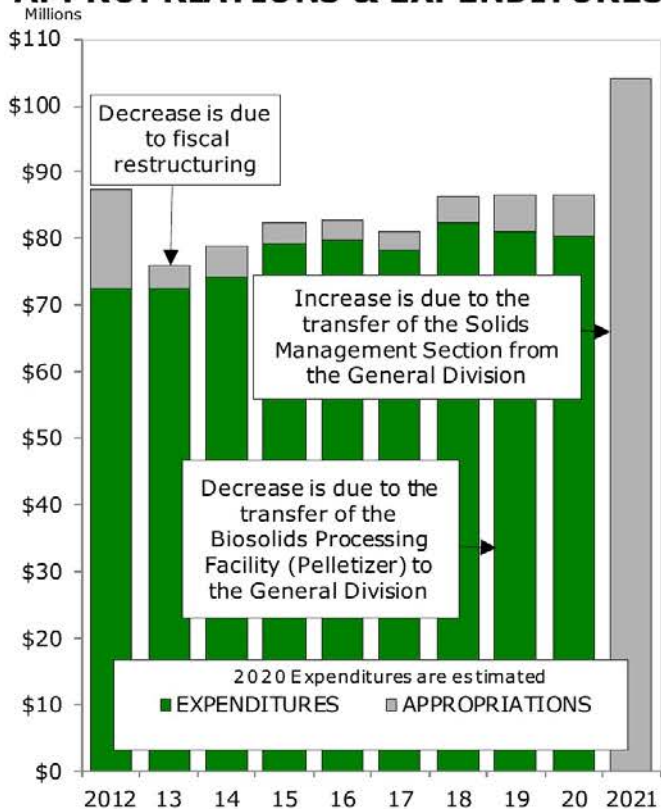
MAINTENANCE & OPERATIONS – STICKNEY SERVICE AREA

2021	\$104,039,100
2020	\$86,695,900
Increase	\$17,343,200

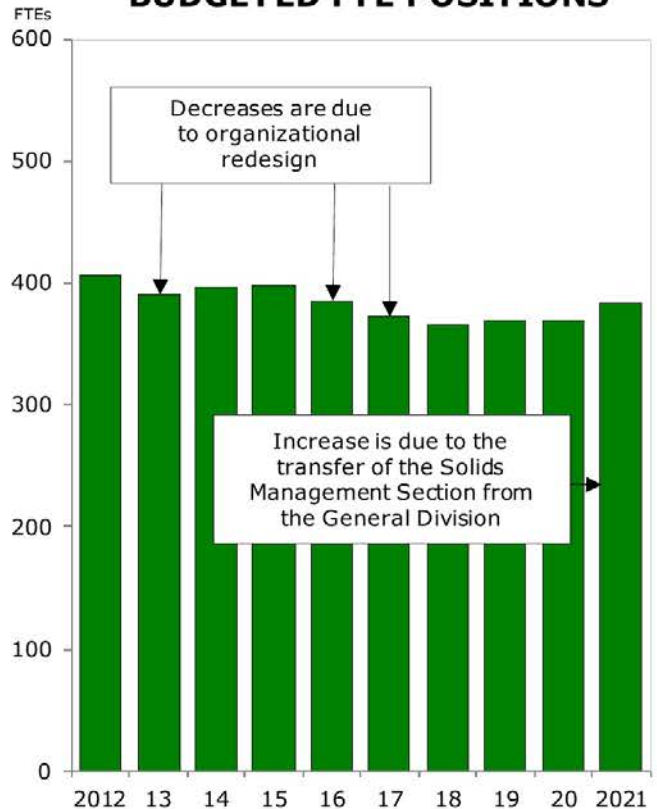
FUNCTIONS



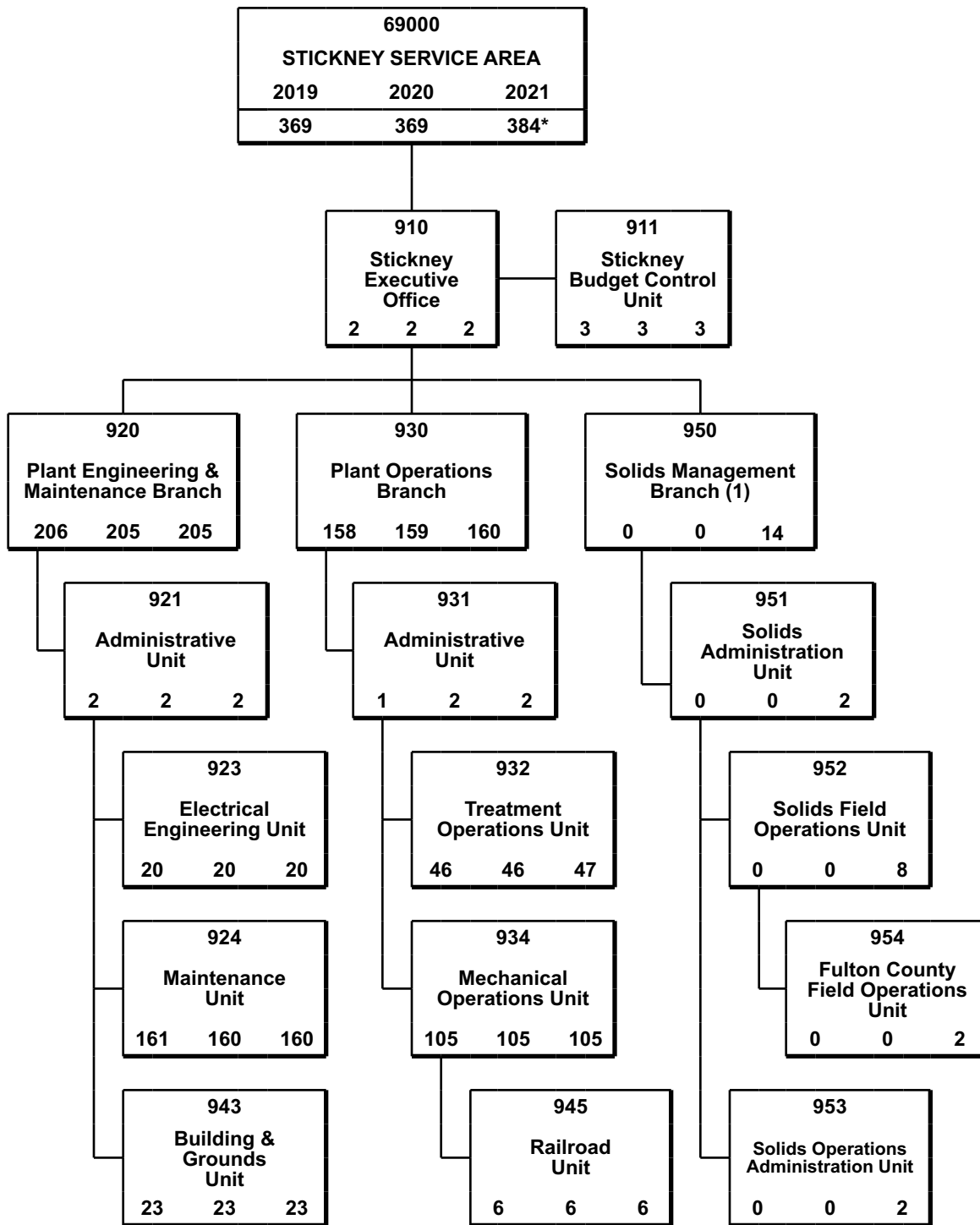
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS

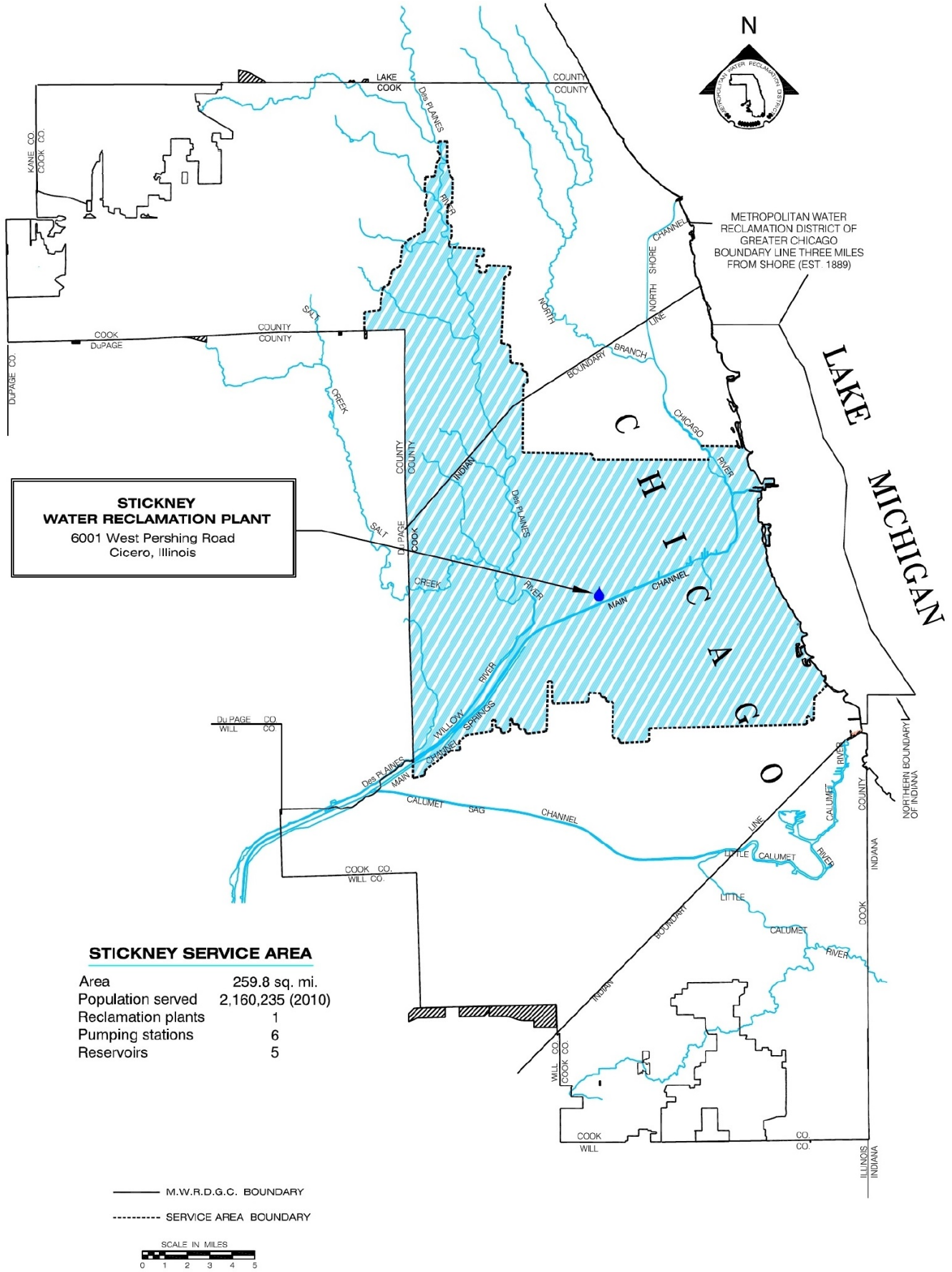


MAINTENANCE & OPERATIONS - STICKNEY SERVICE AREA



* In 2021, nine positions in the Stickney Service Area are funded by the Stormwater Management Fund while the operations remain in the Maintenance & Operations Department, one in Unit 924 and eight in Unit 934.

(1) Effective 01/01/21, Section 950 positions were transferred from Section 650 in the Maintenance & Operations - General Division.



69000 M&O - STICKNEY SERVICE AREA

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:				Cost	Percent
1.	COLLECTION & TREATMENT: The Stickney Service Area will collect and treat approximately 290.0 billion gallons of wastewater through its treatment facilities.			\$ 53,760,513	51.7%
		Design:	Flows ^ CBOD * SS *		
	Stickney Water Reclamation Plant		1,200 MGD 10 mg/L 12 mg/L		
	^ In millions of gallons per day (MGD).				
	* National Pollutant Discharge Elimination System monthly effluent quality standards in milligrams per liter: CBOD - Carbonaceous Biochemical Oxygen Demand SS - Suspended Solids				
2.	SOLIDS PROCESSING: The Stickney Service Area will remove 94,500 dry tons and process solids from 140,700 dry tons of concentrated sewage (includes 42,500 dry tons from North Service Area) through various systems including heated digestion, centrifuging, concentration, and aging low solids sludge and centrifuge cake in lagoons.			\$ 28,683,887	27.6%
3.	SOLIDS UTILIZATION: The Stickney Service Area will utilize 76,000 dry tons of biosolids, for use at final utilization sites, such as farmland application, District-funded green infrastructure projects, public works projects, golf courses, highway authorities, and public distribution outlets.			\$ 17,661,557	17.0%
4.	FLOOD & POLLUTION CONTROL: The Stickney Service Area will work to prevent local area flooding through the operation of 5 detention reservoirs, in cooperation with local communities. It will also work to maintain the quality of the waterways system and associated District property, in cooperation with the debris boats and the channel maintenance and debris boat crews.			\$ 1,395,194	1.3%
5.	GENERAL SUPPORT: The Stickney Service Area will provide technical and administrative support for other departments not directly related to the operational activities of Collection & Treatment, Solids Processing, Solids Utilization, and Flood & Pollution Control.			\$2,537,949	2.4%
Totals				\$104,039,100	100.0%

MEASURABLE GOALS:		2019	2020	2021	
	Unit of Measure	Actual	Estimated	Proposed	
1.	The Stickney Service Area will collect and treat approximately 290 billion gallons of wastewater in 2021.	Billion Gallons	299	290	290
2.	The Stickney Service Area will remove and process solids from 140,700 dry tons of concentrated sewage, including 42,500 dry tons transferred from the North Service Area.	Dry Tons Process Solids	139,077	140,700	140,700
3.	The Stickney Service Area will obtain 100 percent permit compliance in 2021 for National Pollutant Discharge Elimination System effluent limits.	Percent	99.20%	100.00%	100.00%
4.	The Stickney Service Area will utilize 76,000 dry tons of biosolids in 2021 (does not include Pelletizer Facility Operations).	Dry Tons	41,940	76,000	76,000

69000 M&O - STICKNEY SERVICE AREA

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change	
Number	Name	Actual	FTEs	Dollars	Dollars	Percent
1000	Collection	\$22,600,305	2021	79 \$ 23,544,530	\$ 50,680	0.2
			2020	79 \$ 23,493,850		
1100	Surface Interceptor Systems	\$ 513,236	2021	— \$ 217,000	\$ (7,800)	(3.5)
			2020	— \$ 224,800		
1200	Tunnel and Reservoir System	\$ 5,907,276	2021	12 \$ 6,041,000	\$ 45,500	0.8
			2020	13 \$ 5,995,500		
1300	Pumping Station Facilities	\$ 7,711,946	2021	28 \$ 8,179,600	\$ 81,000	1.0
			2020	28 \$ 8,098,600		
1900	Collection - Indirect Costs	\$ 8,467,847	2021	39 \$ 9,106,930	\$ (68,020)	(0.7)
			2020	38 \$ 9,174,950		
2000	Treatment	\$25,812,684	2021	126 \$ 29,651,883	\$ 1,358,588	4.8
			2020	125 \$ 28,293,295		
2000	Pre-Treatment	\$ 2,117,318	2021	17 \$ 2,086,200	\$ 77,000	3.8
			2020	17 \$ 2,009,200		
2100	Primary Treatment	\$ 1,628,135	2021	18 \$ 1,623,100	\$ (102,700)	(6.0)
			2020	18 \$ 1,725,800		
2200	Secondary Treatment	\$ 8,225,442	2021	26 \$ 8,622,900	\$ 327,000	3.9
			2020	26 \$ 8,295,900		
2300	Tertiary Treatment	\$ 16,499	2021	— \$ 15,400	\$ 200	1.3
			2020	— \$ 15,200		
2900	Treatment - Indirect Costs	\$13,825,290	2021	65 \$ 17,304,283	\$ 1,057,088	6.5
			2020	64 \$ 16,247,195		

a) Increase is due to an increased demand for final tank painting (\$274,700), parts for process blower motors (\$160,000), and reconditioning of process blower motors (\$135,500), offset by a reduced demand for electrical energy for aeration blowers (\$203,000).

b) Increase is due to an increased demand for services to upgrade and replace the distributed control system (\$600,000), a snow plow truck (\$202,000), a stake body truck (\$170,000), chains, sprockets, and appurtenances (\$138,000), reconditioning of circuit breakers (\$100,000), the reallocation of salaries to more accurately reflect current activities (\$90,800), and the addition of one FTE position (\$77,500), offset by a reduced demand for repairs and alterations to plant facilities (\$277,700) and gas monitoring equipment (\$75,000).

69000 M&O - STICKNEY SERVICE AREA

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change	
Number	Name	Actual	FTEs	Dollars	Dollars	Percent
3000	Solids Processing	\$26,025,454	2021 133	\$ 28,683,887	\$ 666,204	2.4
			2020 132	\$ 28,017,683		
3100	Thickening	\$ 4,926,590	2021 25	\$ 5,098,200	\$ (118,400)	(2.3)
			2020 25	\$ 5,216,600		
3200	Stabilization	\$ 3,914,952	2021 27	\$ 3,869,100	\$ 39,700	1.0
			2020 27	\$ 3,829,400		
3300	Dewatering	\$10,097,401	2021 32	\$ 11,416,000	\$ 387,200	3.5
			2020 32	\$ 11,028,800		
3900	Solids Processing - Indirect Costs	\$ 7,086,511	2021 49	\$ 8,300,587	\$ 357,704	4.5
			2020 48	\$ 7,942,883		
4000	Flood & Pollution Control	\$ 930,472	2021 6	\$ 1,395,194	\$ 273,428	24.4
			2020 6	\$ 1,121,766		
4200	Waterways Control and Stormwater Reservoirs	\$ 609,948	2021 5	\$ 550,800	\$ 7,600	1.4
			2020 5	\$ 543,200		
4900	Flood & Pollution Control - Indirect Costs	\$ 320,524	2021 1	\$ 844,394	\$ 265,828	45.9
			2020 1	\$ 578,566		
5000	Solids Utilization	\$ 2,753,708	2021 24	\$ 17,661,557	\$ 14,910,660	542.0
			2020 12	\$ 2,750,897		
5100	Solids Drying	\$ 614,203	2021 7	\$ 3,774,300	\$ 3,295,500	688.3
			2020 5	\$ 478,800		
5200	Solids Distribution	\$ 787,310	2021 6	\$ 10,609,600	\$ 9,837,600	1,274.3
			2020 1	\$ 772,000		
5900	Solids Utilization - Indirect Costs	\$ 1,352,195	2021 11	\$ 3,277,657	\$ 1,777,560	118.5
			2020 6	\$ 1,500,097		
7000	General Support (excluding program number 7604)	\$ 2,372,348	2021 16	\$ 2,537,949	\$ 66,240	2.7
			2020 15	\$ 2,471,709		
7604	Social Security and Medicare Contributions	\$ 533,280	2021 —	\$ 564,100	\$ 17,400	3.2
			2020 —	\$ 546,700		
Totals		\$81,028,251	2021 384	\$ 104,039,100	\$ 17,343,200	20.0%
			2020 369	\$ 86,695,900		

- c) Increase is due to an increased demand for ferric chloride (\$400,000), sodium hydroxide (\$146,200), and carbon dioxide (\$81,500), offset by a reduced demand for polymer (\$205,800) and magnesium chloride (\$131,400).
- d) Increase is due to an increased demand for chains, sprockets, and appurtenances (\$204,000), the reallocation of salaries to more accurately reflect current activities (\$101,900), the transfer in of one FTE position from the General Division (\$75,300), services to repair railroad crossing signal systems (\$60,000), and the addition of one FTE position (\$55,100), offset by a reduced demand for thickening centrifuges parts (\$64,600), electrical energy for general service and the Ostara process at the Stickney WRP (\$38,900), and the drop of one FTE position (\$26,800).
- e) Increase is due to the addition of painting and protective coating services at the Stickney WRP, which was deferred from 2020 (\$270,000), offset by a reduced demand for thickening centrifuges parts (\$7,600).
- f) Increase is due to the transfer of the Solids Management Section from the General Division (\$3,288,500).
- g) Increase is due to the transfer of the Solids Management Section (\$5,354,900) and the pelletizer facility (\$4,500,000) from the General Division.
- h) Increase is due to the transfer of the Solids Management Section from the General Division (\$1,636,400).

* The 2021 position total for the Stickney Service Area is 384, with an additional nine positions budgeted in the Stormwater Management Fund.

69000 M&O - STICKNEY SERVICE AREA

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
1000-2900	Collection & Treatment					
	Collect and Treat Wastewater at the Stickney Water Reclamation Plant	Mil. Gallons	298,833	285,000	290,000	
		Cost	\$ 48,412,989	\$ 51,787,145	\$ 53,196,413	a)
		Cost/Mil. Gallons	\$ 162.01	\$ 181.71	\$ 183.44	a)
3000	Solids Processing					
	Remove 94,500 Dry Tons of Solids and Process 140,700 Dry Tons of Solids (Includes 42,500 Dry Tons from North Service Area) from Concentrated Sewage Through Various Systems Including Heated Digestion, Centrifuging, Concentration, and Aging Low Solids Sludge and Centrifuge Cake in Lagoons	Dry Tons	139,077	139,500	140,700	
		Cost	\$ 26,025,454	\$ 28,017,683	\$ 28,683,887	b)
		Cost/Dry Ton	\$ 187.13	\$ 200.84	\$ 203.87	
4000	Flood & Pollution Control					
	Operation and Maintenance of the Waterways to Minimize Area Flooding and Pollution					
4200	Minimize Area Flooding and Pollution of Lake Michigan Through the Continuous Control of Water Levels in Major Rivers and Canals and the Operation of Detention Reservoirs	Reservoirs	5	5	5	
		Cost	\$ 609,948	\$ 543,200	\$ 550,800	
		Cost/Reservoir	\$ 121,989.60	\$ 108,640.00	\$ 110,160.00	
4900	Flood & Pollution Control - Indirect Costs	Cost	\$ 320,524	\$ 578,566	\$ 844,394	c)
5000	Solids Utilization					
	Utilize Biosolids for Application at Final Utilization Sites Such as Farmland, District-Funded Green Infrastructure Projects, Public Works Projects, Golf Courses, Highway Authorities, and Public Distribution Outlets.	Dry Tons	41,940	76,000	76,000	
		Cost	\$ 2,014,413	\$ 2,038,197	\$ 12,476,157	d)
		Cost/Dry Ton	\$ 48.03	\$ 26.82	\$ 164.16	d)
5271	Pelletizer Disposal	Dry Tons	—	—	40,000	e)
	Control Management and Disposal of Solids by Private Contracts	Cost	\$ 739,295	\$ 712,700	\$ 5,185,400	e)
		Cost/Dry Ton	\$ —	\$ —	\$ 129.64	e)
7000	General Support (excluding program number 7604)					
	Technical and Administrative Support for Other Departments' Activities Indirectly Related to the Operational Activities of Collection and Treatment, Solids Processing, Flood & Pollution Control, and Solids Utilization	Cost	\$ 2,372,348	\$ 2,471,709	\$ 2,537,949	
7604	Social Security and Medicare Contributions	Cost	\$ 533,280	\$ 546,700	\$ 564,100	
	Division Totals		\$ 81,028,251	\$ 86,695,900	\$ 104,039,100	

- a) Increase is due to an increased demand for services to upgrade and replace the distributed control system at the Stickney WRP (\$600,000), chains, sprockets, and appurtenances (\$282,000), final tank painting (\$274,700), rehabilitation of rotating assemblies (\$230,000), a snow plow truck (\$202,000), power distribution equipment cleaning (\$175,000), a stake body truck (\$170,000), parts for process blower motors (\$160,000), painting and protective coating services at the Stickney WRP, which was deferred from 2020 (\$150,000), water services (\$142,300), reconditioning of process blower motors (\$135,500), the reallocation of salaries to more accurately reflect current activities (\$122,600), the addition of one FTE position (\$116,300), and the reconditioning of circuit breakers (\$100,000), offset by a reduced demand for electrical energy (\$585,000), repairs and alterations to plant facilities (\$476,100), emergency generators (\$215,500), and gas monitoring equipment (\$75,000).
- b) Increase is due to an increased demand for ferric chloride (\$400,000), chains, sprockets and appurtenances (\$204,000), sodium hydroxide (\$146,200), the reallocation of salaries to more accurately reflect current activities (\$114,000), carbon dioxide (\$81,500), the transfer in of one FTE position from the General Division (\$75,300), services to repair railroad crossing signal systems (\$60,000), and the addition of one FTE position (\$55,100), offset by a reduced demand for services to repair centrifuges (\$206,900), magnesium chloride (\$131,400), polymer (\$83,900), thickening centrifuges parts (\$64,600), electrical energy for general service and the Ostara process at the Stickney WRP (\$38,900), and the drop of one FTE position (\$26,800).
- c) Increase is due to the addition of painting and protective coating services at the Stickney WRP, which was deferred from 2020 (\$270,000), offset by a reduced demand for thickening centrifuges parts (\$7,600).
- d) Increase is due to the transfer of the Solids Management Section from the General Division (\$10,279,800) and an increased demand for railroad track maintenance (\$135,700).
- e) Increase is due to the transfer of the pelletizing facility from the General Division (\$4,500,000).

Account Number	Account Name	LINE ITEM ANALYSIS						
		2019	2020			2021		
101	Fund: Corporate							
69000	Department: Maintenance & Operations							
	Division: Stickney Service Area							
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 35,629,542	\$ 37,253,300	\$ 37,253,300	\$ 27,014,056	\$ 36,729,000	\$ 39,039,500	\$ —
601060	Compensation Plan Adjustments	2,477,643	2,544,500	2,544,500	1,995,259	2,686,800	2,428,500	—
601070	Social Security and Medicare Contributions	533,280	546,700	546,700	422,626	549,200	564,100	—
601080	Salaries of Nonbudgeted Employees	—	1,500	5,600	5,600	3,200	1,500	—
601100	Tuition and Training Payments	33,967	91,500	91,500	9,901	12,800	86,500	—
100	TOTAL PERSONAL SERVICES	38,674,432	40,437,500	40,441,600	29,447,442	39,981,000	42,120,100	—
612010	Travel	573	5,400	5,400	794	1,000	5,400	—
612030	Meals and Lodging	20,569	26,500	26,500	11,312	21,500	26,500	—
612050	Compensation for Personally-Owned Automobiles	45,754	45,000	45,000	19,339	27,000	45,000	—
612080	Motor Vehicle Operating Services	132	300	300	80	200	300	—
612150	Electrical Energy	20,349,731	20,226,600	20,226,600	12,178,377	20,206,400	19,493,000	—
612160	Natural Gas	1,370,583	2,022,600	2,022,600	503,165	2,002,400	2,050,000	—
612170	Water and Water Services	1,581,250	1,543,200	1,543,200	931,629	1,466,100	1,825,200	—
612240	Testing and Inspection Services	36,552	64,400	64,400	60,409	58,000	94,000	—
612330	Rental Charges	137,255	146,000	146,000	130,821	143,200	135,400	—
612410	Governmental Service Charges	89,880	90,200	90,200	73,000	90,200	90,700	—
612420	Maintenance of Grounds and Pavements	106,353	550,500	506,800	504,476	481,200	1,040,900	—
612430	Payments for Professional Services	18,540	19,000	19,000	18,540	18,600	194,000	—
612490	Contractual Services, N.O.C.	320,320	372,400	372,400	334,266	260,200	487,300	—
612520	Waste Material Disposal Charges	612,231	583,000	583,000	582,480	546,400	7,532,700	—
612590	Sludge Disposal	—	—	—	—	—	4,500,000	—
612600	Repairs to Collection Facilities	2,165,941	2,247,500	2,024,400	2,005,356	947,500	2,184,400	—
612650	Repairs to Process Facilities	3,240,873	4,483,000	3,876,400	3,670,085	2,283,000	5,465,100	—
612670	Repairs to Railroads	398,984	396,700	396,700	371,014	376,900	642,800	—
612680	Repairs to Buildings	194,643	471,500	471,500	263,116	407,500	485,000	—
612760	Repairs to Material Handling and Farming Equipment	—	—	—	—	—	605,500	—
612780	Safety Repairs and Services	178,180	215,100	209,100	208,162	214,200	250,100	—
612820	Computer Software Maintenance	—	—	—	—	—	9,000	—
612860	Repairs to Vehicle Equipment	22,743	24,600	24,600	24,600	22,700	27,100	—
612990	Repairs, N.O.C.	2,038	16,500	16,500	13,100	15,500	16,500	—
200	TOTAL CONTRACTUAL SERVICES	30,893,124	33,550,000	32,670,600	21,904,121	29,589,700	47,205,900	—

101 69000	Fund: Corporate Department: Maintenance & Operations Division: Stickney Service Area	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623030	Metals	11,994	10,400	10,400	10,400	9,800	10,400	—
623070	Electrical Parts and Supplies	990,487	1,108,200	1,028,200	756,870	845,500	1,155,100	—
623090	Plumbing Accessories and Supplies	335,045	338,600	338,600	245,463	210,000	363,600	—
623110	Hardware	3,243	6,100	6,100	1,437	3,200	2,100	—
623130	Buildings, Grounds, Paving Materials, and Supplies	47,197	40,200	40,200	34,856	37,400	56,700	—
623170	Fiber, Paper, and Insulation Materials	5,335	13,500	13,500	5,300	13,000	13,500	—
623190	Paints, Solvents, and Related Materials	2,294	1,300	1,300	1,100	1,200	1,300	—
623250	Vehicle Parts and Supplies	37,689	38,000	38,000	36,778	35,800	118,000	—
623270	Mechanical Repair Parts	1,996,918	2,458,100	2,098,100	2,032,461	2,045,000	3,085,600	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	14,481	11,000	11,000	8,388	10,600	14,000	—
623530	Farming Supplies	—	—	—	—	—	4,000	—
623560	Processing Chemicals	7,349,013	8,300,500	8,400,500	7,069,048	7,236,500	8,808,000	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	800	800	800	741	700	5,600	—
623660	Cleaning Supplies	782	700	700	687	700	2,000	—
623680	Tools and Supplies	116,220	99,100	99,100	97,170	93,000	99,600	—
623700	Wearing Apparel	245	600	600	—	600	600	—
623780	Safety and Medical Supplies	155	1,400	1,400	660	1,000	1,400	—
623800	Computer Software	15,542	61,500	64,700	63,136	63,200	31,500	—
623810	Computer Supplies	33,476	10,000	10,000	8,076	10,000	10,000	—
623820	Fuel	68,491	87,400	79,500	79,415	74,000	227,700	—
623840	Gases	147	600	600	600	300	600	—
623860	Lubricants	3,182	1,200	7,300	6,401	6,500	11,200	—
623990	Materials and Supplies, N.O.C.	27,421	31,700	25,600	19,803	24,200	59,600	—
300	TOTAL MATERIALS AND SUPPLIES	11,060,157	12,620,900	12,276,200	10,478,790	10,722,200	14,082,100	—
634600	Equipment for Collection Facilities	—	—	—	—	—	25,000	—
634650	Eqpt for Proc Facil	64,730	—	—	—	—	94,000	—
634670	Railroad Equipment	20,779	—	—	—	—	25,000	—
634860	Vehicle Equipment	282,723	—	—	—	—	422,000	—

101 69000 Fund: Corporate Department: Maintenance & Operations Division: Stickney Service Area		LINE ITEM ANALYSIS						
		2019	2020				2021	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
634990	Machinery and Equipment, N.O.C.	32,306	87,500	97,000	92,796	81,900	65,000	—
400	TOTAL MACHINERY AND EQUIPMENT	400,538	87,500	97,000	92,796	81,900	631,000	—
TOTAL STICKNEY SERVICE AREA		\$ 81,028,251	\$ 86,695,900	\$ 85,485,400	\$ 61,923,149	\$ 80,374,800	\$104,039,100	\$ —

NOTES: 1. Amounts may not add up due to rounding.

2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.

Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.

3. For the M&O Department, Expenditure (Committed Budget plus Disbursement) may exceed Adjusted Appropriation for a specific division as funding is controlled at the M&O Overall department-level.

Fund: Corporate Dept: Maintenance & Operations Division: Stickney Service Area		POSITION ANALYSIS				
		2019	2020		2021	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
910	Stickney Executive Office					
HP23	Deputy Director of Maintenance & Operations	—	1		1	
HP23	Deputy Director of Maintenance & Operations #2 (Assistant Director of Maintenance & Operations) (New Grade HP22)	1	—		—	
HP12	Secretary #2 (Administrative Specialist) (New Grade HP11)	1	1		1	
TOTAL 910	Stickney Executive Office	2	2	355,516	2	355,516
911	Stickney Budget Control Unit					
HP14	Budget & Management Analyst	2	2		2	
HP11	Administrative Specialist	1	1		1	
TOTAL 911	Stickney Budget Control Unit	3	3	284,154	3	284,154
920	Plant Engineering & Maintenance Branch					
921	Administrative Unit					
HP21	Engineer of Treatment Plant Operations	—	—		1	
HP21	Engineer of Treatment Plant Operations I	—	1		—	
HP21	Engineer of Treatment Plant Operations I #2 (Managing Engineer) (New Grade HP20)	1	—		—	
HP11	Administrative Specialist	1	1		1	
TOTAL 921	Administrative Unit	2	2	294,814	2	294,814
923	Electrical Engineering Unit					
HP18	Principal Electrical Engineer	1	—		—	
HP17	Senior Electrical Engineer	—	1		1	
HP15	Associate Process Control Engineer	1	1		2	
HP14	Engineering Technician V	1	1		—	
HP12	Engineering Technician IV	1	1		1	
NR6275	Chief Powerhouse Dispatcher I	1	1		1	
NR6272	Powerhouse Dispatcher	4	4		4	
NR6233	Electrical Operator II	11	11		11	
TOTAL 923	Electrical Engineering Unit	20	20	2,174,786	20	2,168,304
924	Maintenance Unit					
	(* Number of positions budgeted and funded by the Stormwater Management Fund appear below position count)					
HP19	Master Mechanic	1	1		1	
HP17	Assistant Master Mechanic	5	5		5	
HP14	Engineering Technician V	2	1		1	

Fund: Corporate Dept: Maintenance & Operations Division: Stickney Service Area		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
HP11	Administrative Specialist	1	1		1	
PR5935	Architectural Ironworker Leadman	1	1		1	
PR5933	Architectural Ironworker	3	3		3	
PR5353	Bricklayer	1	1		1	
PR5159	Carpenter Foreman	1	1		1	
PR5155	Carpenter Leadman	1	1		1	
PR5153	Carpenter	6	6		6	
PR7425	Electrical Instrument & Testing Mechanic Foreman	1	1		1	
PR7424	Electrical Instrument & Testing Mechanic Leadman	1	1		1	
PR7423	Electrical Instrument & Testing Mechanic	13	13		13	
PR7347	Electrical Mechanic Foreman	1	1		1	
PR7349	Electrical Mechanic Sub-Foreman	2	2		2	
PR7343	Electrical Mechanic	18	18		18	
PR6459	Hoisting Engineer Foreman	1	1		1	
PR6453	Hoisting Engineer	10	10		10	
PR5989	Ironworker Foreman	1	1		1	
PR5973	Structural Ironworker	9	9		9	
PR7579	Machinist Foreman	1	1		1	
PR7575	Machinist Leadman	2	2		2	
PR7573	Machinist	26	26		26	
PR5555	Painter Leadman	1	1		1	
PR5553	Painter	3	3		3	
PR7743	Pipcoverer	2	2		2	
PR7779	Pipefitter Foreman	1	1		1	
PR7775	Pipefitter Leadman	2	2		2	
PR7773	Pipefitter	23	23		23	
		(*1)	(*1)		(*1)	
PR5759	Plumber Foreman	1	1		1	
PR5753	Plumber	4	4		4	
PR5955	Sheet Metal Worker Leadman	1	1		1	
PR5953	Sheet Metal Worker	6	6		6	
PR6479	Truck Driver Foreman	1	1		1	

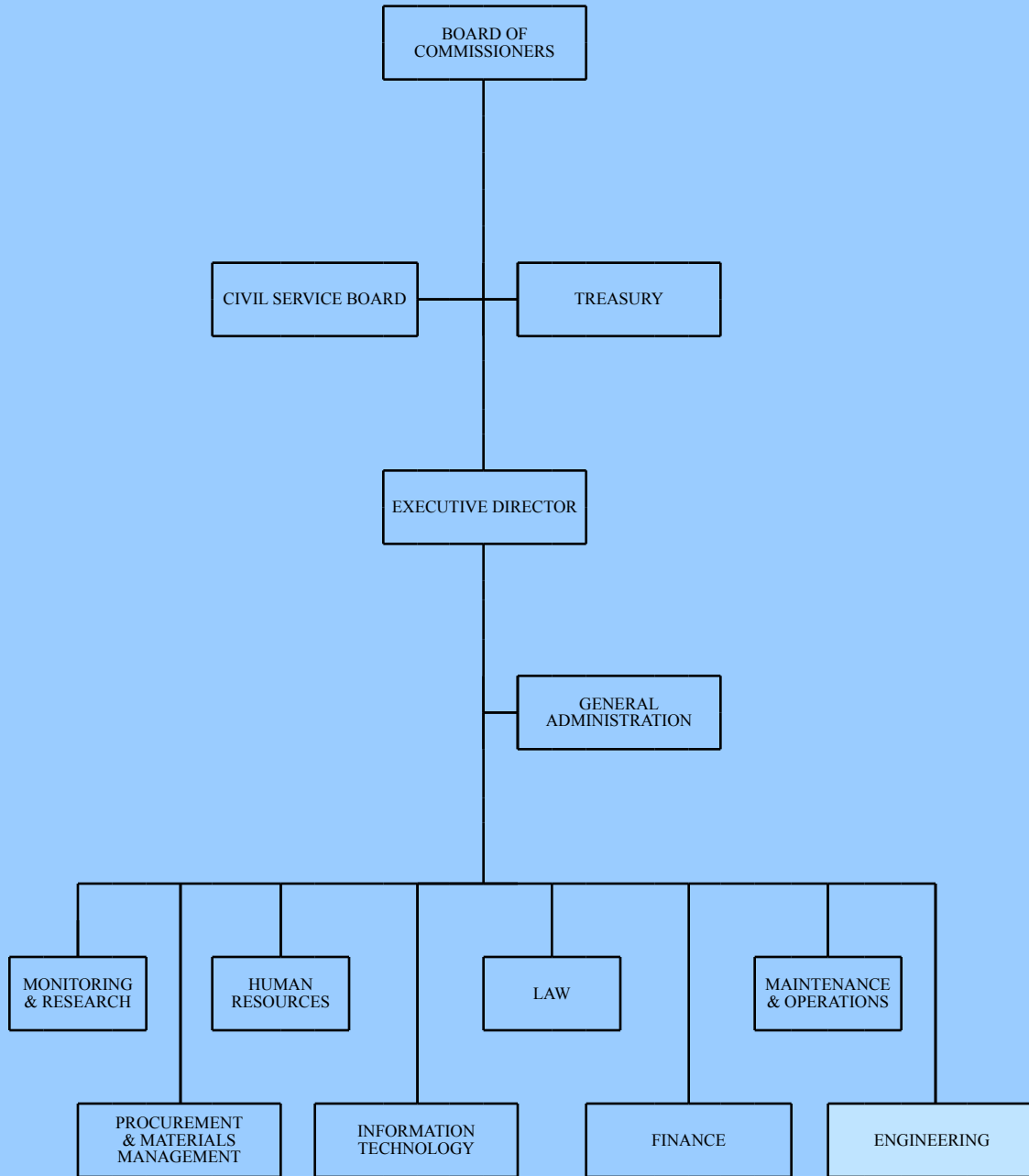
Fund: Corporate Dept: Maintenance & Operations Division: Stickney Service Area		POSITION ANALYSIS				
		2019	2020		2021	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
PR6473	Truck Driver	8	8		8	
TOTAL 924	Maintenance Unit	161	160	16,729,932	160	17,086,316
TOTAL	Stormwater Management Fund Positions	(*1)	(*1)		(*1)	
943	Buildings & Grounds Unit					
HP18	Principal Mechanical Engineer	1	1		1	
HP15	Associate Civil Engineer	1	1		1	
HP14	Engineering Technician V	2	2		2	
HP09	Administrative Clerk	1	1		1	
NR8331	Laborer Foreman	2	2		2	
NR8651	Maintenance Laborer Class A	7	7		7	
NR8652	Maintenance Laborer Class B	9	9		9	
TOTAL 943	Buildings & Grounds Unit	23	23	1,825,039	23	1,812,100
TOTAL 920	Plant Engineering & Maintenance Branch	206	205	21,024,571	205	21,361,533
TOTAL	Stormwater Management Fund Positions	(*1)	(*1)		(*1)	
930	Plant Operations Branch					
931	Administrative Unit					
HP21	Engineer of Treatment Plant Operations	—	—		1	
HP21	Engineer of Treatment Plant Operations I	—	1		—	
HP20	Managing Engineer	1	—		—	
HP20	Managing Engineer #1	—	1		1	
TOTAL 931	Administrative Unit	1	2	369,114	2	372,395
932	Treatment Operations Unit					
HP19	Assistant Engineer of Treatment Plant Operations II #2 (Principal Engineer) (New Grade HP18)	1	1		—	
HP18	Principal Engineer	—	—		1	
HP17	Senior Engineer	1	1		1	
HP16	Treatment Plant Operator III	6	6		6	
HP15	Associate Civil Engineer	—	1		1	
HP14	Assistant Civil Engineer	—	—		1	
HP14	Treatment Plant Operator II	8	8		9	
HP14	Treatment Plant Operator II #4	1	1		—	
HP12	Treatment Plant Operator I	6	6		6	
HP11	Administrative Specialist	1	1		1	

Fund: Corporate Dept: Maintenance & Operations Division: Stickney Service Area		POSITION ANALYSIS				
		2019	2020		2021	
				Proposed by the Executive Director		
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP11	Engineering Technician III	1	—		—	
NR8331	Laborer Foreman	1	1		1	
NR8650	Maintenance Laborer Class A Shift	15	15		15	
NR8651	Maintenance Laborer Class A	5	5		5	
TOTAL 932	Treatment Operations Unit	46	46	4,422,066	47	4,417,628
934	Mechanical Operations Unit					
	(* Number of positions budgeted and funded by the Stormwater Management Fund appear below position count)					
HP18	Chief Operating Engineer II	1	1		1	
HP17	Chief Operating Engineer I	2	2		2	
HP16	Assistant Chief Operating Engineer	6	6		6	
NR6810	Fireman-Oiler	11	11		11	
NR8650	Maintenance Laborer Class A Shift	20	20		20	
		(*4)	(*4)		(*4)	
NR8651	Maintenance Laborer Class A	4	4		4	
NR6832	Operating Engineer II	35	35		35	
NR6831	Operating Engineer I	26	26		26	
		(*4)	(*4)		(*4)	
TOTAL 934	Mechanical Operations Unit	105	105	10,796,212	105	10,818,961
TOTAL	Stormwater Management Fund Positions	(*8)	(*8)		(*8)	
945	Railroad Unit					
NR8331	Laborer Foreman	1	1		1	
NR8650	Maintenance Laborer Class A Shift	5	5		5	
TOTAL 945	Railroad Unit	6	6	523,370	6	523,370
TOTAL 930	Plant Operations Branch	158	159	16,110,762	160	16,132,354
950	Solids Management Section					
951	Solids Administration Unit					
HP20	Managing Engineer	—	—		1	
HP12	Administrative Assistant #2 (Administrative Specialist) (New Grade HP11)	—	—		1	
TOTAL 951	Solids Administration Unit	—	—	—	2	283,512
952	Solids Field Operations Unit					
HP15	Associate Civil Engineer	—	—		1	
HP14	Engineering Technician V	—	—		2	

Fund: Corporate Dept: Maintenance & Operations Division: Stickney Service Area		POSITION ANALYSIS				
		2019	2020		2021	
				Proposed by the Executive Director		
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP14	Engineering Technician V #4	—	—		1	
HP12	Engineering Technician IV	—	—		3	
NR8651	Maintenance Laborer Class A	—	—		1	
TOTAL 952	Solids Field Operations Unit	—	—	—	8	753,457
953	Solids Operations Administration Unit					
HP19	Assistant Engineer of Treatment Plant Operations II #2 (Principal Engineer) (New Grade HP18)	—	—		1	
HP17	Senior Engineer	—	—		1	
TOTAL 953	Solids Operations Administration Unit	—	—	—	2	320,686
954	Fulton County Field Operations Unit					
HP12	Agricultural Technician II	—	—		1	
HP11	Agricultural Technician I	—	—		1	
TOTAL 954	Fulton County Field Operations Unit	—	—	—	2	142,248
TOTAL 950	Solids Management Section	—	—	—	14	1,499,902
TOTAL	Stormwater Management Fund Positions	(*8)	(*8)		(*8)	
TOTAL	Maintenance & Operations Stickney Service Area	369	369	37,775,003	384	39,633,459
TOTAL	Stormwater Management Fund Positions	(*9)	(*9)		(*9)	

NOTE: 1. Nine positions budgeted in Sections 924 and 934 are funded by the Stormwater Management Fund while the operations remain in the Maintenance & Operations Department.

2. Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.



Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 8, 2020

Mr. Brian A. Perkovich
Executive Director
OFFICE

Dear Sir:

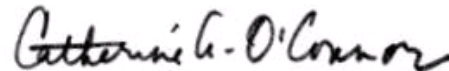
Subject: 2021 Program for the Engineering Department - Corporate Fund

The Engineering Department - Corporate Fund's program for 2021, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the department's 2021 initiatives in alignment with and in support of the Strategic Business Plan. The budget requests include all amendments as directed by you during the Executive Director Budget Hearings in August of this year.

The narrative provides a summary of the department, 2021 major initiatives and challenges, and 2020 accomplishments. Supporting schedules of objectives, performance, and staffing levels present three years of detailed budgetary information.

Thank you for the opportunity to present the proposed Engineering Department - Corporate Fund budget for 2021.

Respectfully submitted,

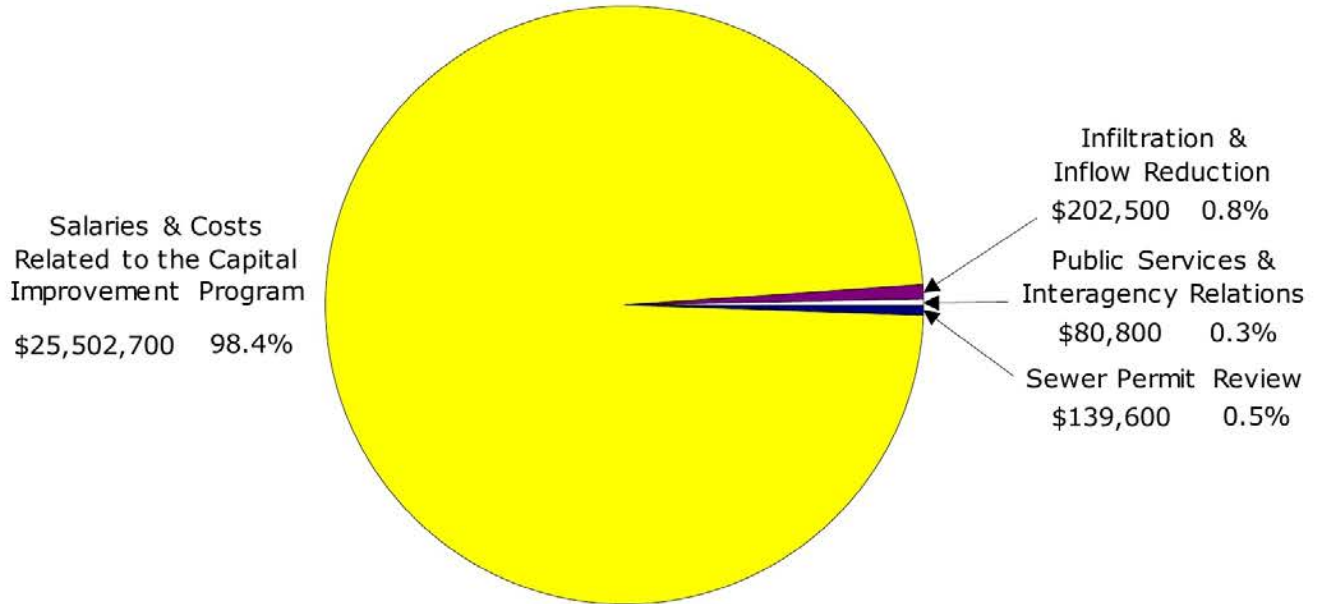


Catherine A. O'Connor
Director of Engineering

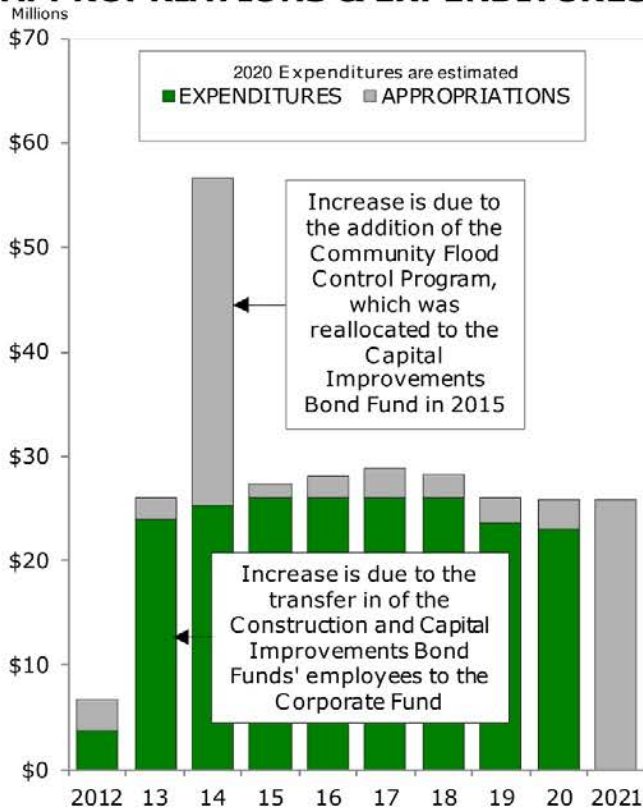
ENGINEERING – CORPORATE FUND

2021	\$25,925,600
2020	\$25,911,100
Increase	\$14,500

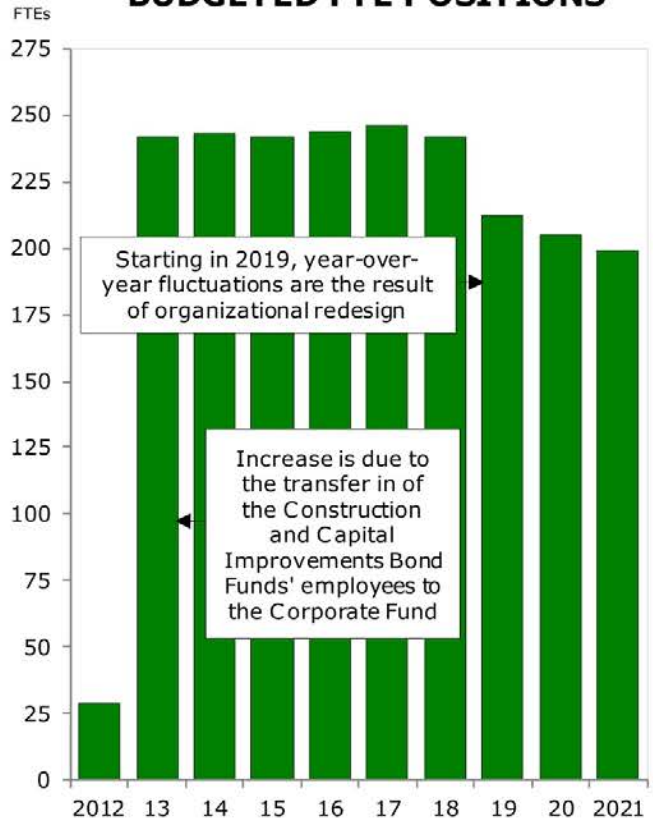
FUNCTIONS



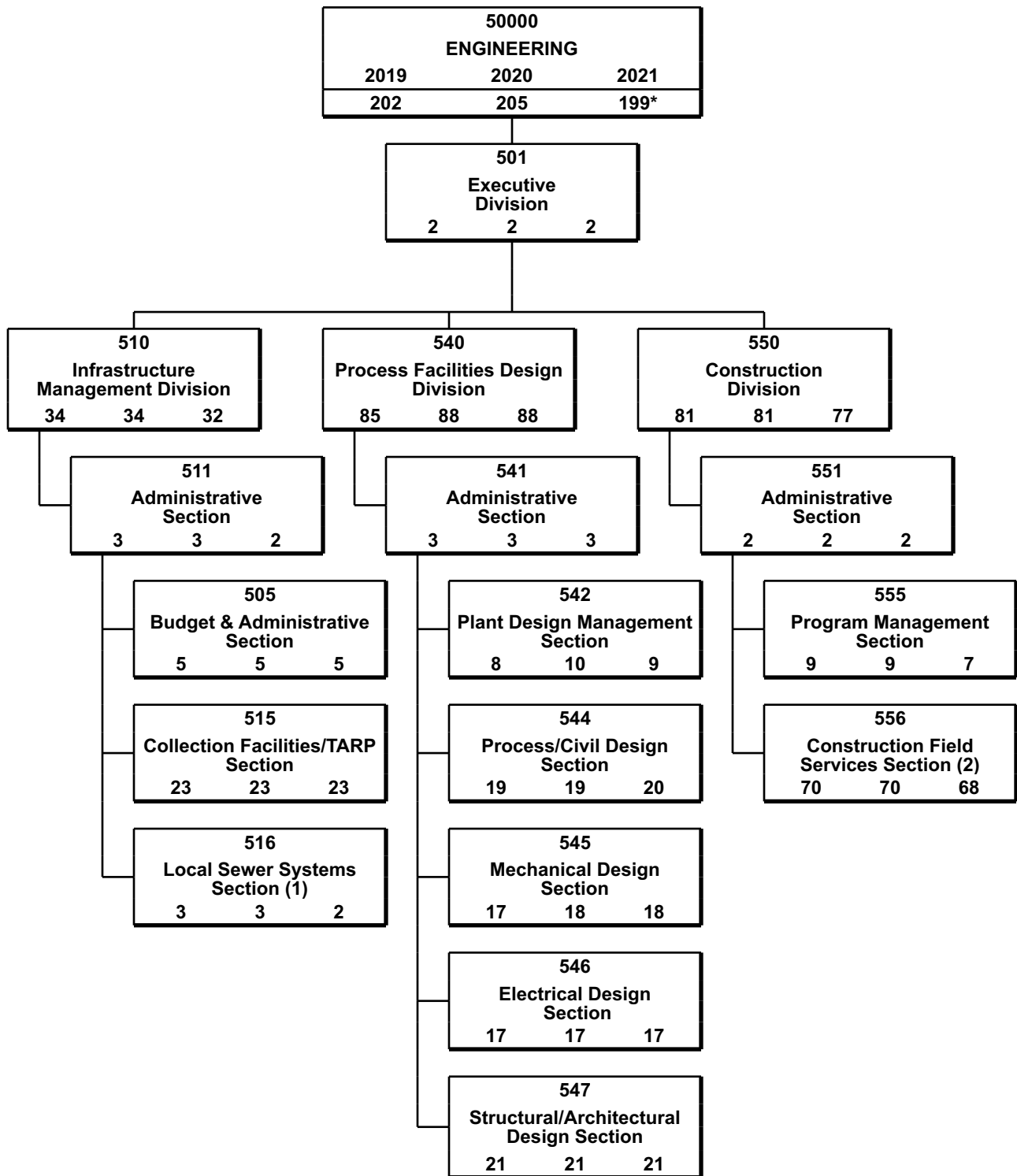
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



ENGINEERING



* The 2021 position total for the Engineering Department - Corporate Fund is 199. There are an additional 69 positions funded by the Stormwater Management Fund while the operations remain in the Engineering Department.

- (1) Effective 01/01/19, 27 positions were transferred from the Engineering Department - Corporate Fund to the Stormwater Management Fund.
- (2) Effective 01/01/21, six positions were transferred from the Engineering Department - Corporate Fund to the Stormwater Management Fund.

ENGINEERING CORPORATE FUND

The mission of the Engineering Department is to plan, design, and construct projects prioritized in the Capital Improvement Program and to regulate stormwater management, flood protection areas, and construction and maintenance of local sewers, which are tributary to the District's intercepting sewer system.

Departmental Summary

The programs of the Engineering Department are described in three sections of the budget: the Corporate Fund, described below, the Capital Budget, described in Section V, and the Stormwater Management Fund, which is described in Section VI. The Corporate Fund finances Engineering positions and corporate activities, while the Stormwater Management Fund finances Stormwater Management and regulatory activities including positions. The Capital Budget is used to finance projects executed by the Infrastructure Management Division, Process Facilities Design Division, and the Construction Division.

The Engineering Department's primary responsibilities include:

- Plan, develop, and implement a Capital Improvement Program that meets the District's statutory responsibilities, complies with applicable state and federal regulations and requirements, and responds to the needs of the District's residents, as directed through the policies adopted by its Board of Commissioners in the areas of sewage treatment, stormwater management, resource recovery, and pollution control;
- Provide requested and required engineering assistance to other departments within the District in support of their missions. The Engineering Department engages internal staff for all intercepting sewer rehabilitation design, all construction management, and most of the District's process facilities design. Employing a rigorous qualifications-based selection process, the balance of design work is completed by engineering consulting firms. By blending District staff's design expertise with design expertise of highly qualified outside firms, the Engineering Department is able to ensure that water reclamation plant upgrade, rehabilitation, and resource recovery projects are state of the art;
- Regulate impacts of development in suburban Cook County on stormwater runoff, wetlands, and floodplains, in accordance with the Watershed Management Ordinance (WMO). This is accomplished by reviewing and issuing WMO permits for development and inspecting work performed under WMO permits.

Summary of 2020 Accomplishments

- In 2020, the Engineering Department successfully transitioned many of its operations to predominantly remote working conditions, in response to the COVID-19 pandemic. With assistance from the Information Technology Department, Engineering Department staff conduct most design work, post-award work, drafting, processing of utility location requests, and administration of sewer service agreements remotely. While physical inspection of construction of capital improvement projects cannot be performed remotely, administrative tasks associated with construction oversight are conducted remotely;
- An electronic project management system, e-Builder, was implemented in 2018 and continues to be improved to manage all of the District's Capital Improvement Program projects and report on the \$200.0 million in expenditures, as well as the various metrics used in the department, including: tracking project design and construction schedules, forecasting award dates, cash flow projections for budgeting, and all construction contractor submittals and documentation. In 2020, e-Builder was modified to improve project scheduling by design engineers. As a result, e-Builder guides engineers to develop more accurate schedules, which facilitates planning and budgeting. Additionally, in 2020, staff commenced processing consultant invoices via e-Builder, thus providing tracking of the status of submitted invoices.

Budget Highlights

The 2021 appropriation for the Engineering Department - Corporate Fund is \$25,925,600, an increase of \$14,500, or 0.1 percent, from 2020. The Engineering Department's 2021 Budget provides direct support to the Capital Improvement Program.

The staffing level has decreased from 205 to 199, which includes the addition of one Principal Mechanical Engineer, offset by the drop of one Principal Electrical Engineer and the transfer of six positions to the Stormwater Management Fund. Two of the transferred positions will assist with the administration of the WMO. The remaining four transferred positions will be responsible for the construction oversight of Stormwater Management Program's capital improvement projects.

2021 Initiatives in Support of the Strategic Business Plan Include the Following:

Add Value

The Engineering Department adds value by ensuring efficient use of funds in the implementation of appropriate capital improvements. In addition to designing capital projects and overseeing construction work in accordance with contract documents, the Engineering Department's staff apply for project funding through the State Revolving Fund Loan Program. State Revolving Fund loans offset the need for funding through the sale of bonds, ultimately saving the District money. In 2021, staff intends to pursue additional low interest federal loans through the Water Infrastructure Finance and Innovation Act to supplement State Revolving Fund loans and reduce the total cost of capital improvement projects.

- **Excellence**

The Engineering Department strives to achieve best-in-class performance for budgeting and scheduling of all Capital Improvement Program projects and has implemented comprehensive metrics to keep track of performance. The Engineering Department's capital projects have consistently averaged at or below the best-in-class cost goal of 105 percent of the award value. This is due to the quality assurances and control of both in-house and consultant designs. In 2019, the projects substantially complete averaged 102.9 percent of the original contract award value. Additionally, the Engineering Department strives to meet or exceed the industry standard of 120 percent of the originally scheduled contract time and has made consistent improvements in this area. Data shows that recent close outs of projects substantially complete in 2010 averaged approximately 240 percent of the original contract time, whereas those projects substantially complete in 2019 averaged closer to 140 percent of the original contract time.

As an agency responsible for aging infrastructure, the District has considerable in-house expertise in designing capital improvement projects focused on rehabilitation of assets. Through collaboration with the Maintenance & Operations (M&O) Department, Engineering Department design staff evaluate facilities, determine the appropriate method of rehabilitation, and design solutions. With the District's three largest water reclamation plants being at or more than 100 years old, maintaining staff with the skills and experience needed to prepare and finalize contract documents allows the District to efficiently support a capital improvement program that modernizes infrastructure.

In conjunction with the M&O Department, the Engineering Department protects the District's surface and subsurface infrastructure from damage due to planned and programmed construction, installation, and maintenance projects by transportation agencies, utility work, and private and public development. As a member of the State of Illinois' Joint Utility Locating Information for Excavators, Inc. and 811 Chicago one-call system, the District constantly monitors submitted excavation tickets and positively responds to excavators or the City of Chicago. M&O Department staff mark District facilities at the site as needed.

The District is also a member of the City of Chicago's Office of Underground Coordination (OUC) system. In the project planning phase, the District responds to OUC Information Retrieval requests by providing as-built plans of District facilities in the project area. In the OUC Existing Facility Protection phase, the District responds to requests for review of completed plans of projects and concurs or objects to the project based on impact to District facilities. The Joint Utility Locating Information for Excavators, Inc., 811 Chicago, OUC Information Retrieval, and OUC Existing Facility Protection requests processed by the Engineering Department on an annual basis are summarized in the Measurable Goals exhibit.

The District also reviews project plans for the Illinois Department of Transportation, Illinois State Toll Highway Authority, Cook County Department of Transportation and Highways, municipalities, and private developments to ensure District facilities are protected. Conflicts are resolved when possible through collaborative efforts, though relocation of District facilities is necessary for certain projects.

In 2021, the District will fund its contract for televising and inspection of intercepting sewers through the Corporate Fund. This ongoing initiative is another way the District ensures the longevity of its infrastructure and serves our constituents with this essential sanitary service. Defects can develop in sewers and manholes that can remain unknown until catastrophic failures occur. To avoid the risks to public safety and health associated with such failures, the Engineering Department administers an inspection program to evaluate the condition of interceptors on a routine basis. The information collected from these inspections determines the nature and priority of interceptor rehabilitation capital improvement projects.

- **Develop Employees**

The Engineering Department encourages staff to attend professional development conferences and seminars that present state-of-the-art technologies and provide information on the latest developments in engineering design and construction. Engineering staff include numerous licensed professional engineers who are leaders in their respective fields. Staff regularly attend national and international conferences, seminars, and society meetings where they present papers and act as chairs or moderators in their areas of expertise. Examples of such events include the Water Environment Federation's Technical Exhibition and Conference, the North American Society For Trenchless Technology's Annual Conference, the Illinois Wastewater Professionals' Annual Conference, the Illinois Water Environment Association's Collection Systems Conference, and the Illinois Water Environment Association's Government Affairs Conference. Additionally, the Engineering Department rotates staff between the design and construction administration sections in order to gain perspective and understanding of all aspects of contract development and execution. Further efforts will be made in 2021 to expand this program to more staff members.

- **Leading Partnerships**

The District is authorized to provide wastewater treatment service for areas located outside of the corporate limits. This service is provided through service agreements, which the Engineering Department's staff negotiate and administer. Areas outside of the District may seek wastewater collection and treatment service from the District if doing so is more cost effective than building infrastructure required to convey their wastewater to their local wastewater treatment plant. Areas within Cook County may enter into service agreements with the District, while petitioning the State Legislature for annexation into the District, at which point, the service agreement ends. Areas outside of Cook County but immediately adjacent to the District's boundary may enter into long-term extraterritorial service agreements. Under current state regulations, such areas cannot be annexed to the District. Revenue

collected by the District under service agreements includes impact fees and service fees. Service fees are based upon the ad valorem tax rate levied by the District applied to the equalized assessed value of parcels in the service area, multiplied by 140 percent.

- **Information Technology**

During the construction of Stage 1 of the McCook Reservoir, it was necessary to monitor components of the reservoir's highwall to ensure that unexpected rock movements that could potentially impact the reservoir's surroundings did not occur. This instrumentation includes inclinometers, extensometers, piezometers, and appurtenances and monitors the conditions of the highwall. Manual data collection from this instrumentation is complex and could pose safety issues for accessing the reservoir highwall. As a result, the Army Corps of Engineers installed a data collection system that is managed and monitored through an instrumentation website that provides a clean graphical interface and has the ability to send e-mail and text message alerts when possible issues arise. Now that the District is responsible for the operation of Stage 1, maintenance of the website is being transferred from the Army Corps of Engineers to the District. The District will continue to monitor Stage 1 features to observe if normal reservoir operations will impact the highwall and will also incorporate new instrumentation slated to be installed in Stage 2 and at the Thornton Composite Reservoir into this interface.

50000 ENGINEERING

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:	Cost	Percent
1. Protect public health by administering the Watershed Management Ordinance to regulate local sewer connections to local treatment plants, discharges to District waters, and migration of runoff from new developments and redevelopments.	\$ 139,600	0.5%
2. Provide information to the public and local communities regarding District ordinances, coordinate solutions to regional problems with other governmental agencies, and review and evaluate new cost-effective sewer construction procedures and products.	\$ 80,800	0.3%
3. Reduce treatment costs by eliminating excessive infiltration/inflow of stormwater into sanitary sewers through a comprehensive rehabilitation program of local sewer systems.	\$ 202,500	0.8%
4. Ongoing maintenance projects, salaries, and employee expenses related to the Capital Improvement Program.	\$ 25,502,700	98.4%
Totals	\$ 25,925,600	100.0%

MEASURABLE GOALS:	2019 Actual	2020 Estimated	2021 Proposed
Process all requests for District facility information and review project plans prepared by other agencies for potential conflict with District facilities.			
Regular JULIE Requests	34,745	34,382	36,101
Emergency JULIE Requests	4,465	4,688	4,923
811 Chicago Requests	6,633	6,965	7,313
OUC Information Retrieval Requests	1,781	1,959	2,057
OUC Existing Facility Protection Requests	3,394	3,564	3,742
IDOT Requests	52	55	55
Compliance status of the 115 satellite entities (sewer system owners) with the requirements of the Infiltration/Inflow Control Program.			
Number of satellite entities that have completed the Short Term Requirements ¹	10	12	99
Percentage Complete	9%	11%	86%
Annual Summary Reports Received	102	54	105
Annual Summary Reports in Compliance ²	41	—	52
Major Design Work Completed	6	16	13
<p>¹Under the Short Term Requirements, each satellite entity will perform a prioritized condition assessment of their high-risk public sewers, conduct rehabilitation work to address infiltration/inflow sources, and develop and submit their individual Private Sector Program and Long Term Operation and Maintenance Program to the District for approval. The deadline to complete the Short Term Requirements was July 10, 2019. In light of the magnitude of work and time required to adopt regulations to implement Private Sector Programs, many satellite entities have requested additional time to complete their Short Term Requirements. The District will work with satellite entities that have not completed the Short Term Requirements to ensure that the work will be completed in a reasonable time frame.</p> <p>²Annual Summary Reports (ASR) in compliance with the reporting requirements of the Infiltration/Inflow Control Program. The District is continually providing assistance and collaborating with the satellite entities to produce compliant ASR. ASR were due on March 1, 2020. In light of the COVID-19 pandemic, the process of submitting and reviewing ASR was disrupted leading to delays in assessing the state of compliance. Furthermore, unless a satellite entity has been granted an extension, short term requirements were to be completed by July 10, 2019, and documented in the 2020 ASR. Satellite entities that have submitted a 2020 ASR but have not completed short term requirements and have not been granted an extension are not in compliance.</p>			

50000 ENGINEERING

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
1000	Collection	\$ 4,434,184	2021	33 \$ 5,251,500	\$ 337,400	6.9	
			2020	36 \$ 4,914,100			
1530	Local Sewer Permit Activity	\$ 229,907	2021	1 \$ 139,600	\$ (97,100)	(41.0)	a)
			2020	2 \$ 236,700			
1560	Local Sewer Public Service Coordination	\$ 212,512	2021	1 \$ 80,800	\$ (146,800)	(64.5)	b)
			2020	2 \$ 227,600			
1571	Local Sewer Rehabilitation Ordinance Enforcement Activity	\$ 230,798	2021	1 \$ 202,500	\$ (30,300)	(13.0)	
			2020	1 \$ 232,800			
1700	Collection System Design	\$ 1,061,435	2021	8 \$ 1,132,600	\$ (19,600)	(1.7)	
			2020	8 \$ 1,152,200			
1800	Collection Construction	\$ 2,699,532	2021	22 \$ 3,696,000	\$ 631,200	20.6	c)
			2020	23 \$ 3,064,800			
2000	Treatment	\$ 8,092,471	2021	72 \$ 8,590,000	\$ (189,200)	(2.2)	
			2020	73 \$ 8,779,200			
2700	Treatment Design	\$ 2,974,467	2021	27 \$ 3,374,700	\$ (65,100)	(1.9)	
			2020	27 \$ 3,439,800			
2800	Treatment Construction	\$ 5,118,004	2021	45 \$ 5,215,300	\$ (124,100)	(2.3)	
			2020	46 \$ 5,339,400			
3000	Solids Processing	\$ 5,659,734	2021	49 \$ 6,405,100	\$ (30,300)	(0.5)	
			2020	51 \$ 6,435,400			
3700	Solids Processing Design	\$ 2,733,286	2021	24 \$ 3,327,400	\$ 60,000	1.8	
			2020	25 \$ 3,267,400			
3800	Solids Processing Construction	\$ 2,926,448	2021	25 \$ 3,077,700	\$ (90,300)	(2.9)	
			2020	26 \$ 3,168,000			

a) Decrease is due to the transfer out of one FTE position to the Stormwater Management Fund (\$96,300).

b) Decrease is due to the transfer out of one FTE position to the Stormwater Management Fund (\$145,300).

c) Increase is due to the transfer of television inspection and recording of sewers and manholes from the Construction Fund (\$750,000) and an increased demand in the maintenance warranty for solar powered aerators at the Thornton Composite Reservoir (\$23,100), offset by the transfer out of one FTE position to the Stormwater Management Fund (\$136,400).

50000 ENGINEERING

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
4000	Flood and Pollution Control	\$ 2,878,887	2021	26 \$ 3,077,900	\$ (56,100)	(1.8)	
			2020	25 \$ 3,134,000			
4216	Bridge and Road Maintenance	\$ 31,908	2021	— \$ 30,000	\$ (83,100)	(73.5)	d)
			2020	— \$ 113,100			
4322	Storm and Flood Ordinance Development	\$ 18,341	2021	— \$ 18,500	\$ —	—	
			2020	— \$ 18,500			
4341	Planning/Design	\$ 66,906	2021	— \$ 66,500	\$ (200)	(0.3)	
			2020	— \$ 66,700			
4342	Contract Administration	\$ 95,711	2021	1 \$ 107,000	\$ 4,300	4.2	
			2020	1 \$ 102,700			
4343	Construction	\$ 104,648	2021	1 \$ 104,400	\$ (400)	(0.4)	
			2020	1 \$ 104,800			
4700	Flood and Pollution Control Design	\$ 646,067	2021	5 \$ 628,800	\$ (7,800)	(1.2)	
			2020	5 \$ 636,600			
4800	Flood and Pollution Control Construction	\$ 1,915,306	2021	19 \$ 2,122,700	\$ 31,100	1.5	
			2020	18 \$ 2,091,600			
5000	Solids Disposal	\$ 351,685	2021	2 \$ 298,000	\$ (52,900)	(15.1)	
			2020	3 \$ 350,900			
5700	Solids Disposal Design	\$ 10,675	2021	— \$ 10,500	\$ (100)	(0.9)	
			2020	— \$ 10,600			
5800	Solids Disposal Construction	\$ 341,010	2021	2 \$ 287,500	\$ (52,800)	(15.5)	e)
			2020	3 \$ 340,300			
7000	General Support (excluding program number 7604)	\$ 1,786,564	2021	17 \$ 1,945,100	\$ 13,800	0.7	
			2020	17 \$ 1,931,300			
7604	Social Security and Medicare Contributions	\$ 315,264	2021	— \$ 358,000	\$ (8,200)	(2.2)	
			2020	— \$ 366,200			
Totals		\$23,518,789	2021	199 \$ 25,925,600	\$ 14,500	0.1%	
			2020	205 \$ 25,911,100			

d) Decrease is due to a reduced demand for a biennial bridge inspection, based on scheduled contract payments (\$83,100).

e) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$51,900).

50000 ENGINEERING

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
1500	Local Sewer - Engineering Activity					
1530	Local Sewer Permit Activity					
1531	Review/Issuance of MWRD Sewer Permits (includes standard permits and notification and request for inspection permits)	Permits	530	—	—	
		Cost	\$ 79,002	\$ 78,900	\$ 78,700	
		Cost/Permit	\$ 149.06	\$ —	\$ —	
1533	Review of Other Permits	Cost	\$ 121,345	\$ 128,100	\$ 60,900	a)
1535	Local Sewer Construction Surveillance/Enforcement	Inspections	4,590	—	—	
		Cost	\$ 90	\$ —	\$ —	
		Cost/Inspection	\$ 0.02	\$ —	\$ —	
1537	Permit Revision	Revisions	61	—	—	
		Cost	\$ 29,470	\$ 29,700	\$ —	b)
		Cost/Revision	\$ 483.11	\$ —	\$ —	
1560	Local Sewer - Public Service Coordination					
1561	Public Service	Requests	1,000	—	—	
		Cost	\$ 50,402	\$ 54,600	\$ —	c)
		Cost/Request	\$ 50.40	\$ —	\$ —	
1563	Interagency Coordination	Cost	\$ 162,110	\$ 173,000	\$ 80,800	d)
1571	Local Sewer Rehabilitation Ordinance Enforcement Activity	Systems	250	115	105	
		Cost	\$ 230,798	\$ 232,800	\$ 202,500	
		Cost/System	\$ 923.19	\$ 2,024.35	\$ 1,928.57	
1700	Collection System Design	Cost	\$ 1,061,435	\$ 1,152,200	\$ 1,132,600	
1800	Collection Construction	Cost	\$ 2,699,532	\$ 3,064,800	\$ 3,696,000	e)
2700	Treatment Design	Cost	\$ 2,974,467	\$ 3,439,800	\$ 3,374,700	
2800	Treatment Construction	Cost	\$ 5,118,004	\$ 5,339,400	\$ 5,215,300	
3700	Solids Processing Design	Cost	\$ 2,733,286	\$ 3,267,400	\$ 3,327,400	
3800	Solids Processing Construction	Cost	\$ 2,926,448	\$ 3,168,000	\$ 3,077,700	
4200	Waterways Control and Stormwater Detention Reservoirs	Cost	\$ 31,908	\$ 113,100	\$ 30,000	f)
4300	Stormwater Management	Cost	\$ 285,606	\$ 292,700	\$ 296,400	
4700	Flood and Pollution Control Design	Cost	\$ 646,067	\$ 636,600	\$ 628,800	
4800	Flood and Pollution Control Construction	Cost	\$ 1,915,306	\$ 2,091,600	\$ 2,122,700	
<p>a) Decrease is due to the transfer out of one FTE position to the Stormwater Management Fund (\$66,500).</p> <p>b) Decrease is due to the transfer out of one FTE position to the Stormwater Management Fund (\$29,700).</p> <p>c) Decrease is due to the transfer out of one FTE position to the Stormwater Management Fund (\$54,300).</p> <p>d) Decrease is due to the transfer out of one FTE position to the Stormwater Management Fund (\$91,000).</p> <p>e) Increase is due to the transfer of television inspection and recording of sewers and manholes from the Construction Fund (\$750,000) and an increased demand in the maintenance warranty for solar powered aerators at the Thornton Composite Reservoir (\$23,100), offset by the transfer out of one FTE position to the Stormwater Management Fund (\$136,400).</p> <p>f) Decrease is due to a reduced demand for a biennial bridge inspection, based on scheduled contract payments (\$83,100).</p>						

50000 ENGINEERING

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
5700	Solids Disposal Design	Cost	\$ 10,675	\$ 10,600	\$ 10,500	
5800	Solids Disposal Construction	Cost	\$ 341,010	\$ 340,300	\$ 287,500	g)
7000	General Support (excluding program number 7604)	Cost	\$ 1,786,564	\$ 1,931,300	\$ 1,945,100	
7604	Social Security and Medicare Contributions	Cost	\$ 315,264	\$ 366,200	\$ 358,000	
		Totals	\$ 23,518,789	\$ 25,911,100	\$ 25,925,600	
<p>g) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$51,900).</p>						

101 50000	Fund: Corporate Department: Engineering	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 22,215,924	\$ 24,059,000	\$ 24,059,000	\$ 15,923,248	\$ 21,615,000	\$ 23,374,600	\$ —
601060	Compensation Plan Adjustments	568,300	531,800	531,800	358,461	396,000	614,100	—
601070	Social Security and Medicare Contributions	315,264	366,200	366,200	234,079	300,600	358,000	—
601100	Tuition and Training Payments	80,898	98,000	98,000	14,325	19,500	97,000	—
100	TOTAL PERSONAL SERVICES	23,180,386	25,055,000	25,055,000	16,530,113	22,331,100	24,443,700	—
612010	Travel	6,919	12,800	12,300	665	1,200	9,000	—
612030	Meals and Lodging	17,561	34,700	33,500	1,500	2,000	17,000	—
612040	Postage, Freight, and Delivery Charges	1,384	1,500	1,500	1,500	1,500	1,500	—
612050	Compensation for Personally-Owned Automobiles	6,679	8,000	8,000	1,404	1,900	8,000	—
612080	Motor Vehicle Operating Services	224	500	500	19	100	500	—
612090	Reprographic Services	3,275	3,500	3,500	3,500	3,500	3,500	—
612170	Water and Water Services	4,746	4,500	4,500	4,500	4,500	4,500	—
612240	Testing and Inspection Services	—	250,000	250,000	234,995	181,700	1,000,000	—
612330	Rental Charges	—	—	500	476	500	500	—
612430	Payments for Professional Services	84,754	318,600	295,100	247,227	225,000	183,000	—
612490	Contractual Services, N.O.C.	82,059	83,100	83,100	82,059	82,100	79,600	—
612620	Repairs to Waterway Facilities	70,955	47,900	71,400	70,955	71,000	71,000	—
612800	Repairs to Office Furniture and Equipment	—	—	—	—	—	7,100	—
612970	Repairs to Testing and Laboratory Equipment	2,226	5,500	5,500	2,316	3,200	7,500	—
612990	Repairs, N.O.C.	8,088	8,800	10,000	9,912	8,700	500	—
200	TOTAL CONTRACTUAL SERVICES	288,871	779,400	779,400	661,028	586,900	1,393,200	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	38,918	42,300	42,300	30,939	28,500	38,300	—
623680	Tools and Supplies	5,638	8,200	8,200	6,208	6,100	11,200	—
623720	Books, Maps, and Charts	4,975	5,000	5,000	2,388	2,900	5,000	—
623780	Safety and Medical Supplies	—	—	—	—	—	1,000	—
623800	Computer Software	—	21,000	21,000	—	15,700	33,000	—
623990	Materials and Supplies, N.O.C.	—	200	200	—	—	200	—
300	TOTAL MATERIALS AND SUPPLIES	49,531	76,700	76,700	39,535	53,200	88,700	—
TOTAL ENGINEERING		\$ 23,518,788	\$ 25,911,100	\$ 25,911,100	\$ 17,230,676	\$ 22,971,200	\$ 25,925,600	\$ —

NOTES: 1. Amounts may not add up due to rounding.
 2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.
 Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.

Fund: Corporate Dept: Engineering		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
501	Executive Division					
EX15	Director of Engineering	1	1		1	
EX06	Secretary to Officer	1	1		1	
TOTAL 501	Executive Division	2	2	382,518	2	382,517
510	Infrastructure Management Division					
505	Budget & Administrative Section					
HP18	Supervising Budget & Management Analyst	1	1		1	
HP17	Management Analyst III #2 (Senior Budget & Management Analyst) (New Grade HP16)	1	1		1	
HP15	Management Analyst II #2 (Budget & Management Analyst) (New Grade HP14)	1	1		1	
HP14	Budget & Management Analyst	1	1		1	
HP13	Senior Administrative Specialist	1	1		1	
TOTAL 505	Budget & Administrative Section	5	5	639,241	5	639,241
511	Administrative Section					
HP22	Assistant Director of Engineering	1	1		1	
HP20	Managing Civil Engineer	1	1		—	
HP11	Administrative Specialist	1	1		1	
TOTAL 511	Administrative Section	3	3	518,775	2	315,259
515	Collection Facilities / TARP Section					
HP20	Managing Civil Engineer	1	1		1	
HP18	Principal Civil Engineer	3	3		3	
HP17	Senior Civil Engineer	6	6		6	
HP15	Associate Civil Engineer	3	3		3	
HP14	Assistant Civil Engineer	3	3		3	
HP14	Engineering Technician V	1	2		2	
HP14	Engineering Technician V #4	1	—		—	
HP13	Engineering Draftsman III	1	1		1	
HP12	Engineering Technician IV	3	3		3	
HP11	Engineering Technician III	1	1		1	
TOTAL 515	Collection Facilities / TARP Section	23	23	2,696,260	23	2,691,511

Fund: Corporate Dept: Engineering		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
516	Local Sewer Systems Section					
	(* Number of positions budgeted and funded by the Stormwater Management Fund appears below position count)					
HP20	Managing Civil Engineer	—	—		1	
HP18	Principal Civil Engineer	1	1		—	
		(*2)	(*2)		(*3)	
HP17	Senior Civil Engineer	1	1		—	
		(*8)	(*9)		(*10)	
HP15	Associate Civil Engineer	1	1		1	
		(*8)	(*9)		(*9)	
HP14	Assistant Civil Engineer	—	—		—	
		(*6)	(*8)		(*8)	
HP14	Engineering Technician V	—	—		—	
		(*3)	(*3)		(*3)	
HP12	Engineering Technician IV	—	—		—	
		(*4)	(*6)		(*6)	
HP12	Engineering Technician IV #4	—	—		—	
		(*1)	(*1)		(*1)	
HP11	Administrative Specialist	—	—		—	
		(*1)	(*1)		(*1)	
HP11	Engineering Technician III	—	—		—	
		(*1)	(*1)		(*1)	
HP09	Administrative Clerk	—	—		—	
		(*2)	(*2)		(*1)	
TOTAL 516	Local Sewer Systems Section	3	3	394,154	2	325,833
TOTAL	Stormwater Management Fund Positions	(*36)	(*42)		(*43)	
TOTAL 510	Infrastructure Management Division	34	34	4,248,430	32	3,971,845
TOTAL	Stormwater Management Fund Positions	(*36)	(*42)		(*43)	
522	Stormwater Management Section					
	(* Number of positions budgeted and funded by the Stormwater Management Fund appears below position count)					
HP20	Managing Civil Engineer	—	—		—	
		(*1)	(*1)		(*1)	
HP18	Principal Civil Engineer	—	—		—	
		(*3)	(*3)		(*3)	
HP17	Senior Civil Engineer	—	—		—	
		(*7)	(*7)		(*7)	

Fund: Corporate Dept: Engineering		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
HP15	Associate Civil Engineer	—	—		—	
		(*6)	(*6)		(*6)	
HP14	Assistant Civil Engineer	—	—		—	
		(*3)	(*3)		(*3)	
HP14	Public Affairs Specialist	—	—		—	
		(*1)	(*1)		(*1)	
HP11	Administrative Specialist	—	—		—	
		(*1)	(*1)		(*1)	
TOTAL 522	Stormwater Management Section	—	—	—	—	—
TOTAL	Stormwater Management Fund Positions	(*22)	(*22)		(*22)	
540	Process Facilities Design Division					
541	Administrative Section					
HP22	Assistant Director of Engineering	1	1		1	
HP11	Administrative Specialist	2	2		2	
TOTAL 541	Administrative Section	3	3	385,745	3	385,745
542	Plant Design Management Section					
HP18	Principal Civil Engineer	2	3		2	
HP17	Senior Civil Engineer	4	4		4	
HP16	Computer Aided Drafting and Design Administrator	1	1		1	
HP15	Associate Civil Engineer	1	1		1	
HP11	Engineering Technician III	—	1		1	
TOTAL 542	Plant Design Management Section	8	10	1,295,565	9	1,155,319
544	Process / Civil Design Section					
HP20	Managing Civil Engineer	1	1		1	
HP18	Principal Civil Engineer	3	3		3	
HP17	Senior Civil Engineer	5	5		5	
HP17	Senior Process Control Engineer	1	1		1	
HP15	Associate Civil Engineer	3	3		3	
HP15	Associate Process Control Engineer	1	1		1	
HP14	Assistant Civil Engineer	2	2		3	
HP13	Engineering Draftsman III	1	1		1	
HP12	Engineering Draftsman II	2	2		2	
TOTAL 544	Process / Civil Design Section	19	19	2,349,578	20	2,493,846

Fund: Corporate Dept: Engineering		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
545	Mechanical Design Section					
HP20	Managing Mechanical Engineer	1	1		1	
HP18	Principal Mechanical Engineer	2	2		2	
HP17	Senior Mechanical Engineer	5	5		5	
HP15	Associate Mechanical Engineer	4	5		5	
HP14	Assistant Mechanical Engineer	2	2		2	
HP13	Engineering Draftsman III	1	1		1	
HP12	Engineering Draftsman II	2	2		2	
TOTAL 545	Mechanical Design Section	17	18	2,121,226	18	2,133,824
546	Electrical Design Section					
HP20	Managing Electrical Engineer	1	1		1	
HP18	Principal Electrical Engineer	2	2		2	
HP17	Senior Electrical Engineer	5	5		5	
HP15	Associate Electrical Engineer	5	5		5	
HP14	Assistant Electrical Engineer	1	1		1	
HP13	Engineering Draftsman III	1	1		1	
HP12	Engineering Draftsman II	2	2		2	
TOTAL 546	Electrical Design Section	17	17	1,924,456	17	1,989,081
547	Structural / Architectural Design Section					
HP20	Managing Structural Engineer	1	1		1	
HP18	Principal Architect	1	1		1	
HP18	Principal Structural Engineer	2	2		2	
HP17	Senior Architect	2	2		2	
HP17	Senior Structural Engineer	4	4		4	
HP15	Associate Architect	3	3		3	
HP15	Associate Structural Engineer	3	3		3	
HP14	Assistant Structural Engineer	3	3		3	
HP13	Engineering Draftsman III	1	1		1	
HP12	Engineering Draftsman II	1	1		1	
TOTAL 547	Structural / Architectural Design Section	21	21	2,416,856	21	2,371,238
TOTAL 540	Process Facilities Design Division	85	88	10,493,425	88	10,529,052

Fund: Corporate Dept: Engineering		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
550	Construction Division					
551	Administrative Section					
HP22	Assistant Director of Engineering	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 551	Administrative Section	2	2	235,220	2	248,562
555	Program Management Section					
HP20	Managing Civil Engineer	1	1		1	
HP18	Principal Civil Engineer	1	1		1	
HP17	Senior Civil Engineer	1	1		1	
HP15	Associate Civil Engineer	2	1		1	
HP14	Assistant Civil Engineer	1	1		—	
HP14	Assistant Electrical Engineer	1	1		1	
HP14	Engineering Technician V	—	1		—	
HP13	Senior Administrative Specialist	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 555	Program Management Section	9	9	1,080,194	7	897,114
556	Construction Field Services Section					
	(* Number of positions budgeted and funded by the Stormwater Management Fund appears below position count)					
HP20	Managing Civil Engineer	2	2		2	
HP18	Principal Civil Engineer	3	2		3	
HP18	Principal Electrical Engineer	2	2		1	
HP18	Principal Mechanical Engineer	—	—		1	
HP17	Senior Civil Engineer	10	10		9	
					(*1)	
HP17	Senior Electrical Engineer	4	4		4	
HP17	Senior Mechanical Engineer	1	1		1	
HP15	Associate Civil Engineer	10	10		9	
					(*1)	
HP15	Associate Electrical Engineer	3	3		3	
HP15	Associate Mechanical Engineer	4	3		3	
HP14	Assistant Civil Engineer	4	3		3	
HP14	Assistant Electrical Engineer	1	1		1	

Fund: Corporate Dept: Engineering		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
HP14	Assistant Mechanical Engineer	1	1		1	
HP14	Engineering Technician V	11	11		11	(*1)
HP14	Engineering Technician V #4	2	2		2	
HP12	Administrative Assistant #2 (Administrative Specialist) (New Grade HP11)	1	1		1	
HP12	Engineering Technician IV	8	8		7	(*1)
HP11	Engineering Technician III	3	6		6	
TOTAL 556	Construction Field Services Section	70	70	7,739,277	68	7,462,890
TOTAL	Stormwater Management Fund Positions				(*4)	
TOTAL 550	Construction Division	81	81	9,054,691	77	8,608,566
TOTAL	Engineering	202	205	24,179,063	199	23,491,980
TOTAL	Stormwater Management Fund Positions	(*58)	(*64)		(*69)	

NOTES: 1. Sixty-nine positions budgeted in Sections 516, 522, and 556 are funded by the Stormwater Management Fund while the operations remain in the Engineering Department.

2. Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.

SECTION V

CAPITAL BUDGET

The Capital Improvement Program is the District's plan for the construction, rehabilitation, and modernization of District-owned and operated infrastructure. It includes plans to protect Lake Michigan from pollution, to clean up approximately 532 miles of rivers and streams within the District's jurisdiction to meet federal and state standards, and to reduce the level of flooding which has persistently plagued many municipalities within the District's jurisdiction.

The Capital Budget includes the Construction Fund and the Capital Improvements Bond Fund. To understand the Capital Budget, it is necessary to visualize existing facilities as well as the program for the next year and the long-term plan.

The type of funding for each fund corresponds to the estimated useful life of the project and statutory restrictions on bond sales. The Tax Cap Law imposes restrictions on the non-referendum bonding authority of the District. There are exceptions in the Tax Cap Law to allow non-referendum bonds to be sold to finance certain District projects. Bonds or long-term debt are only utilized to finance projects with useful lives beyond 20 years. Capital projects not eligible for bond financing, or with shorter useful lives, are funded on a pay-as-you-go basis and financed primarily by property taxes. The Capital Improvements Bond Fund receives most of its resources from bond sales, State Revolving Fund loans, and federal and state grants. It provides for major plant and sewer construction, flood control facilities, and land acquisition. The Construction Fund is financed primarily through a property tax levy and provides for much of the District's infrastructure rehabilitation and modernization.

The narrative discussion of the District's 2021 Capital Improvement Program places the 2021 program within the context of our long-range plan. Information is provided on the levels of funding in 2021 and in the future. The graphs, charts, figures, and descriptions of the Construction Fund and Capital Improvements Bond Fund Program within this section aid the reader in understanding this component of the Budget. The impact on operating costs associated with capital projects scheduled for award in 2021 is presented in the Capital Improvement Program narrative.

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Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 8, 2020

Mr. Brian A. Perkovich
Executive Director
OFFICE

Dear Sir:

Subject: 2021 Program for the Capital Funds

The Capital Funds' program for 2021, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the District's 2021 Capital Plan initiatives in alignment with and in support of the Strategic Business Plan. The budget requests include all amendments as directed by you during the Executive Director Budget Hearings in August of this year.

The narrative by fund provides a summary of the 2021 major initiatives and challenges and 2020 accomplishments. Supporting schedules of objectives and performance present three years of detailed budgetary information.

Thank you for the opportunity to present the proposed Capital Funds budget for 2021.

Respectfully submitted,

Catherine A. O'Connor
Director of Engineering

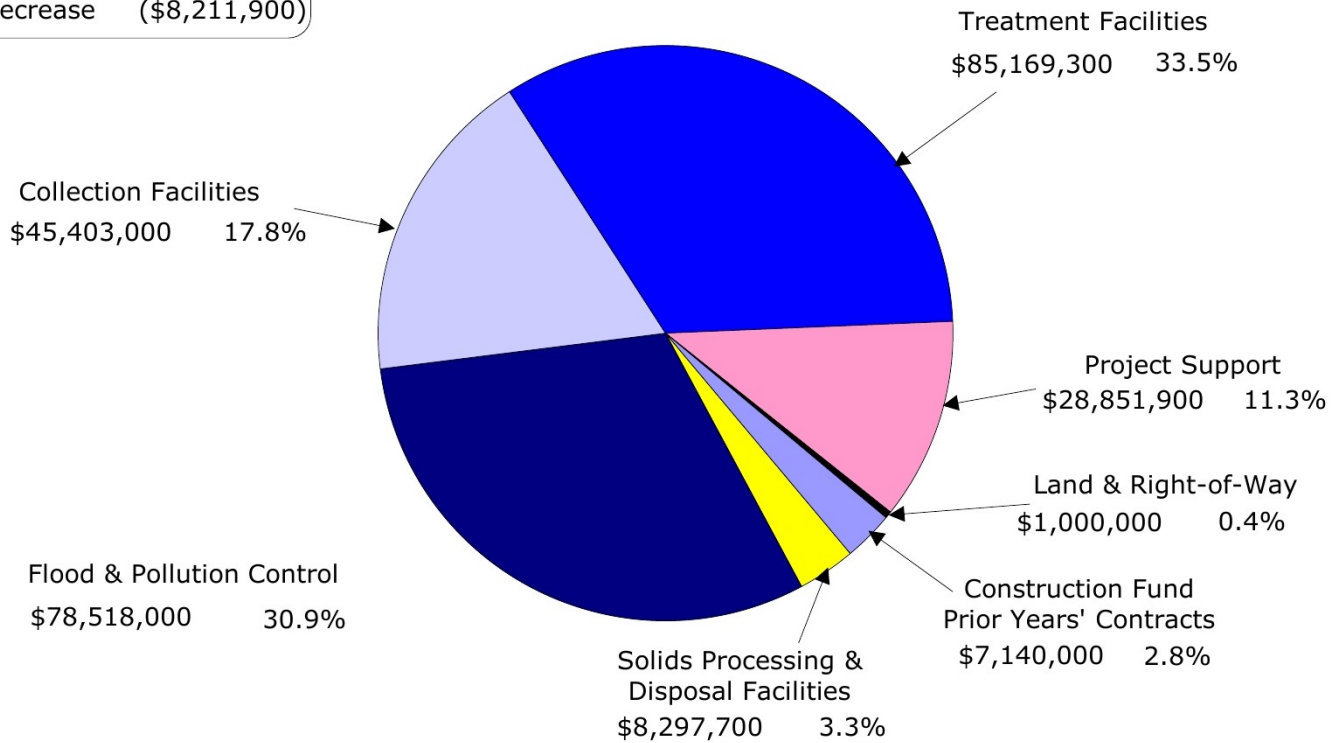
John P. Murray
Director of Maintenance & Operations

Edward W. Podczewinski
Director of Monitoring & Research

CAPITAL IMPROVEMENT PROGRAM CONSTRUCTION AND CAPITAL IMPROVEMENTS BOND FUNDS

2021	\$254,379,900
2020	\$262,591,800
Decrease	(\$8,211,900)

FUNCTIONS



The District utilizes the Construction and Capital Improvements Bond Funds for the Capital Improvement Program. Capital improvements comprise all new facilities and projects that preserve the useful life of District facilities or increase the capacity or efficiency of these facilities. The project support activities of the Construction and Capital Improvements Bond Funds consist of planning, designing, and constructing District infrastructure, acting as a liaison to the United States Environmental Protection Agency and the Illinois Environmental Protection Agency. Funding for capital projects includes pay-as-you-go funding in the Construction Fund, federal and state grants, state revolving loan programs for wastewater and stormwater and alternative revenue and general obligation bonds.

Budget Highlights

The 2021 appropriation for the Capital Improvement Program (Construction and Capital Improvements Bond Funds) is \$254,379,900, a decrease of \$8,211,900, or 3.1 percent, from 2020 due to the timing of project awards scheduled for 2021. A total of 109 projects funded by the Construction or Capital Improvements Bond Funds will be under planning, design, or construction in 2021. There is one channel improvement project planned for award in 2021 and this project will be funded by both the Stormwater Management Capital Improvements Bond Fund Program and the Stormwater Management Fund. There are no staff positions budgeted in the Construction and Capital Improvements Bond Funds.

The mission of the Capital Improvement Program is to plan, develop, and implement projects for new facilities, preserve the useful life of facilities, or increase the capacity or efficiency of facilities to ensure that the District complies with our statutory responsibilities in the areas of sewage treatment and pollution control.

Capital Improvement Program Policy

The District's Capital Improvement Program consists of those projects identified as necessary to ensure safe and uninterrupted operation of our facilities, meet existing and new statutory and regulatory requirements, and maintain efficiency in a cost-effective manner. Projects are identified based on asset management audits, Governmental Accounting Standards Board Statement 34 inspections, and need, such as regulatory requirements or long-term strategic planning. Following identification, projects must be justified and vetted by an interdepartmental review panel. Projects are prioritized using an evaluation and scoring system that values preservation of infrastructure, improvements to environmental quality, and commitment to community. Projects are added to the Capital Improvement Program and scheduled for award according to priority and resource availability after they have been through the review panel.

Governmental Accounting Standards Board Statement 34 became effective in 2003. By adopting the modified approach for reporting infrastructure assets, the District agrees to perform condition assessments of our facilities, establish service levels for our infrastructure, and appropriate funds to maintain these high standards, thus protecting the environment and avoiding the detrimental impacts of deferred maintenance. The results of these assessments are reported in the Comprehensive Annual Financial Report.

Beneficial Impacts of Capital Projects

Through proper operation, maintenance, rehabilitation, and replacement of equipment and facilities, the District ensures continuous efficient and reliable service, protects our investment and infrastructure, and meets National Pollutant Discharge Elimination System permit requirements. The Capital Improvement Program identifies and prioritizes projects to upgrade and modernize obsolete equipment and facilities.

Program Funding

Sources of funding for the Capital Improvement Program consist of capital improvements bond sales, general property tax revenues, State Revolving Fund loans, and federal and state grants.

Construction Fund

The Construction Fund is a property tax supported fund authorized by State Statute. Section 12 of "An act to create sanitary districts and to remove obstructions in the Des Plaines and Illinois Rivers," approved May 29, 1889, as amended, provides that the Board of Commissioners of the District can levy and collect taxes for construction purposes (which means the replacement, remodeling, completion, alteration, construction, and enlargement, which will add appreciably to the value, utility, or useful life of sewage treatment works or flood control facilities, and additions thereto, pumping stations, tunnels, conduits, and intercepting sewers connecting therewith, and outlet sewers together with the equipment and appurtenances necessary thereto, and for the acquisition of the sites and rights of way necessary thereto, and for engineering expenses of designing and supervising construction of the work above described) for the year 1985 and each year thereafter, which shall be at a rate not to exceed 0.10 percent of the assessed valuation of all taxable property within the District as equalized and determined for state and local taxes.

In 2021, the Construction Fund has 4 projects scheduled for award and 18 projects under construction.

Capital Improvements Bond Fund

Section 9.6(a) of "An act to create sanitary districts and to remove obstructions in the Des Plaines and Illinois Rivers," approved May 29, 1889, as amended, provides that the Board of Commissioners of the District is authorized to issue bonds for District purposes. The District issues bonds to provide funds to replace, remodel, complete, alter, construct, and enlarge sewage treatment or flood control facilities, to acquire air pollution control equipment, and to build or acquire sewers. The total allowable bond debt at any given time cannot exceed 3.35 percent of the last known equalized assessed valuation of all taxable property within the District. The ordinance authorizing the issuance of the bonds provides for the levy of a tax on all taxable property within the District adequate to pay principal and interest on the bonds when due, including a provision for loss in the collection of taxes.

Tax Cap laws enacted in Illinois have a significant impact on the funding of the District's Capital Improvement Program through bond sales. Under Public Act 89-1, the District's non-referendum bond authority is restricted to fund only projects initiated prior to October 1, 1991, which generally covers only Tunnel and Reservoir Plan (TARP) projects. However, Public Act 89-385 provided additional non-referendum authority to the District by authorizing the issuance of "limited bonds." These "limited bonds" allow the District to issue non-referendum debt for projects initiated after October 1, 1991. "Limited bonds" can be issued up to the debt service extension base established by the Act. This "limited bond" authority was expanded for the District by passage of Public Act 90-485 in the 1997 legislative session. This Act excludes debt associated with the TARP program from the "limited bond"

limitation. The use of general obligation and alternative revenue bonds comprises only a portion of the District's capital project financing.

State Revolving Fund

The United States Environmental Protection Agency implemented the State Revolving Fund (SRF) to ensure that each state's program is designed and operated to continue to provide capital funding assistance for water pollution control activities in perpetuity, but preserves a high degree of flexibility for operating revolving funds in accordance with each state's unique needs and circumstances.

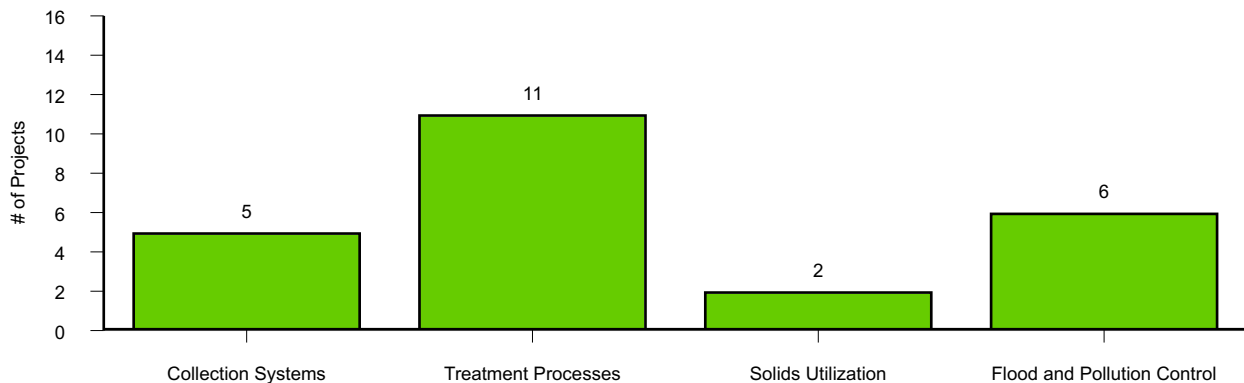
Funds in the SRF shall not be used to provide grants. SRF balances must be available in perpetuity and must be used solely to provide loans and other authorized forms of financial assistance:

- a. For municipalities, intermunicipal, interstate, or state agencies for the construction of publicly owned wastewater treatment works;
- b. For implementation of a new point source pollution control management program;
- c. For development and implementation of a conservation and management plan.

For many years, the major sources of funding for District projects were federal grants and the Build Illinois Compliance Grants, both of which were discontinued. Under the grant program, the District received approximately \$1.9 billion between 1973 and 1993, leaving 25 percent of the project cost to be borne by the District. The District continues to aggressively pursue federal and state funding to minimize the impact on our constituency. Low-interest SRF loans are an integral part of the District's capital improvements financing. SRF revenues are based on the award and construction schedule of specific projects. It is estimated the District will receive approximately \$70 million annually in SRF loans for the next several years.

In 2021, there are 24 projects scheduled for award in the Capital Improvements Bond Fund. In the exhibit below, the breakdown by program is displayed.

Capital Improvements Bond Fund Projects Scheduled for 2021 Award



The District received \$33.8 million in federal funds to complete McCook Reservoir Stage 2. This lump sum payment to the District comes as a result of a pilot program established under the Water Resources Development Act of 2014, which evaluates the cost-effectiveness and project delivery efficiency of allowing non-federal interests to carry out construction of projects for flood risk management. The funds, which complete the federal cost share for the project, are held in a Restricted Asset account. The District will budget for these funds as grant revenue to be received in increments as the work progresses and are not expected to be depleted until 2029 when the project is completed.

Operating Cost Impacts of Capital Improvement Projects

The annual maintenance and/or operating costs associated with new capital projects provide an important part of the decision-making process for the selection of capital projects. The operating cost impacts of proposed capital projects are analyzed by design personnel, as well as operating staff, in order to implement a Capital Improvement Program that meets operating needs in the most cost-effective manner. For example, the Mainstream TARP Pump Rehabilitation, Stickney WRP (Project 18-144-3M) will increase energy efficiency. This project includes the rehabilitation of Mainstream TARP Pumps 1, 3 and 5, initially placed into service in 1985, and rehabilitation of motors and the discharge valve/actuator. A similar project completed in 2018 to rehabilitate TARP Pump 8 became 25 percent more efficient resulting in lower energy costs. Capital projects also serve as opportunities to evaluate new technology at one location, and assess whether implementing that technology will reduce operating costs at other locations throughout the District. For example, in 2021, the District will award a contract for installation of a combined heat and power unit at the Egan WRP. The combined heat and power unit is designed to maximize utilization of biogas throughout the year.

Currently, the District uses biogas for heating, but during warmer months, biogas is not fully utilized. The combined heat and power unit project will provide an opportunity for assessment of the technology, analysis of options for pre-digestion treatment to increase biogas production, and a review of financial return on investment, carbon offsets and market risks.

Operating impacts for each project are included on the individual project fact sheets.

Overall Capital Improvement Program Costs

The District’s 2021 Capital Improvement Program includes 2021 project awards, program support, and projects under construction at award value with total estimated cost of approximately \$822.3 million. A breakdown of these projects (in millions of dollars) is as follows:

2021 project awards	\$ 223.5
2021 program support (project support and land)	29.9
Projects currently under construction (award value)	<u>568.9</u>
Total	\$ 822.3

◆ A breakdown of projects scheduled for 2021 award by fund is as follows:

Construction Fund projects	\$ 12.0
Capital Improvements Bond Fund projects	<u>211.5</u>
Total	\$ 223.5

◆ A breakdown of projects under construction (award value) by fund is as follows:

Construction Fund projects	\$ 15.5
Capital Improvements Bond Fund projects	<u>553.4</u>
Total	\$ 568.9

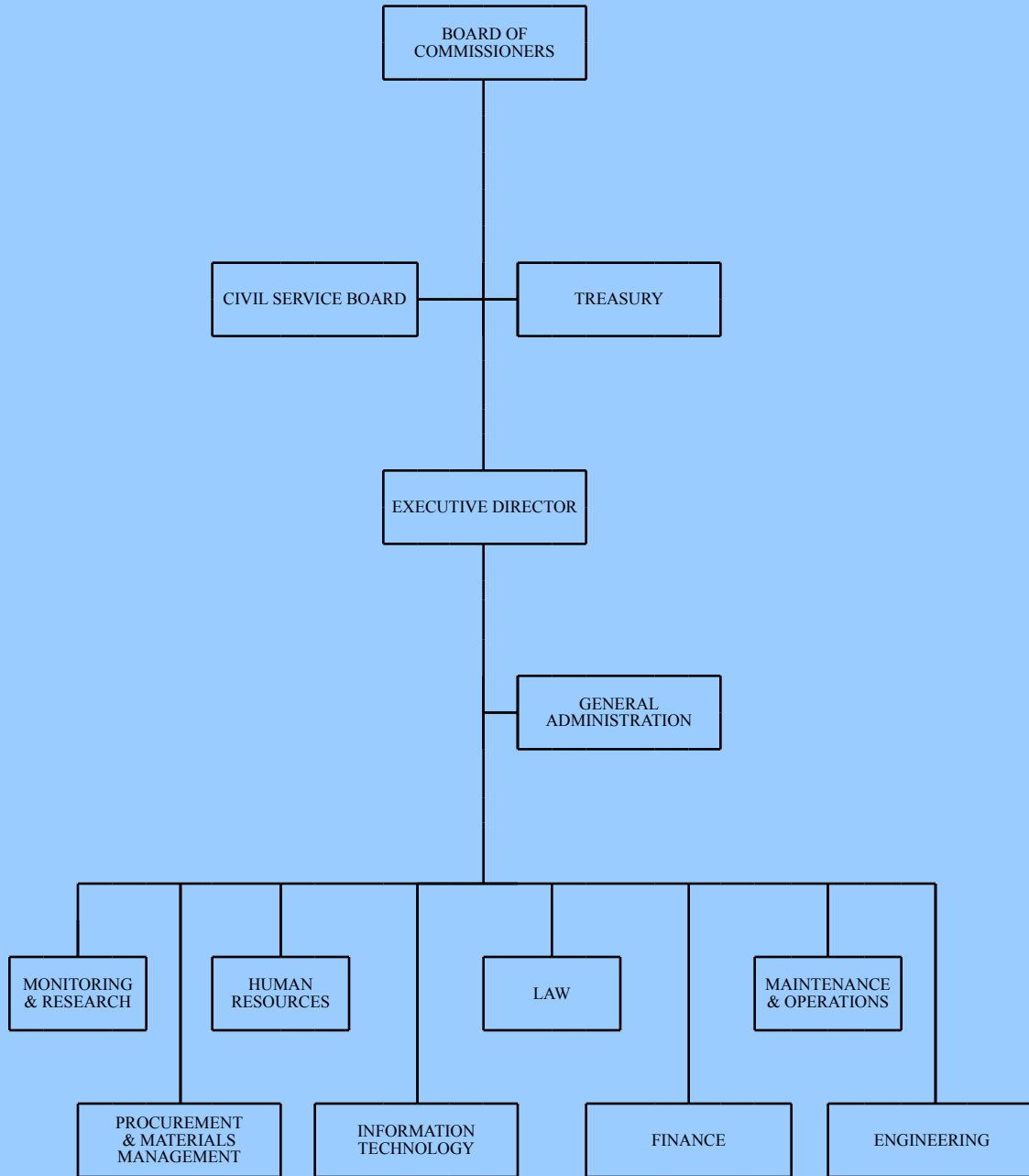
The table on page 330 shows the 10-year construction cost projections for the Capital Improvement Program, including Stormwater Management capital projects.

10-YEAR CAPITAL IMPROVEMENT PROGRAM SUMMARY 2016 - 2025 CAPITAL PROJECT CONSTRUCTION COST

	ACTUAL CASH DISBURSEMENTS					ESTIMATED CASH DISBURSEMENTS					TOTAL
	2016	2017	2018	2019	2020*	2021	2022	2023	2024	2025	2016-2025
BY CATEGORY											
Water Reclamation Plants and Solids Management	\$107.01	\$104.26	\$34.17	\$22.29	\$43.93	\$67.16	\$58.24	\$55.66	\$60.35	\$58.08	\$611.16
Replacement of Facilities	36.98	43.22	14.48	10.71	26.79	32.24	62.41	53.46	49.37	55.08	\$384.73
Collection Facilities	25.51	10.52	16.58	5.90	5.43	18.28	18.26	31.26	22.60	24.04	\$178.36
Stormwater Management	7.49	5.69	26.23	52.48	56.75	87.85	85.74	64.96	59.43	58.48	\$505.10
Tunnel and Reservoir Plan	47.68	55.79	45.84	4.87	22.61	16.20	17.83	24.51	19.52	20.62	\$275.47
TOTAL	\$224.67	\$219.48	\$137.30	\$96.25	\$155.52	\$221.73	\$242.47	\$229.85	\$211.26	\$216.30	\$1,954.81
BY FUND											
Stormwater Management Fund	\$6.34	\$0.96	\$6.59	\$16.72	\$33.17	\$57.90	\$60.01	\$57.47	\$39.43	\$38.48	\$317.08
Construction Fund	13.47	8.83	6.82	9.47	9.50	9.87	8.08	7.55	7.40	7.37	\$88.35
Capital Improvements Bond Fund	204.86	209.69	123.89	70.06	112.84	153.95	174.37	164.83	164.43	170.45	\$1,549.38
TOTAL	\$224.67	\$219.48	\$137.30	\$96.25	\$155.52	\$221.73	\$242.47	\$229.85	\$211.26	\$216.30	\$1,954.81

- Notes: 1. All project costs are in millions of dollars.
 2. Information regarding the distribution of funds between the sub-items in the Construction and Capital Improvements Bond Funds can be found in the Five-Year Financial Forecast.
 3. Amounts are rounded.

* PROJECTED CASH DISBURSEMENTS



CONSTRUCTION FUND

Fund Summary

The Construction Fund provides for the acquisition of infrastructure assets or the rehabilitation of existing structures that increase the efficiency or extend the useful life of the structure. The useful life of the improvement is at least 15 years and the values are generally less than \$2 million. The Construction Fund is a pay-as-you-go capital fund and is funded primarily by property taxes.

Summary of 2020 Accomplishments

Guided by the Strategic Business Plan (SBP), these projects and initiatives were undertaken with the purpose of minimizing future maintenance costs, increasing system reliability, and achieving excellence:

- Substantially completed an odor dispersion modeling and preliminary design of odor control facilities at the Stickney WRP;
- Completed the restoration of the roof at the Lockport Powerhouse. The powerhouse's clay tile roof is approximately 110 years old and in need of restoration. Preserving the building is essential as it houses critical components used to control the water level of the Sanitary and Ship Canal and generate hydroelectricity;
- Began work on a large-scale project to improve the railroad assets at the Stickney WRP. The railroad is used to convey biosolids material to solids management areas, making it an important element in producing Class A Exceptional Quality biosolids and by extension recovering resources;
- Installed a shaftless screw conveyor in one aerated grit tank in the Aerated Grit Building at the Calumet WRP to replace the traveling bridge system. Located in a hazardous environment, the traveling bridge system often needed repairs, which required an extended shutdown of the aerated grit tank. The new shaftless screw conveyor, with its superior design, will provide a more reliable and less costly system that will minimize tank downtime;
- Completed the second phase of an extensive District-wide heating, ventilation, and air conditioning improvement project. The modifications will improve indoor air quality and protect and preserve valuable assets, such as those contained in laboratories and data centers. The equipment specified for this project was chosen based on its performance properties;
- Substantially completed a project to restore the cathodic protection system for the Calumet Tunnel and Reservoir Plan East and West Pumping Stations. The rehabilitated system will protect valuable underground equipment and structures from harmful electric currents;
- Began the installation of nine exciter control panels for the main sewage pumps located at the Racine Avenue and North Branch Pumping Stations. The panels are used to control the synchronous motors on the large main sewage pumps. The upgraded exciter control panels replaced obsolete equipment that was increasingly costly to repair and prone to failure. With the new equipment, the risk of interruptions to critical pumping operations is greatly reduced;
- Procured a replacement lathe and accessories that will be used for day-to-day machining at the O'Brien WRP. The old lathe, which had been in service for more than 40 years, was no longer able to satisfy workplace requirements;
- Used District trades and the specialized services of an outside contractor to rehabilitate one 3,000 horsepower horizontal shaft synchronous pump motor at the Stickney WRP. The right balance of resources, in this case a combination of insourcing and outsourcing, improves organizational efficiency and effectiveness;
- Began asbestos removal in the Pump and Blower House at the Stickney WRP. With the asbestos removed, the rehabilitation of the blowers can now proceed in a safe environment;
- Removed and replaced two chillers at the Main Office Building with energy efficient models;
- Ordered new air handling coils to replace units that were corroded and leaking due to hydrogen sulfide exposure. This equipment is part of the system that provides heating for buildings at the Kirie, Egan and Calumet WRPs. The new coils are expected to last three to five times longer than the existing coils, extending the useful life from four years to as much as 20 years;
- Provided funds to inspect and record sewers and manholes. The information is used to update condition assessments of sewers and prioritize rehabilitation work;
- Began the installation of an electric actuator to replace the existing hydraulic operator for Gate I of the Tunnel and Reservoir Plan at the O'Brien WRP. The existing gate operator is beyond its useful life and requires frequent repairs using proprietary parts which are no longer supplied by the original equipment manufacturer. The replacement equipment will increase reliability and reduce downtime;
- Monitored and adjusted the project schedule for delays related to the COVID-19 pandemic to ensure that sufficient funds and resources are available in 2021 to proceed with the work.

Budget Highlights

The 2021 appropriation for the Construction Fund is \$14,103,200, a decrease of \$3,941,200, or 21.8 percent, from 2020. There are no staff positions budgeted in the Construction Fund. The 2021 value of the Construction Fund Program includes \$7,140,000 for projects under construction and \$2,479,000 for projects scheduled for award in 2021. An additional \$4,484,200 is appropriated for purposes not specifically associated with listed project costs, including \$1,484,200 for professional engineering services in connection with initiatives sponsored by the Engineering and Monitoring & Research Departments and \$3,000,000 for capital project assessments for the DuPage River Salt Creek Workgroup (DRSCW).

2021 Initiatives in Support of the Strategic Business Plan Include the Following:

- **Add Value**
 - Satisfy customer expectations, a core principle of the SBP, by using the Construction Fund to rehabilitate and improve facilities to ensure the long-term viability of assets;
 - Design projects with the purpose of providing valuable equipment redundancies, preventing system failures, and improving operating reliability;
 - Understand and consider outside forces and influences, such as the COVID-19 pandemic. The District will continue to evaluate the financial impacts related to the pandemic as it plans for capital infrastructure needs. Funds are included in the 2021 Budget for construction delays related to the pandemic, though to date they have not been significant.
- **Excellence**
 - Adhere to an asset rehabilitation schedule with the goal of reducing emergency work;
 - Continue to prioritize projects to ensure the best use of available resources. In 2021, 22 projects are on the Construction Fund schedule based on their alignment with the SBP. The projects are vetted and approved using criteria specified in the SBP, including the ability to produce results, deliver services, and demonstrate financial soundness;
 - Award facility needs study to assess the current and future needs for the Lemont and Hanover Park WRPs to ensure the service areas will continue to provide reliable, long-term services;
 - Operate with the sense of urgency described in the SBP. The Maintenance & Operations Department will oversee four new and 18 existing Construction Fund projects in 2021 related to collection, treatment, flood and pollution control, and solids processing, which are the core programs and functions of the department;
 - Continue to pursue research programs focused on addressing impending or anticipated future regulatory actions, achieving energy savings and resource recovery, or generating cost savings;
 - Allocate resources to ensure the required productive or operating capacity of the District's assets is met and maintained.
- **Recover Resources**
 - Continue research projects utilizing algae technology for the recovery of phosphorus and nitrogen from wastewater;
 - Provide funding for three projects to upgrade and improve the District's railroad system, which is an important element in the biosolids process, which in turn is integral to recovering resources.
- **Leading Partnerships**
 - Under an Intergovernmental Agreement with the United States Geological Survey, operate a "multi-parameter, water-quality superstation" for real-time monitoring and data transmission of water conditions at Route 53 in the Des Plaines River, near Joliet. The data will be used by the Chicago Area Waterway System Nutrient Oversight Committee to develop and inform nutrient implementation plans, as described in the National Pollutant Discharge Elimination System permits for the Stickney, O'Brien, and Calumet WRPs. The station will be operated and maintained through federal fiscal year 2021. Agreements like this one support the SBP, which encourages the development of strategic relationships and the promotion of the District as an influential leader in the water industry;
 - Act as an influential and leading member of the DRSCW, which is a non-profit organization founded in 2005 by a group of local communities, WRPs, and environmental organizations to address water quality concerns and implement targeted watershed projects in the Salt Creek and the East and West Branch DuPage River Watersheds. Membership in the DRSCW provides the District with a valuable opportunity to benefit the environment. It also provides a financial benefit to the District since the Egan and Hanover Park WRPs will not be required to meet the more stringent phosphorus limit standards, a potentially costly undertaking, for at least 10 years while the DRSCW projects are being implemented and their impacts on the waterway are evaluated. As a member, the District contributes funds for capital projects that will have the most significant positive impact on aquatic life. The planned annual capital project contributions for the three-year period beginning in 2021 and ending in 2023 are \$3,000,000, \$485,000, and \$480,071, respectively. The 2021 amount was adjusted to account for prior-year delays due in part to the pandemic.

Construction Fund Program

Projects Under Construction						
Project Name	Project Number	Est. Construction Cost	2021 Appropriation	Duration (days)	Award Date	
Furnish, Deliver, and Install Four Sacrificial Deep Anode Ground Beds for the Cathodic Protection System, CSA	19-804-21	\$ 805	\$ 100	601	Aug 2019	
Furnish, Deliver, and Install a Shaftless Screw Conveyor in an Aerated Grit Tank, CWRP	18-802-22	415	50	543	Sep 2019	
Rehabilitation of Two Double Disc Gate Valves, SWRP	19-905-21	1,088	888	619	Oct 2019	
Furnish, Deliver, and Install Motor Excitation Control Equipment, Various Locations	19-603-21	865	50	496	Nov 2019	
Furnish and Deliver HVAC Coils, Various Service Areas	19-608-22	62	62	447	Jan 2020	
Railroad Track Rehabilitation, SSA	J69922-22.A	1,353	800	470	Feb 2020	
Furnish, Deliver, and Install an Upgraded Operator for TARP Gate I, OWRP	19-717-22	775	450	480	Mar 2020	
Asbestos Abatement at the Pump and Blower Building Bag House, SSA	J69922-023.A	626	76	384	Mar 2020	
Rehabilitate One Electric Motor, OWRP	20-704-21	203	150	360	Aug 2020	
HVAC Improvements, Various Locations	19-613-21	3,175	1,100	1,216	Sep 2020	
Furnish, Deliver, and Install 480 VAC Duct Bank Feeder Cables, SSA	J69923-012.A	200	200	211	Sep 2020	
Rehabilitation of the Gloria Alitto Majewski Reservoir, KWRP	16-708-22	600	400	348	Oct 2020	
Rehabilitate Aeration Blowers, SWRP	20-908-21	3,385	1,000	1,172	Oct 2020	
Furnish, Deliver, and Install Air Compressors, CSA and SWRP	J67722-001.A	735	610	456	Oct 2020	
Furnish, Deliver, and Install Emergency Backup Generator, CSA	J67723-001.D	204	204	180	Nov 2020	
Remove and Replace Two Boilers, Main Office Building	J15090-076	500	500	334	Dec 2020	
Furnish, Deliver, and Install 480V Power Feeds to Aeration Batteries A, B, and C, CWRP	J68823-001.A	250	250	274	Dec 2020	
Furnish, Deliver, and Install Automatic Transfer Switches, LWRP	J68823-002.A	250	250	274	Dec 2020	
Total Projects Under Construction		\$ 15,491	\$ 7,140			

Awards in 2021						
Project Name	Project Number	Est. Construction Cost	2021 Appropriation	Duration (days)	Est. Award Date	
Railroad Track Improvements, SSA	20-907-21	\$ 2,800	\$ 1,948	660	Mar 2021	
Furnish, Deliver, and Install HVAC Control Panels, SWRP	21-910-21	425	165	1,004	Apr 2021	
HVAC System Replacement, Various Locations	21-611-21	8,300	166	1,187	Oct 2021	
Rehabilitation of Locomotive No. 4, SSA	21-911-21	500	200	456	Oct 2021	
Total 2021 Awards		\$ 12,025	\$ 2,479			
Cumulative Projects Under Construction and 2021 Awards		\$ 27,516	\$ 9,619			

Note: All cost figures are in thousands of dollars.

CAPITAL PROJECTS LISTED BY SERVICE AREA - CONSTRUCTION FUND

The following is a list of capital projects within the District’s three major service areas. They are presented by their association with a water reclamation plant (WRP) and by their completion status: projects under construction or for 2021 award.

**STICKNEY
SERVICE
AREA (SSA)**



Stickney Water Reclamation Plant (SWRP)

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects Under Construction			
19-608-22	Furnish and Deliver HVAC Coils, Various Service Areas	3/21	\$ 62,000
19-613-21	HVAC Improvements, Various Locations	12/23	3,175,000
19-905-21	Rehabilitation of Two Double Disc Gate Valves, SWRP	6/21	1,088,000
20-908-21	Rehabilitate Aeration Blowers, SWRP	12/23	3,384,500
J15090-076	Remove and Replace Two Boilers, Main Office Building	10/21	500,000
J69922-023.A	Asbestos Abatement at the Pump and Blower Building Bag House, SSA	3/21	626,200
J69922-22.A	Railroad Track Rehabilitation, SSA	5/21	1,353,000
J69923-012.A	Furnish, Deliver, and Install 480 VAC Duct Bank Feeder Cables, SSA	3/21	200,000
		Total	\$ 10,388,700
Projects for 2021 Award			
20-907-21	Railroad Track Improvements, SSA		\$ 2,800,000
21-611-21	HVAC System Replacement, Various Locations		8,300,000
21-910-21	Furnish, Deliver, and Install HVAC Control Panels, SWRP		425,000
21-911-21	Rehabilitation of Locomotive No. 4, SSA		500,000
		Total	\$ 12,025,000
	Stickney Service Area Grand Total		\$ 22,413,700

**NORTH
SERVICE
AREA (NSA)**



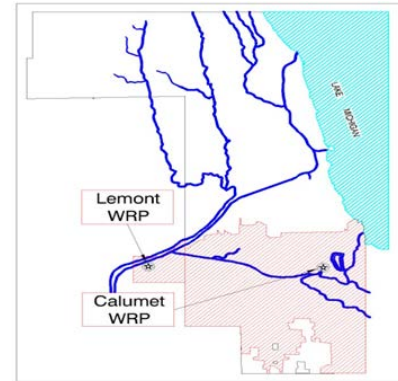
Terrence J. O'Brien Water Reclamation Plant (OWRP)

Projects Under Construction		Estimated Substantial Completion Date	Estimated Construction Cost
19-603-21	Furnish, Deliver, and Install Motor Excitation Control Equipment, Various Locations	3/21	\$ 864,900
19-717-22	Furnish, Deliver, and Install an Upgraded Operator for TARP Gate I, OWRP	6/21	775,200
20-704-21	Rehabilitate One Electric Motor, OWRP	7/21	202,700
		Total	\$ 1,842,800

James C. Kirie Water Reclamation Plant (KWRP)

Project Under Construction		Estimated Substantial Completion Date	Estimated Construction Cost
16-708-22	Rehabilitation of the Gloria Alitto Majewski Reservoir, KWRP	9/21	\$ 600,000
		Total	\$ 600,000
North Service Area Grand Total			\$ 2,442,800

**CALUMET
SERVICE
AREA (CSA)**



Calumet Water Reclamation Plant (CWRP)

Projects Under Construction		Estimated Substantial Completion Date	Estimated Construction Cost
18-802-22	Furnish, Deliver, and Install a Shaftless Screw Conveyor in an Aerated Grit Tank, CWRP	2/21	\$ 415,000
19-804-21	Furnish, Deliver, and Install Four Sacrificial Deep Anode Ground Beds for the Cathodic Protection System, CSA	3/21	804,600
J67722-001.A	Furnish, Deliver, and Install Air Compressors, CSA and SWRP	12/21	735,000
J67723-001.D	Furnish, Deliver, and Install Emergency Backup Generator, CSA	4/21	204,000
J68823-001.A	Furnish, Deliver, and Install 480V Power Feeds to Aeration Batteries A, B, and C, CWRP	9/21	250,000
		Total	\$ 2,408,600

Lemont Water Reclamation Plant (LWRP)

Project Under Construction		Estimated Substantial Completion Date	Estimated Construction Cost
J68823-002.A	Furnish, Deliver, and Install Automatic Transfer Switches, LWRP	9/21	250,000
		Total	\$ 250,000
Calumet Service Area Grand Total			\$ 2,658,600
Capital Projects Grand Total - All Service Areas			\$ 27,515,100

Rehabilitation of the Gloria Alitto Majewski Reservoir, KWRP

Project Number 16-708-22

Service Area North

Location Kirie WRP

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$600,000

Contract Award Date October 2020

Substantial Completion Date September 2021



Project Description This project is for the rehabilitation of the Gloria Alitto Majewski Reservoir.

Project Justification In 2011, the Army Corps of Engineers' reservoir inspection identified deficiencies with the geomembrane liner and underdrain system. Project 06-363-3D, Gloria Alitto Majewski Reservoir Rehabilitation, North Service Area, was completed in 2013 and implemented several improvements based on the 2011 inspection. However, subsequent inspections identified additional deficiencies at the reservoir which will be addressed under this project, including concrete spalling, slope failures, and the undermining of the underdrain system. The rehabilitation is necessary to restore the reservoir to a satisfactory condition.

Project Status Planning

Furnish, Deliver, and Install a Shaftless Screw Conveyor in an Aerated Grit Tank, CWRP

Project Number	18-802-22
Service Area	Calumet
Location	Calumet WRP
Engineering Consultant	In-house design
Engineering Contractor	IHC Construction Companies, Inc.
Estimated Construction Cost	\$415,000
Contract Award Date	September 2019
Substantial Completion Date	February 2021



Project Description This project entails furnishing, delivering, and installing one shaftless screw conveyor in an aerated grit tank in the Calumet WRP's grit facility.

Project Justification The grit facility has eight traveling bridge grit tanks that were installed more than six years ago. There have been seven bridge misalignment problems since the installation. The bridges' festoon rollers have been replaced at a cost of approximately \$4,500 per grit tank. There have also been numerous problems with the proximity and limit switches. District staff investigated putting the bridges on rails to eliminate misalignments, but the cost of the parts alone was approximately \$180,000. Screw conveyors are less complex than traveling bridges because they have fewer moving parts. Additionally, electrical components on traveling bridges are prone to failure due to hydrogen sulfide exposure. Unlike the traveling bridges, the new conveyors will be controlled via distributed control systems that will limit electrical component exposure to hydrogen sulfide.

Project Status Construction

Furnish, Deliver, and Install Motor Excitation Control Equipment, Various Locations

Project Number	19-603-21
Service Area	North and Stickney
Location	North Branch and Racine Avenue Pumping Stations
Engineering Consultant	In-house design
Engineering Contractor	Broadway Electric, Inc.
Estimated Construction Cost	\$864,900
Contract Award Date	November 2019
Substantial Completion Date	March 2021



Project Description This project entails furnishing, delivering, and installing replacement excitation control equipment at the North Branch Pumping Station (NBPS) and Racine Avenue Pumping Station (RAPS) main sewage pump synchronous motors. Five new pump motor exciter control systems will be installed at the NBPS and four at the RAPS.

Project Justification The existing synchronous motor power factor controllers and voltage regulators controlling the excitation of the NBPS and the RAPS main sewage pumps are obsolete and no longer manufactured or supported. These analog excitation controllers are more than 30 years old and are prone to malfunction, which negatively impacts sewage conveyance. Excitation controls are required to synchronize an induction motor and are critical for pump availability and operation. There are currently no spare parts, and the new replacement parts do not work without modifications from the manufacturer. Since the controllers are obsolete and no longer manufactured or supported, rehabilitation work takes longer and is costlier due to the use of specialized parts and labor.

Project Status Construction

Furnish and Deliver HVAC Coils, Various Service Areas

Project Number 19-608-22

Service Area Calumet, North, and Stickney

Location Calumet, Kirie, and Stickney WRPs

Engineering Consultant In-house design

Engineering Contractor Autumn Construction Services, Inc.

Estimated Construction Cost \$62,000

Contract Award Date January 2020

Substantial Completion Date March 2021

Project Description This project entails replacing deteriorated and leaking air handling coils used in the process facility air handling systems at the Calumet, Kirie, and Stickney WRPs.

Project Justification The existing air handling coils have deteriorated and corroded due to age and hydrogen sulfide exposure. New air handling coils will restore heating capacity at the process facility buildings.

Project Status Construction



HVAC Improvements, Various Locations

Project Number	19-613-21
Service Area	Calumet, North, and Stickney
Location	Stickney, Calumet, Egan, Kirie, and Hanover Park WRPs and the North Branch Pumping Station
Engineering Consultant	In-house design
Engineering Contractor	Autumn Construction Services, Inc.
Estimated Construction Cost	\$3,175,000
Contract Award Date	September 2020
Substantial Completion Date	December 2023



Project Description This project includes the replacement and improvement of heating, ventilation, and air conditioning systems at various locations. At the Stickney WRP, the air handling units in the Monitoring and Research Laboratory Building and the air conditioning unit and condenser in the Information Technology Department's data room will be replaced. At the Calumet WRP, ventilation improvements will be made in the battery room, two explosion-proof dehumidifiers will be replaced in the Tunnel and Reservoir Plan pumping station, and system balancing will be performed in the Administration Building. At the Egan WRP, the controls will be upgraded in the Administration Building and two digester gas systems with appurtenances will be replaced in the Digester Complex. At the Kirie WRP, ventilation improvements will be made in the influent pumping station. At the Hanover Park WRP, ventilation improvements will be made, and controls will be upgraded in the pump and blower building. At the North Branch Pumping Station, there will be ventilation improvements.

Project Justification The need for replacement is based on age, life expectancy, and reliability. The equipment being replaced has experienced chronic failures due to equipment corrosion and leaking coils and piping. The project will minimize future maintenance costs and ensure increased reliability to protect the District's assets, improve air quality, and provide a safe working environment.

Project Status Construction

Furnish, Deliver, and Install an Upgraded Operator for TARP Gate I, OWRP

Project Number	19-717-22
Service Area	North
Location	O'Brien WRP
Engineering Consultant	In-house design
Engineering Contractor	Ornelas Construction Company
Estimated Construction Cost	\$775,200
Contract Award Date	March 2020
Substantial Completion Date	June 2021



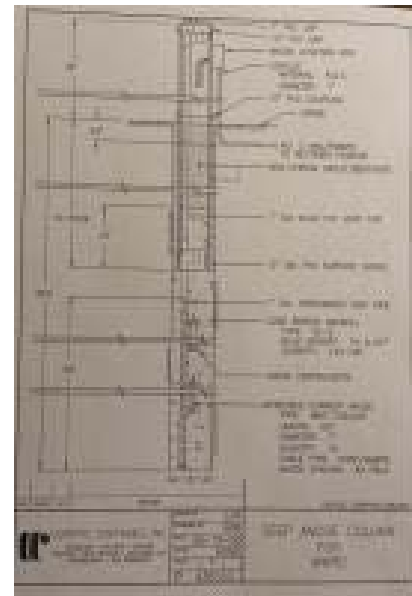
Project Description This project entails removing the existing hydraulic operator and accumulator assembly for Tunnel and Reservoir Plan (TARP) Gate I at the O'Brien WRP and installing an electric actuator in its place. Five redundant hydraulic sluice gates will also be blocked open and decommissioned.

Project Justification The existing gate operator is beyond its useful life. It requires frequent rehabilitation work and the proprietary parts are becoming increasingly scarce as they are no longer supplied by the original equipment manufacturer. The replacement actuator will result in improved reliability and reduced equipment maintenance and downtime.

Project Status Construction

Furnish, Deliver, and Install Four Sacrificial Deep Anode Ground Beds for the Cathodic Protection System, CSA

Project Number	19-804-21
Service Area	Calumet
Location	Tunnel and Reservoir Plan (TARP) East and West Pumping Stations
Engineering Consultant	In-house design
Engineering Contractor	Industria, Inc.
Estimated Construction Cost	\$804,600
Contract Award Date	August 2019
Substantial Completion Date	March 2021



Project Description This project entails drilling four, 10-inch diameter holes by approximately 400 feet, installing 14 mixed metal oxide sacrificial anodes in the four holes, and filling the remainder of the holes with coke breeze and bentonite. Additional work includes installing new junction boxes, connecting new wires to the existing rectifier system, installing reference cells for the new deep anode ground bed cathodic protection system in the east and west TARP pumping stations, and replacing conduit and cables as needed.

Project Justification The purpose of the contract is to replace four deep anode ground beds (DAGBs), which are no longer functional. The DAGBs are a part of the cathodic protection system responsible for protection of the underground piping infrastructure, mainly suction and discharge pipe sleeves. Based on the annual cathodic protection maintenance report received in 2017, the DAGBs' cathodic protection system located at the east and west TARP pumping stations is no longer functional. The anodes inside each of the deep anode columns have disintegrated and are no longer protecting the underground piping. Installation of a new DAGB system will restore protection for the existing and new underground equipment.

Project Status Construction

Rehabilitation of Two Double Disc Gate Valves, SWRP

Project Number	19-905-21
Service Area	Stickney
Location	Stickney WRP
Engineering Consultant	In-house design
Engineering Contractor	Pumping Solutions, Inc. D/B/A Proflow Pumping Solutions
Estimated Construction Cost	\$1,088,000
Contract Award Date	October 2019
Substantial Completion Date	June 2021



Project Description This project entails the rehabilitation of two 66-inch double-disc gate valves on main raw sewage pumps No. 5 and 6 at the Southwest Pumping Station at the Stickney WRP. District trades will perform the removal of the valve and its installation following a full rehabilitation. The rehabilitation work will include welding and machining of the gate discs, fabricating and replacing the valve stem, stem nut, disc nut, wedges, disc and valve body seats, hooks, and the hardware for the discharge valve assembly. The scope of work also includes hydraulic leak testing of the valve assembly to the American Water Works Association C500-93 Standard and the preparation of drawings.

Project Justification The Stickney WRP has six main raw sewage pumps at the Southwest Pumping Station with a 66-inch discharge valve on each pump. The discharge valves on main sewage pumps No. 1 through 4 were originally installed in 1938 and rehabilitated in 2008 through 2010. The discharge valves on raw sewage pumps No. 5 and 6 were originally installed in 1958. During recent maintenance work, severe wear and damage were observed on the components of the discharge valve assemblies. Failure of the discharge valves could result in the pump being unavailable for operation, which would reduce the pumping capacity of the station. A leaking valve could also cause the sewage discharge to flow back into the wet well, necessitating the need to operate more pumps and increase electrical energy consumption.

Project Status Construction

Rehabilitate One Electric Motor, OWRP

Project Number 20-704-21

Service Area North

Location O'Brien WRP

Engineering Consultant In-house design

Engineering Contractor L&S Electric, Inc.

Estimated Construction Cost \$202,700

Contract Award Date August 2020

Substantial Completion Date July 2021

Project Description This project entails rewinding the motor stator and refurbishing the rotor on main sewage pump motor No. 1 at the O'Brien WRP.

Project Justification On May 5, 2020, main sewage pump motor No. 1 tripped while in service. District staff tested the motor and found the stator winding had shorted to ground. To restore the pump to operation, the motor stator must be rewound and new temperature monitoring devices must be installed. The rotor will be tested and refurbished.

Project Status Construction



Railroad Track Improvements, SSA

Project Number	20-907-21
Service Area	Stickney
Location	Stickney Service Area
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$2,800,000
Contract Award Date	March 2021
Substantial Completion Date	December 2022



Project Description This project entails removing and replacing two railroad grade crossings, providing for track drainage improvements, and rehabilitating eight retaining walls. The grade crossings are located outside and to the west of the Stickney WRP.

Project Justification Improvements are necessary to ensure the integrity of the track gauge and prevent derailments. The existing grade crossing under Interstate 55 has noticeably degraded. At other locations outside the Stickney WRP, heavy traffic loads have degraded the crossing and it must be replaced to restore its integrity. There are numerous locations along the track system where poor track drainage causes the track ballast to become fouled with dirt and sediments. Rainwater carries ballast away from the track bed, and existing underdrain piping has been damaged or is no longer at an elevation sufficient to provide effective drainage. At certain locations, the surrounding terrain drains onto the track bed instead of away from it. These conditions keep the wood crossties saturated for extended periods of time and deposit significant amounts of dirt onto the ballast. Such conditions have a detrimental effect: the ability of the ballast to retain the rail in place is impaired and the frequency of crosstie replacements and track re-ballasting is increases. During more extreme wet weather events at the most susceptible locations, track flooding can reach the top of the rail, forcing the shutdown of the railroad until the floodwaters subside. Retaining walls in the area are in various stages of dilapidation, and some have completely failed, allowing the previously retained material to gradually migrate onto the track bed and interfere with the wheel flanges of the locomotives and dump cars.

Project Status Design

Rehabilitate Aeration Blowers, SWRP

Project Number 20-908-21

Service Area Stickney

Location Stickney WRP

Engineering Consultant In-house design

Engineering Contractor Dresser-Rand Group, Inc.

Estimated Construction Cost \$3,384,500

Contract Award Date October 2020

Substantial Completion Date December 2023



Project Description This project entails inspecting, rehabilitating, and overhauling four Dress-Clark blowers at the Stickney WRP.

Project Justification Four axial flow blowers (No. 4 through 7) at the Stickney WRP are used to provide air to the aeration tanks and airlifts. Blower No. 7's guide vane stator has sustained damage, preventing it from moving. The stator is critical as it is used to adjust the air flow based on the WRP's need. The stator on blower No. 4 also needs to be replaced. The blowers are due for an overhaul (every eight years is recommended). The work will include the inspection, rehabilitation, balancing, and replacement of worn parts. In addition, blowers No. 5 and 7 have obsolete pneumatic actuators which will be replaced with electro-hydraulic actuators.

Project Status Design

HVAC System Replacement, Various Locations

Project Number	21-611-21
Service Area	Calumet, North, and Stickney
Location	Calumet, North, and Stickney Service Areas
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$8,300,000
Contract Award Date	October 2021
Substantial Completion Date	December 2024



Project Description This project entails replacing and improving heating, ventilating, and air conditioning systems at various locations. At the Calumet WRP, a cross-connection between cooling towers will be installed for the Tunnel and Reservoir Plan, the old chiller and cooling towers will be removed at the Pump and Blower Building, and gas and water lines will be installed in the Heavy Equipment Building. At the 95th Street Pumping Station, ventilation improvements will be made in the Screenings Room. At the Egan WRP, two digester gas systems with appurtenances will be replaced in the Digester Complex, three absorption chillers will be replaced and the building management system controls will be upgraded in the Administration Building. At the Kirie WRP, the air handling system will be replaced to improve ventilation in the Influent Pumping Station. At the O'Brien WRP, four air handling units will be replaced in the Pump and Blower Building. At the Racine Avenue Pumping Station, the air handling system will be updated to improve ventilation. At the Stickney WRP, the heating, ventilation, and air conditioning (HVAC) system and two chillers will be replaced, the building management system controls will be upgraded in the Engineering Building, two heat exchangers will be replaced in the Monitoring and Research Building, and a high-pressure steam line will be installed in the Digester Facility. At the Lawndale Avenue Solids Management Facility, the HVAC system and controls will be upgraded in the Visitor's Center.

Project Justification The need for replacement is based on age, life expectancy, and reliability. The equipment being replaced has experienced chronic failures due to equipment corrosion and leaking coils and piping. The project will minimize future maintenance costs and ensure increased reliability to protect District assets, improve air quality, and provide a safe working environment.

Project Status Planning

Furnish, Deliver, and Install HVAC Control Panels, SWRP

Project Number 21-910-21

Service Area Stickney

Location Stickney WRP

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$425,000

Contract Award Date April 2021

Substantial Completion Date December 2023



Project Description The vendor shall provide all necessary services including labor, supervision, transportation, tools, parts, materials, instruments, insurance, management, expertise, and equipment to replace controllers such that 15 obsolete and damaged panels are brought up to date. Five panels will be completed in 2021, seven in 2022, and three in 2023. The panels and nodes are linked to the building management system that manages and monitors the electrical and mechanical equipment, which controls the heating, ventilation, and air conditioning systems at the Office, Shop, and Storage Facility, Building No. 3 and the Truck and Equipment Facility at the Stickney WRP.

Project Justification The precise control of the ventilation system is critical to the safety of the individuals who work with the welding, cutting, and torching equipment and operate the heavy equipment, trucks, and machines in these areas. The existing panels are obsolete and prone to malfunction, and parts are no longer available from the manufacturer. The expected useful life of the replacement panels is 20 years.

Project Status Planning

Rehabilitation of Locomotive No. 4, SSA

Project Number	21-911-21
Service Area	Stickney
Location	Stickney Service Area
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$500,000
Contract Award Date	October 2021
Substantial Completion Date	December 2022



Project Description Perform an overhaul of Locomotive No. 4 in the Stickney Service Area.

Project Justification Locomotive No. 4 was built in 1983 and has been in service since that time. Other than the replacement of the wheel sets, significant rehabilitation work has not been performed on the locomotive. This project specifies the overhaul of the major mechanical and electrical components to ensure that the locomotive can provide reliable service to transport dewatered biosolids to the Harlem and Lawndale Avenue Solids Management Area drying sites. In addition to the wear and tear associated with age and regular use, the engine sustained significant damage when it and four dump cars derailed on July 13, 2020.

Project Status Design

Remove and Replace Two Boilers, Main Office Building

Project Number	J15090-076
Service Area	Stickney
Location	Main Office Building
Engineering Consultant	In-house design
Engineering Contractor	McDonagh Demolition, Inc.
Estimated Construction Cost	\$500,000
Contract Award Date	December 2020
Substantial Completion Date	October 2021



Project Description This project entails removing and replacing two boiler units at the Main Office Building. The new units will be energy efficient.

Project Justification There have been several projects to re-tube the boilers, which have resulted in significant maintenance costs. The boilers are original to the building, which was constructed in 1955. According to the standards of the American Society of Heating, Refrigerating, and Air Conditioning Engineers, the useful life of cast iron boilers is 35 years. These have now been operational for 64 years. Failure of either of the existing boilers could have adverse effects on the working conditions of all employees in the Main Office Building due to the inability to regulate temperature during the cooler months.

Project Status Planning

Furnish, Deliver, and Install Air Compressors, CSA and SWRP

Project Number J67722-001.A

Service Area Calumet and Stickney

Location Calumet Tunnel and Reservoir Plan and Stickney WRP

Engineering Consultant In-house design

Engineering Contractor McDonagh Demolition, Inc.

Estimated Construction Cost \$735,000

Contract Award Date October 2020

Substantial Completion Date December 2021

Project Description This project entails furnishing, delivering, and installing two air compressors at the Calumet Tunnel and Reservoir Plan and two at the Stickney WRP.

Project Justification Of the two high-pressure air compressors at the Calumet Tunnel and Reservoir Plan, only one is currently in service. Of the five compressors at the Stickney WRP, only two are currently in service. The two compressors planned for replacement at the Stickney WRP have the largest capacity. The units that are not in service are obsolete and the replacement parts are either unavailable or uneconomical to purchase. The installation of the new equipment will provide continued availability of the compressed air systems at these WRPs.

Project Status Planning



Furnish, Deliver, and Install Emergency Backup Generator, CSA

Project Number J67723-001.D

Service Area Calumet

Location Thornton Pumping Station

Engineering Consultant In-house design

Engineering Contractor McDonagh Demolition, Inc.

Estimated Construction Cost \$204,000

Contract Award Date November 2020

Substantial Completion Date April 2021



Project Description This project entails furnishing, delivering, and installing all materials, labor, and equipment required to install an emergency backup generator at the Thornton Pumping Station.

Project Justification The Thornton Pumping Station does not have a gravity bypass. The emergency generator will provide critical and redundant power to the station.

Project Status Planning

Furnish, Deliver, and Install 480V Power Feeds to Aeration Batteries A, B, and C, CWRP

Project Number J68823-001.A

Service Area Calumet

Location Calumet WRP

Engineering Consultant In-house design

Engineering Contractor McDonagh Demolition, Inc.

Estimated Construction Cost \$250,000

Contract Award Date December 2020

Substantial Completion Date September 2021

Project Description This project entails furnishing, delivering, and installing two 480V power feeds to aeration batteries A, B, and C at the Calumet WRP.

Project Justification By design, the power feeds to aeration batteries A, B, and C share the same raceway or cable trough. The trough is integral to an adjacent tank that leaks, causing the cables and splices to become submerged, which creates a potential ground fault condition. This project will remedy that hazard.

Project Status Planning



Furnish, Deliver, and Install Automatic Transfer Switches, LWRP

Project Number J68823-002.A

Service Area Calumet

Location Lemont WRP

Engineering Consultant In-house design

Engineering Contractor McDonagh Demolition, Inc.

Estimated Construction Cost \$250,000

Contract Award Date December 2020

Substantial Completion Date September 2021



Project Description This project entails furnishing, delivering, and installing automatic transfer switches at the Lemont WRP.

Project Justification Power at the Lemont WRP is sourced by two Commonwealth Edison feeds. As this WRP is not staffed around the clock, it is essential that the automatic transfer switches are fully functioning so power is continuously maintained. In the event power is lost to one feed, the automatic transfer switch will sense the loss and transfer to the available source. Recently, the existing automatic transfer switch failed, resulting in the loss of sewage conveyance. This project will replace and upgrade the automatic transfer switches.

Project Status Planning

Asbestos Abatement at the Pump and Blower Building Bag House, SSA

Project Number J69922-023.A

Service Area Stickney

Location Stickney WRP

Engineering Consultant In-house design

Engineering Contractor McDonagh Demolition, Inc.

Estimated Construction Cost \$626,200

Contract Award Date March 2020

Substantial Completion Date March 2021



Project Description Perform asbestos remediation work at the Stickney WRP. Abate and remediate elevations at the +35 level (measured in feet) and +54 level and the debris inside each primary cell cyclone.

Project Justification The primary cell area of the "Bag House" at the Stickney WRP is comprised of 12 individual rooms or cells that share a central outdoor air intake and cyclone rooms that collect heavier particulate. Air is drawn in through the outdoor air intake on the building's roof and is directed down to the +21 level (ground floor) where the air is pulled into cyclones and the larger, heavier particulate is collected. The air continues upward into the +35 level where it flows through tube-like sock filters. These filters collect the finer, lighter particulate before the air proceeds to the +54 level where it is directed toward the blowers.

It is suspected that in the past, the District used asbestos-containing media to line the tube-like sock filters in the "Bag House". In the 1930s and 1940s asbestos was used widely in many applications. It is probable that some degree of asbestos contamination exists in each of the primary cells because the same type of filtering media was most likely used in the tube-like sock filters for all the cells on the +35 level.

Project Status Construction

Railroad Track Rehabilitation, SSA

Project Number J69922-22.A

Service Area Stickney

Location Stickney Service Area

Engineering Consultant In-house design

Engineering Contractor McDonagh Demolition, Inc.

Estimated Construction Cost \$1,353,000

Contract Award Date February 2020

Substantial Completion Date May 2021



Project Description This project entails improving and rehabilitating existing drainage ditches, culverts, and underdrains. The West Con-Global railroad crossing will be completely replaced. Within the Stickney WRP, an asphalt railroad crossing will be replaced with a concrete panel style crossing. An unused and deteriorated asphalt crossing will be removed. A new concrete retaining wall will also be installed.

Project Justification This project is necessary to ensure the integrity of the track system. The rehabilitation work will alleviate flooding of the trackbed, route water through and away from roadway vehicle crossings, reduce the encroachment of earthen materials onto the track bed, and improve existing crossings to prevent damage to vehicles.

Project Status Construction

Furnish, Deliver, and Install 480 VAC Duct Bank Feeder Cables, SSA

Project Number J69923-012.A

Service Area Stickney

Location Mainstream Pumping Station

Engineering Consultant In-house design

Engineering Contractor McDonagh Demolition, Inc.

Estimated Construction Cost \$200,000

Contract Award Date September 2020

Substantial Completion Date March 2021



Project Description This project entails furnishing, delivering, and installing all materials, labor, and equipment required to replace two faulty duct bank 480 volt alternating current (VAC) feeder circuits between the Mainstream Pumping Station building and the McCook Reservoir valve distribution chamber.

Project Justification Electrical energy is normally fed to the valve distribution chamber from the south vent building and facility building at the Mainstream Pumping Station. On June 29, 2020, smoke was observed coming from the electrical manhole. The electrical manhole contains two 800 Amp, 480 VAC circuits that run from the facility building and feed essential loads in the valve distribution chamber. It was discovered that both circuits were compromised. One circuit had a direct short, while the other circuit was severely damaged. Both circuits are faulty and require replacement. The second feed to the valve distribution chamber is from the south vent building. This feed was disabled and taken out of service when it was previously damaged by an outside contractor. Both power feeds must be replaced.

Project Status Construction

50000 CONSTRUCTION FUND

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:	Cost	Percent
1. TREATMENT FACILITIES: Pursue projects, such as the replacement of heating, ventilation, and air conditioning systems, District-wide and the rehabilitation of aeration blowers at the Stickney WRP, which will reduce operation and maintenance costs and/or provide facility improvements.	\$ 569,300	4.0%
2. SOLIDS PROCESSING AND DISPOSAL FACILITIES: Pursue projects, such as railroad track improvements in the Stickney Service Area used to transport biosolids to the solids management areas, which will reduce costs and/or provide facility improvements.	\$ 2,297,700	16.3%
3. FLOOD AND POLLUTION CONTROL: Provide funding for construction projects addressing flood control.	\$ 3,000,000	21.3%
4. CONSTRUCTION FUND PROJECT COST: Provide funding for contracts awarded prior to 2021.	\$ 7,140,000	50.6%
5. PROJECT SUPPORT: Development, design, and administration of current and future contracts, funding support, construction materials, and utility support services.	\$ 1,096,200	7.8%
Totals	\$ 14,103,200	100.0%

MEASURABLE GOALS:	2019	2020	2021
	Actual	Estimated	Proposed
Award contracts for the continued implementation of the District's Capital Improvement Program.			
Number of projects proposed	22	18	4
Number of contracts awarded	22	18	4
Number of plans available for award	22	18	4
<p>The projects proposed for each year are based upon the requirements dictated by the Capital Improvement Program. The number of actual projects awarded may not, on face value, quantify performance. There are several factors that could either increase or decrease the number of projects awarded. Some of these factors are project size, project complexity, project schedules, Intergovernmental Agreements lead times, and unforeseen obstacles. The numbers are provided only as a general indicator of performance.</p>			

50000 CONSTRUCTION FUND

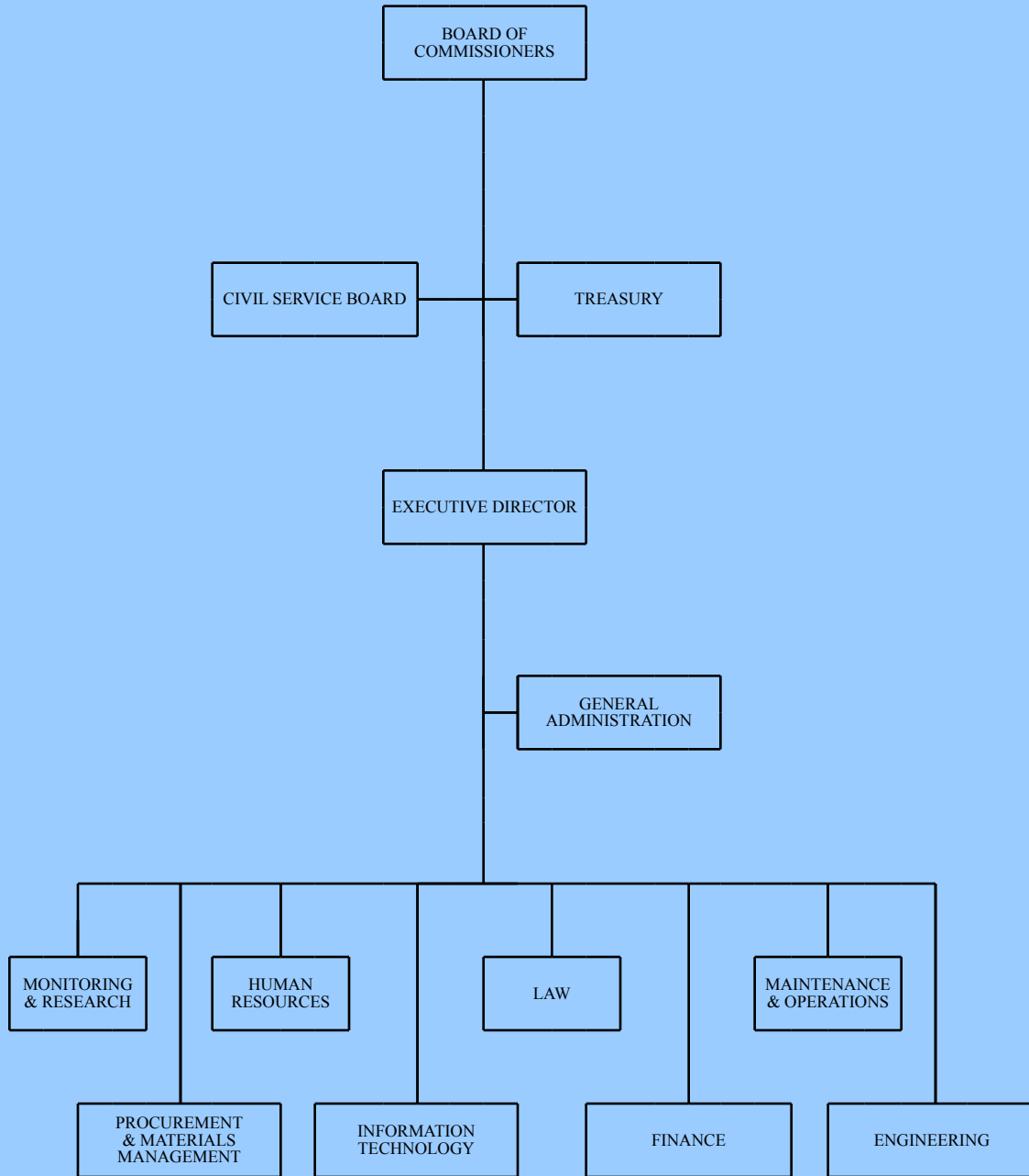
OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change	
Number	Name	Actuals	Positions	Dollars	Dollars	Percent
1110	Interceptor Systems	\$ 848,881	2021	— \$ —	\$ (432,000)	(100.0)
			2020	— \$ 432,000		
1800	Collection Construction	\$ 2,144,310	2021	— \$ 2,042,000	\$ (1,764,400)	(46.4)
			2020	— \$ 3,806,400		
2800	Treatment Construction	\$ 3,650,699	2021	— \$ 3,804,300	\$ (1,079,800)	(22.1)
			2020	— \$ 4,884,100		
2900	Treatment Processes	\$ —	2021	— \$ 163,000	\$ —	—
			2020	— \$ 163,000		
3800	Solids Processing Construction	\$ 134,854	2021	— \$ 150,000	\$ (654,500)	(81.4)
			2020	— \$ 804,500		
4600	Monitoring	\$ 842,915	2021	— \$ 1,096,200	\$ (1,008,800)	(47.9)
			2020	— \$ 2,105,000		
4800	Flood and Pollution Control Construction	\$ —	2021	— \$ 3,400,000	\$ 300,000	9.7
			2020	— \$ 3,100,000		
5800	Solids Disposal Construction	\$ 646,651	2021	— \$ 2,947,700	\$ 1,998,300	210.5
			2020	— \$ 949,400		
7284	Store Operations and Issue	\$ 41,716	2021	— \$ —	\$ —	—
			2020	— \$ —		
7460	Main Office Building Complex Services	\$ 926,784	2021	— \$ 500,000	\$ (1,300,000)	(72.2)
			2020	— \$ 1,800,000		
7491	Automotive Fleet Procurement	\$ 228,660	2021	— \$ —	\$ —	—
			2020	— \$ —		
Totals		\$ 9,465,470	2021	— \$ 14,103,200	\$ (3,941,200)	(21.8)%
			2020	— \$ 18,044,400		

Projects budgeted in the Construction Fund, a pay-as-you-go capital fund, are prioritized based on operational needs, design time frames, and available funding. Year-over-year variances in program area budgets are the result of project timing within the five-year capital planning cycle.

201 50000	Fund: Construction Department: Engineering	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
612240	Testing and Inspection Services	\$ 931,257	\$ 892,700	\$ 1,072,700	\$ 1,043,574	\$ 612,000	\$ 225,000	\$ —
612400	Intergovernmental Agreements	68,500	2,065,000	2,065,000	2,065,000	65,000	3,065,500	—
612430	Payments for Professional Services	597,806	1,900,000	1,720,000	563,831	663,800	1,030,700	—
612440	Preliminary Engineering Reports and Studies	21,053	203,000	203,000	194,629	131,900	163,000	—
200	TOTAL CONTRACTUAL SERVICES	1,618,616	5,060,700	5,060,700	3,867,034	1,472,700	4,484,200	—
634600	Equipment for Collection Facilities	209,717	—	—	—	—	—	—
634620	Equipment for Waterway Facilities	100,837	—	—	—	—	—	—
634650	Equipment for Process Facilities	603,882	248,000	248,000	151,694	231,500	62,000	—
634760	Material Handling and Farming Equipment	646,651	—	—	—	—	—	—
634860	Vehicle Equipment	286,195	—	—	—	—	—	—
400	TOTAL MACHINERY AND EQUIPMENT	1,847,282	248,000	248,000	151,694	231,500	62,000	—
645600	Collection Facilities Structures	208,420	75,000	75,000	—	—	—	—
645650	Process Facilities Structures	363,465	973,000	973,000	415,000	365,000	50,000	—
645680	Buildings	2,481,870	2,522,000	2,522,000	1,117,355	1,197,400	500,000	—
645690	Capital Projects, N.O.C.	562,450	—	—	—	—	—	—
645700	Preservation of Collection Facility Structures	1,151,383	4,379,400	4,529,400	3,760,572	4,050,000	2,442,000	—
645720	Preservation of Waterway Facility Structures	75,000	—	—	—	—	—	—
645750	Preservation of Process Facility Structures	338,857	2,181,900	2,181,900	998,987	1,433,500	2,110,000	—
645780	Preservation of Buildings	802,111	1,655,000	1,018,100	840,741	860,800	1,507,300	—
645790	Preservation of Capital Projects, N.O.C.	16,016	949,400	1,436,300	902,893	503,300	2,947,700	—
500	TOTAL CAPITAL PROJECTS	5,999,573	12,735,700	12,735,700	8,035,548	8,410,000	9,557,000	—
TOTAL CONSTRUCTION FUND		\$ 9,465,471	\$ 18,044,400	\$ 18,044,400	\$ 12,054,276	\$ 10,114,200	\$ 14,103,200	\$ —

NOTES: 1. Amounts may not add up due to rounding.
 2. Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.



CAPITAL IMPROVEMENTS BOND FUND

Fund Summary

The Capital Improvements Bond Fund is used when acquiring an asset that meets the definition of a capital asset: the cost typically exceeds \$500,000 and generally, the useful life will be at least 20 years. Capital projects pursued by the Engineering Department are: (a) preservation/rehabilitation of existing infrastructure to maintain service levels, (b) improvement of environmental quality, or (c) commitment to community through process optimization. The Capital Improvements Bond Fund is funded by the sale of bonds and receipt of loans from the Illinois Environmental Protection Agency and State Revolving Loan Fund. The use of these funds is governed by state statutes and federal guidelines.

Summary of 2020 Accomplishments

The District's Capital Improvements Bond Fund is grouped into three categories: preservation of infrastructure, improvement of environmental quality, and commitment to community.

Preservation of Infrastructure

- Continued construction of contracts to upgrade the digester sludge heating system and remove boilers at the Calumet Water Reclamation Plant (WRP), to rehabilitate digesters and replace digester gas piping at the Stickney WRP, to rehabilitate the North Branch Pumping Station, to replace the roof at the 95th Street Pumping Station, and to replace switchgear and the Motor Control Center at the O'Brien WRP;
- Awarded contracts to rehabilitate Tunnel and Reservoir Plan pumps at the Mainstream Pumping Station and to rehabilitate the central boiler facility and perform electrical upgrades at the Hanover Park WRP;
- Completed two contracts to rehabilitate two deteriorated sewer lines to like new conditions - Calumet 19 Ext. F Intercepting Sewer and Summit Conduit.

Improvement of Environmental Quality

- Awarded construction contract to install mechanical mixers at the Stickney WRP to improve the effectiveness of the biological phosphorus removal process, which will facilitate compliance with the phosphorus limits contained in the operating permit for the Stickney WRP;
- Continued construction of a Sidestream Enhanced Biological Phosphorus Removal pilot study at the Calumet WRP. This project will allow the District to evaluate a method for removing phosphorus from wastewater, that avoids the need for importing chemical or undertaking major infrastructure modifications;
- Partnered with the Army Corp of Engineers and Chicago Park District to complete a project that removed the North Branch Dam and made ecological improvements to the riparian areas on this portion of the river;
- Issued a Request for Proposal to install a combined heat and power unit at the Egan WRP to make better use of our digester gas and reduce our energy and natural gas consumption;
- Initiated the design of a project to construct a new drop shaft and tie it into the Mainstream Tunnel to reduce combined overflows at three outfalls along the near north side of Chicago.

Commitment to Community

- Completed a project to install odor control louvers at several Tunnel and Reservoir Plan drop shafts and improve combined sewer overflow capture at two locations;
- Continued construction on contracts to install odor control systems at the Thornton Reservoir Construction and Gate Shafts;
- Awarded contracts to install odor control systems at the Calumet, Stickney, Kirie, and Hanover Park WRPs.

Budget Highlights

The 2021 appropriation for the Capital Improvements Bond Fund is \$240,276,700, a decrease of \$4,270,700, or 1.7 percent, from 2020. There are no staff positions budgeted in the Capital Improvements Bond Fund. The 2021 appropriation includes construction costs for capital projects to be awarded in 2021 in the amount of \$211.5 million including funding for stormwater management capital projects. The remaining \$28.8 million includes funding for acquisition of easements, bond issuance costs, allowances for contract change orders, and legal and other support services relating to capital projects.

Significant features of the 2021 Budget are:

Preservation of Infrastructure

- Award contract to rehabilitate the North Shore 1 Intercepting Sewer and rehabilitate the Upper Des Plaines 14B Intercepting Sewer;
- Begin construction of project to replace Section 1 of the North Side Sludge Pipeline;
- Begin construction of project to rehabilitate concrete at Battery A Final Settling Tanks and replace roads at the Stickney WRP;
- Begin construction of project to rehabilitate steel spandrel beams of the Pump and Blower House at the O'Brien WRP.

Improvement of Environmental Quality

- Complete construction of the Des Plaines Inflow Tunnel at the McCook Reservoir, which is required to provide adequate conveyance of flow from the Des Plaines tunnel to the reservoir;
- Award a contract to construct two new connections to Tunnel and Reservoir Plan tunnels to reduce overflows at the Palos Hills and Westchester Pumping Stations;
- Award a contract for a chemical addition backup system for phosphorus removal at the Stickney WRP.

Commitment to Community

- Award a contract for installation of odor control systems at the Thornton Reservoir Gate and Construction Shafts;
- Continue construction on two projects to accomplish the goal of improving the quality of life for many individuals. One contract is at the Hanover Park WRP. The coarse screen building exhaust, gravity belt thickener exhaust, aerated grit tanks, and pre-treatment building are odorous areas at the plant, which is located in a residential neighborhood and adjacent to an elementary school. Odor compounds, concentrations, and associated air flows were collected and evaluated to determine the best available strategy to address the odor emissions. A bio-trickling filter and carbon polisher is under construction to effectively treat the odor emissions.

	Method of Financing					Total
	State Revolving Fund Loans	General Obligation Bonds	Army Corps of Engineers	Alternate Bonds		
Tunnel and Reservoir Plan	\$ 30,700	\$ 55,262	\$ 25,053	\$ —	\$ 111,015	
Water Reclamation Plant Expansion and Improvements	153,700	7,250	—	—	160,950	
Solids Management	42,500	8,750	—	—	51,250	
Collection Facilities	95,253	6,700	—	—	101,953	
Replacement of Facilities	187,050	21,400	—	—	208,450	
Stormwater	—	—	—	21,350	21,350	
	<u>\$ 509,203</u>	<u>\$ 99,362</u>	<u>\$ 25,053</u>	<u>\$ 21,350</u>	<u>\$ 654,968</u>	

2021 Initiatives in Support of the Strategic Business Plan Include the Following:

• Add Value

The recent completion of the Thornton Composite Reservoir and Stage 1 of the McCook Reservoir, Tunnel and Reservoir Plan has been effective in reducing pollution and flooding throughout the District’s combined sewer service area. In fact, Stage 1 of the McCook Reservoir, which was completed in late 2017, provides 3.5 billion gallons of storage capacity, and has already prevented more than 62 billion gallons of combined sewage pollution from entering waterways and basements. Stage 2 of the McCook Reservoir is currently being excavated and, when completed, will add 6.5 billion gallons of storage to capture additional combined sewer overflow from 37 communities in Cook County.

In 2019, the Army Corps of Engineers and the District completed a Project Partnership Agreement to implement a pilot program to fund the completion of Stage 2 of the reservoir. The pilot program grants the District \$33.8 million to complete the Stage 2 design and construction work. This lump sum payment to the District came as a result of the Water Resources Development Act of 2014, which evaluates cost-effectiveness and project delivery efficiency of allowing non-federal interests to carry out construction of projects for flood risk management. In 2021, the District intends to award the first of two construction contracts using this Federal funding for stabilizing the walls of Stage 2 of the McCook Reservoir.

• Excellence

In spite of the challenges of designing capital improvement projects while staff work remotely due to the COVID-19 pandemic, the Engineering Department plans to award 28 construction contracts funded through the Capital Improvements Bond Fund between 2020 and 2021. This represents a 17 percent increase in the total contracts projected to be awarded in 2020 and 2021 estimated one year ago.

Some of the District's facilities at its largest WRPs were built nearly a century ago. To ensure the continued reliability and longevity of its facilities, the Engineering Department has initiated a 30-year program to rehabilitate concrete structures, roofs, pumps, and roads at its WRPs and outlying pumping stations so they are in service for the next 100 years. The first of such projects related to concrete rehabilitation is 08-174-3D, Battery A Final Settling Tanks, Rehabilitation of Concrete and Road Replacement, Stickney WRP, scheduled for award in 2021. Rehabilitation of the balance of the aeration battery final tank concrete will be awarded over the next five years, followed by rehabilitation of the concrete in the aeration tanks at the Stickney WRP. The next priorities for

concrete rehabilitation are the Calumet and O'Brien WRPs. Additional projects either under construction or under development include rehabilitation of pumps at the Mainstream Pumping Station and replacement of the roof at the Lue-Hing Monitoring & Research Complex at the Stickney WRP.

- **Recover Resources**

Four of the District's WRPs produce digester gas, also known as "biogas," which is a byproduct of the anaerobic digestion process. Biogas is used as a fuel source in boilers at the four WRPs to produce steam or hot water which is used to heat the digesters and plant buildings. However, not all of the biogas is fully utilized throughout the year. In 2021, the District will award a contract to provide a combined heat and power unit at the Egan WRP. This project will serve as a learning experience for the District to evaluate technologies and opportunities for utilizing 100 percent of the biogas production at each of the WRPs to increase the quantity of resources recovered, reduce dependence on purchased energy, and reduce the District's carbon footprint. The District will also investigate pre-digestion treatment technologies and processes which may increase biogas production. An analysis of options will include a review of financial return on investment, carbon offsets, and market risks.

In order to optimize aeration processes and reduce energy consumption, the Engineering Department has worked with the Monitoring & Research and Maintenance & Operations Departments to implement an ammonia control system. To realize savings from these control strategies, the existing large blowers at the Stickney WRP must be evaluated for optimized operation. Currently, the Engineering Department is evaluating the complex piping configuration to determine the improvements required to reliably provide the reduced air flow equally to all four aeration batteries. Also, the Engineering Department is evaluating the turn-down capacity of the existing large blowers in order to determine if air reduction from a new blower control system can be realized.

Specifications are in place for every Engineering Department Capital Improvement Program project that includes administrative and procedural requirements for the recycling and disposing of non-hazardous construction and demolition waste. The waste includes building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or rehabilitation operations, including packaging materials. Under this specification, the contractor is required to develop a Waste Management Plan that results in a recycling rate of 60 percent by weight of total waste generated by the work. This plan must include how the weights of each type of debris will be calculated and documented. The District's goal is to recycle as much non-hazardous construction and demolition waste as possible.

- **Leading Partnerships**

The District has partnered with the Army Corps of Engineers on several projects over the years, most notably the McCook and Thornton Reservoirs. Due to Federal funding concerns, the District completed the design and construction of the Thornton Reservoir and is now completing Stage 2 of the McCook Reservoir, with oversight by the Army Corps of Engineers. In addition, the District, Army Corps of Engineers, and Chicago Park District recently completed an ecosystem restoration project on the North Branch of the Chicago River, removing a dam and restoring the riparian areas to increase wildlife habitat and diversity.

Capital Improvements Bond Fund Program**Awards in 2021**

Project Name	Project Number	Est. Construction Cost	Duration (days)	Est. Award Date
Chemical Addition Backup System, SWRP	19-159-3P	\$ 8,000	248	Jan 2021
Furnish, Deliver, and Install Coarse Screens, SWRP	20-903-31	6,000	1,081	Jan 2021
Upper Des Plaines Intercepting Sewer 14B Rehabilitation, NSA	06-360-3S	13,053	313	Mar 2021
Battery A Final Settling Tanks, Rehabilitation of Concrete and Road Replacement, SWRP	08-174-3D	7,700	323	Mar 2021
Odor Control Systems at Two TARP Shafts and Decommissioning the Thornton Transitional Reservoir, CSA, Rebid	15-266-4H3	20,000	702	Mar 2021
A/B and C/D Service Tunnel Rehabilitation - Phase III, SWRP	16-127-3D	17,000	1,048	Mar 2021
Furnish, Deliver, and Install Disc Filters, EWRP	18-702-31	6,700	187	Mar 2021
Furnish, Deliver, and Install Three Bar Screens, KWRP	18-703-31	2,000	771	Mar 2021
Furnish, Deliver, and Install Disc Filters and Other Improvements, HPWRP	20-701-31	3,600	903	Mar 2021
Furnish, Deliver and Install Replacement Gearboxes for SEPA (s) 2, 3, 4, & 5, CSA	20-801-31	1,600	658	Mar 2021
Sludge Pumping Improvements, Various Locations	21-603-31	4,000	1,025	Mar 2021
McCook Reservoir Stage 2 Rock Wall Stabilization and Instrumentation, SWRP	17-131-4F	17,268	1,231	Apr 2021
TARP Mainstream Drop Shaft DS-M73E at Armitage Avenue, SSA	20-160-4H	9,600	323	Apr 2021
Stickney Effluent Reuse Line, SSA	14-107-3S	800	193	May 2021
Rehabilitation of Steel Spandrel Beams of Pump and Blower House, OWRP	15-069-3D	10,000	903	May 2021
Roof Replacement of the Lue-Hing M&R Complex, SWRP	17-135-3V	6,500	493	May 2021
Utility Tunnel Cracks and Expansion Joints Rehabilitation, OWRP, KWRP, EWRP, HPWRP	17-843-3D	4,100	683	Jul 2021
Biogas Combined Heat and Power System, EWRP	20-415-3S	2,000	150	Jul 2021
Rehabilitation of North Branch Pumping Station & Other Miscellaneous Work, NSA, SSA	20-858-3D	5,700	225	Jul 2021
North Shore 1 Rehabilitation, NSA	10-047-3S	22,750	953	Oct 2021
Boilers 3, 4, 5 and MCC Replacement, SWRP	19-155-3M	13,000	673	Nov 2021
Replacement of Telemetry, Various Locations	20-861-3E	1,300	351	Nov 2021
Pumping Station Relief Sewers and Collection System Work, Various Locations	20-859-3S	7,500	253	Dec 2021
Total 2021 Awards		\$ 190,172		

Projects Under Construction

Projects under construction in the Capital Improvements Bond Fund were appropriated in prior years using the full encumbrance (obligation) method of budgetary accounting. The construction contract award amount and the full project duration are provided in this table.

Project Name	Project Number	Est. Construction Cost	Duration (days)	Award Date
Thornton Composite Reservoir Mining, Land, and Corp Costs, CSA	77-235-2F	\$ 52,806	8,597	Jun 1998
McCook Reservoir Stages 1 & 2, SSA	73-161-2H	134,702	8,172	May 1999
McCook Reservoir Des Plaines Inflow Tunnel, SSA	13-106-4F	107,868	1,952	Jun 2016
Furnish, Deliver, and Install Boiler Controls, SWRP	16-901-31	1,327	1,569	Sep 2017
North Branch Dam Removal and River Riparian Connectivity, NSA	16-IGA-22	2,500	1,796	Sep 2017
Installation of Shaftless Screw Conveyors for Aerated Grit Tanks, SWRP	17-902-31	2,595	1,138	Dec 2017
Rehabilitation of North Branch Pumping Station, NSA	16-079-3D	5,427	893	Aug 2018
Furnish and Install Odor Control System, CWRP, HPWRP, and KWRP	17-844-3P	4,198	715	Feb 2019
Replacement of Tailrace Stop Logs, Headrace Gates, and Equipment at Lockport Powerhouse, SSA	15-830-3D	12,154	1,109	Jun 2019
Odor Control Facilities at Sludge Concentration, Southwest Coarse Screen, Overhead Weir, and Post-Centrifuge Building, SWRP	17-134-3MR	16,512	699	Sep 2019
Digester Rehabilitation and Gas Piping Replacement, SWRP	17-140-3P	13,663	781	Nov 2019
Digester Sludge Heating System Upgrades and Boiler Removal, CWRP	18-277-3M	25,568	1,100	Dec 2019
Sidestream Enhanced Biological Phosphorus Removal Pilot Study, CWRP	18-248-3P	1,859	383	Jan 2020
Rehabilitation of Gravity Concentration Tank, CWRP	18-803-32	2,296	666	Mar 2020
Phosphorus Removal Liquid Facilities at the Fox River Water Reclamation District	18-IGA-36	7,148	489	Apr 2020
Installation of Mechanical Mixers, SWRP	19-157-3P	12,400	500	Oct 2020
Rehabilitation of TARP Pumps, MSPS	18-144-3M	20,509	1,487	Nov 2020
Central Boiler Facility and Electrical Updates, HPWRP	19-542-3M	14,000	653	Nov 2020
North Side Sludge Pipeline Replacement - Section 1, NSA	07-027-3S	16,365	923	Dec 2020
Six Access Shafts Infiltration Mitigation, MSPS	18-142-3H	2,269	323	Dec 2020
Total Projects Under Construction		\$ 456,166		

Projects Under Development

Project Name	Project Number	Est. Construction Cost	Duration (days)	Est. Award Date
Chemical Phosphorus Removal Facility, CWRP	18-254-3P	\$ 14,000	253	Jan 2022
FST Effluent Conduit Rehab & UV Facility Upgrades, OWRP	19-084-3P	2,000	453	Jan 2022
39th Street Conduit Rehabilitation - Phase II, SSA	01-103-AS	24,700	690	Feb 2022
Gate Control Equipment Upgrade at TARP Control Structures, KWRP, NSA	06-358-3M	2,200	493	Feb 2022
Upper Des Plaines Intercepting Sewer 11D, Ext. C Rehabilitation, NSA	11-404-3S	5,500	403	Feb 2022
Fermentation and Ancillary Facilities for Biological Phosphorus Removal, CWRP	12-245-3P	31,000	482	Feb 2022
6th Street Construction and Utility Tunnel Rehabilitation and Various Roof Replacements, CWRP	19-257-3D	3,100	323	Feb 2022
Digester Rehabilitation and Gas Piping Replacement Phase II, SWRP	18-148-3P	11,500	683	Mar 2022
Furnish Deliver and Install Elevator Upgrades, NSA	21-701-31	3,450	600	Mar 2022
Lockport Turbine Generator Rehabilitation, SSA	21-601-31	1,600	336	Apr 2022
Rehabilitation of the Overhead Bridge Crane in the Discharge Valve Chamber, MSPS	21-901-31	1,100	514	May 2022
MCC Replacement at Upper DuPage Reservoir, NSA	19-543-3E	250	253	Jun 2022
TARP Control System Replacement, SSA, CSA, NSA	19-856-3E	25,000	353	Jun 2022
Salt Creek 3 Intercepting Sewer Rehabilitation, SSA	20-161-3S	7,250	844	Nov 2022
West Side Intercepting Sewer No. 2 Rehabilitation, SSA	20-162-3S	2,000	354	Dec 2022
Rehabilitation of Locomotive Terminal Building, SWRP	18-143-3D	2,750	533	Jan 2023
Rehabilitation of Pump and Blower House, CWRP	19-255-3D	4,000	503	Jan 2023
Low Voltage Pump & Blower Switchgear and Aerated Grit MCC Replacement, SWRP	19-156-3E	6,750	493	Feb 2023
Digester Rehabilitation and Gas Piping Replacement, CWRP	18-253-3P	15,000	783	Mar 2023
Upgrade Wilmette Lift Station, NSA	19-083-3P	1,500	323	Jun 2023
Phosphorus Removal, KWRP	19-375-3P	6,500	453	Jul 2023
Battery C Final Settling Tanks, Rehabilitation of Concrete, SWRP	16-129-3D	3,000	513	Oct 2023
Lockport Powerhouse and Waterways Control System Replacement, SSA	19-855-3E	3,000	393	Oct 2023
Upper Des Plaines Intercepting Sewer 11D Rehabilitation, NSA	12-369-3S	5,500	403	Jan 2024
Battery B Final Settling Tanks, Rehabilitation of Concrete, SWRP	16-128-3D	5,000	513	Jan 2024
Low Voltage Switchgear Replacement, MSPS	19-154-3E	9,000	453	Jan 2024
Digester Rehabilitation, HPWRP	19-541-3P	6,000	513	Jan 2024
Chemical Phosphorus Removal, OWRP	20-087-3P	14,000	705	Mar 2024
Battery D Final Settling Tanks, Rehabilitation of Concrete, SWRP	16-130-3D	3,000	453	Oct 2024
Fermentation and Ancillary Facilities for Biological Phosphorous Removal Phase I, OWRP	20-085-3P	30,000	705	Dec 2024
Aeration Battery A Rehabilitation of Concrete, SWRP	20-164-3D	25,000	503	Dec 2024
Phosphorus Removal, EWRP	19-415-3P	30,000	453	Jan 2025
Digester Rehabilitation and Gas Piping Replacement Phase II, CWRP	19-256-3P	10,000	673	May 2025

Projects Under Development (Continued)

Project Name	Project Number	Est. Construction Cost	Duration (days)	Est. Award Date
Additional Grit Removal Tank, Chemical Phosphorus Removal Facility, and Construction of New Plant Entrance, LWRP	19-717-3P	6,000	553	Jun 2025
Switchgear and MCC Replacement, CWRP	19-258-3E	23,000	635	Sep 2025
Plant Improvements, HPWRP	18-540-3P	20,000	683	Dec 2025
Aeration Battery B Rehabilitation of Concrete, SWRP	20-163-3D	25,000	705	May 2026
Fermentation and Ancillary Facilities for Biological Phosphorous Removal Phase II, OWRP	20-086-3P	30,000	355	Dec 2026
McCook Reservoir Stage 2 Final Reservoir Prep, SSA	17-132-4F	24,796	483	Aug 2028
Total Future Awards		<u>\$ 443,446</u>		
Cumulative 2021 and Future Awards		<u>\$ 633,618</u>		

Note: All cost figures are in thousands of dollars; inflation factor is 0 percent.

Bold type indicates projects to be financed by "Unlimited Tax Bonds."

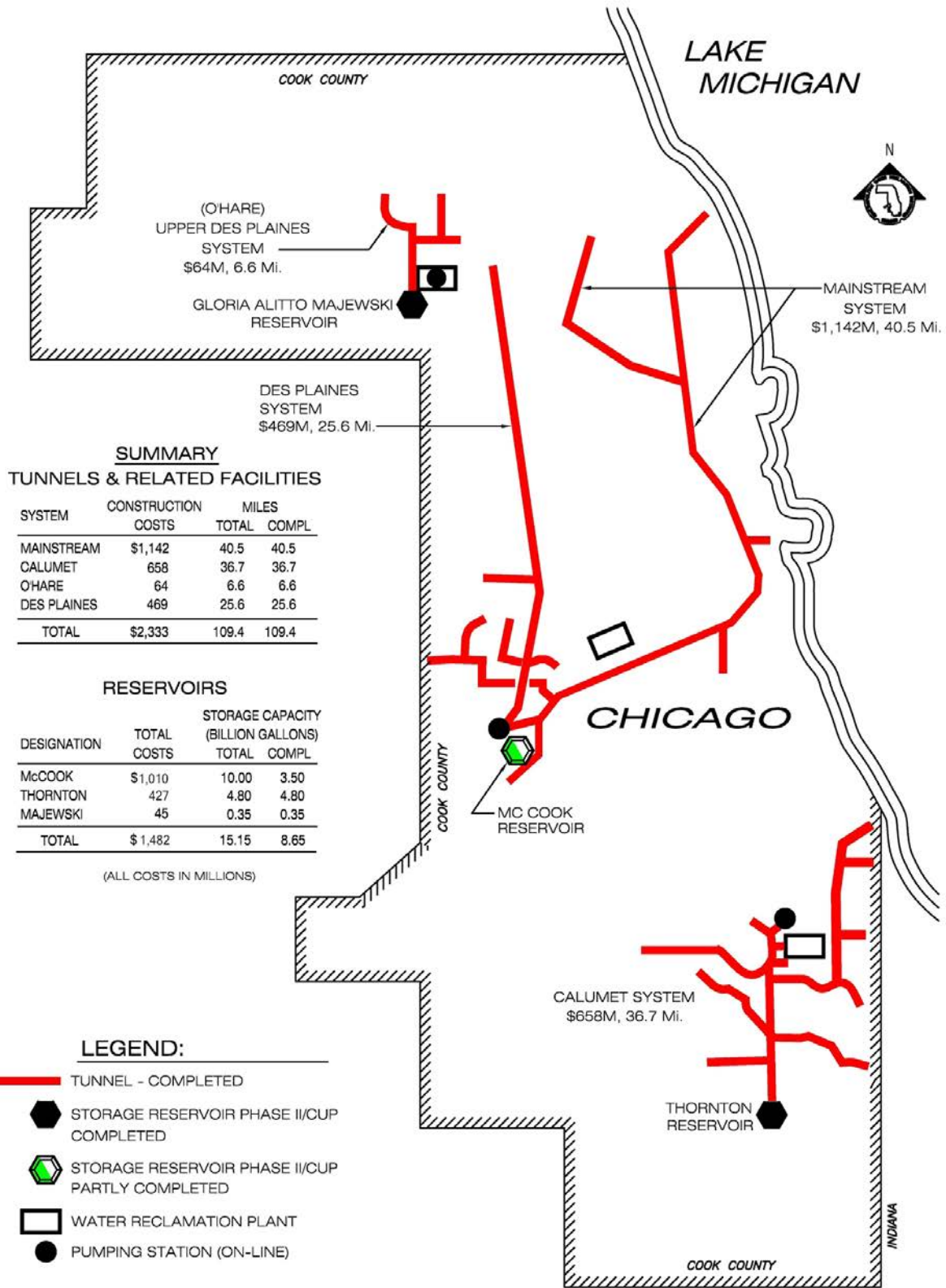
TARP PHASE II PROJECT COSTS

Phase I of TARP was completed in 2006 and two of the Phase II reservoirs, Majewski and Thornton, are now fully operational. Stage 1 of the McCook Reservoir became operational in December 2017 and Stage 2 will continue to be mined with completion scheduled for 2029. Though only partially complete, TARP has already been effective in reducing pollution and flooding. The Phase II Reservoir project costs are shown in the table below.

Project Name	Project Number	Design/Construction Status	Project Costs (4)	Funded by Army Corps of Engineers
Majewski Reservoir				
I - Army Corps of Engineers Contracts	73-315-2S	Construction completed in 1998	\$40,818,858	75%
II - Betterments (1)	93-339-2F	Construction completed in 1998	\$3,991,694	No
Thornton Reservoir				
I - Vincennes Avenue Relocation	77-235-AF	Construction completed in 2001	\$4,398,000	See Note (3)
II - Transitional Reservoir GW Monitoring Wells	77-235-CF	Construction completed in 2002	\$529,000	
III - Transitional Reservoir (2)	77-235-BF	Construction completed in 2003	\$54,707,000	
IV - Mining, Land, and Corps Costs	77-235-2F	Mining completed in 2013	\$65,210,000	
V - Tollway Dam and Grout Curtain	04-201-4F	Construction completed in 2015	\$80,750,000	
VI - TARP Inlet/Outlet Tunnels and Gates	04-202-4F	Construction completed in 2015	\$147,000,000	
VII - Final Reservoir Preparation	04-203-4F	Construction completed in 2015	\$63,479,000	
VIII - Surface Aeration	04-203-AF	Construction completed in 2017	\$1,921,000	
IX - Odor Control Systems and Decommissioning TTR	15-266-44R	Construction to be completed in 2021	\$9,069,000	
McCook Reservoir				
I - Stages 1 and 2 - Army Corps of Engineers Contracts	73-161-2H	Reservoir constructed under several contracts	\$618,391,000	75%
II - Site Preparation, Lagoons 1-10	73-161-BH	Construction completed in 2000	\$889,000	\$307,000 Credited
III - 73rd Street Tunnel Relocation	97-156-2H	Construction completed in 2002	\$15,132,000	Credited
IV - Willow Springs Berm	96-249-2P	Construction completed in 2002	\$3,593,000	No
V - Vulcan Primary Crusher Furnish and Deliver	PO3030920	Crusher purchased in 2005	\$1,626,000	No
VI - Conveyance Tunnel	73-161-AH	Construction completed in 2006	\$5,428,000	No
VII - Vulcan Mining Trucks and Loaders	73-161-HH	Vehicles delivered in 2007	\$11,105,000	No
VIII - Vulcan Miscellaneous Mining Vehicles	73-161-GH	Vehicles delivered in 2007 and 2008	\$4,989,000	No
IX - Conveyance System and Maintenance Facilities	73-161-FH	Construction completed in 2008	\$32,381,000	\$1.84M Credited
X - LASMA Overburden Removal	73-161-CH	Construction completed in 2010	\$66,316,000	No
XI - Vulcan Rock Mining Hard Costs Less Royalty	73-161-EH	Mining underway	\$61,695,000	No
XII - Stage 2 Miscellaneous Overburden Removal	73-161-JH	Construction completed in 2012	\$6,510,000	No
XIII - Expanded Stage 2 Overburden Removal	73-161-DH	Construction completed in 2016	\$18,743,000	No
XIV - Des Plaines Inflow Tunnel	13-106-4F	Construction underway in 2016	\$112,237,000	No
XV - Expanded Stage 2 Slope Stabilization	16-125-4F	Completed	\$8,765,000	No
XVI - McCook Reservoir Stage 2 Rock Wall Stabilization and Instrumentation	17-131-4F	Under construction	\$17,300,000	53%
XVII - McCook Reservoir Stage 2 Final Reservoir Prep	17-132-4F	Future	\$24,800,000	69%
Total Project Cost			\$1,481,773,552	

Notes:

- (1) Betterment includes a control building, reservoir outflow control gates, and monitoring system.
- (2) Cost shown is total cost of Transitional Reservoir. Facilities that will be re-used for the Thornton Composite Reservoir account for \$30,337,000 of the cost.
- (3) The District designed and constructed the Thornton Composite Reservoir in anticipation of receiving reimbursement or credits from the Army Corps of Engineers.
- (4) Includes land, engineering, and construction costs.



TUNNEL and RESERVOIR PLAN PROJECT STATUS

CAPITAL PROJECTS LISTED BY SERVICE AREA - CAPITAL IMPROVEMENTS BOND FUND

The following is a list of capital projects within the District’s three major service areas. They are presented by their association with a water reclamation plant (WRP) and by their completion status: projects under construction, for 2021 award, or under development.

Bold type indicates projects to be financed by "Unlimited Tax Bonds."

**STICKNEY
SERVICE
AREA (SSA)**



Stickney Water Reclamation Plant (SWRP)

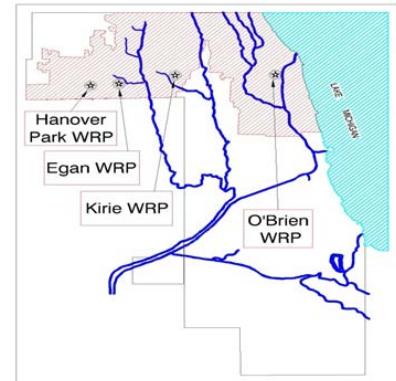
		Estimated Substantial Completion Date	Estimated Construction Cost
Projects for 2021 Award			
08-174-3D	Battery A Final Settling Tanks, Rehabilitation of Concrete and Road Replacement, SWRP		\$ 7,700,000
11-187-3F	^* Addison Creek Channel Improvements, SWRP		21,350,000
14-107-3S	Stickney Effluent Reuse Line, SSA		800,000
16-127-3D	A/B and C/D Service Tunnel Rehabilitation - Phase III, SWRP		17,000,000
17-131-4F	McCook Reservoir Stage 2 Rock Wall Stabilization and Instrumentation, SWRP		17,268,000
17-135-3V	Roof Replacement of the Lue-Hing M&R Complex, SWRP		6,500,000
19-155-3M	Boilers 3, 4, 5 and MCC Replacement, SWRP		13,000,000
19-159-3P	Chemical Addition Backup System, SWRP		8,000,000
20-160-4H	TARP Mainstream Drop Shaft DS-M73E at Armitage Avenue, SSA		9,600,000
20-861-3E	Replacement of Telemetry, Various Locations		1,300,000
20-903-31	Furnish, Deliver, and Install Coarse Screens, SWRP		6,000,000
21-603-31	Sludge Pumping Improvements, Various Locations		4,000,000
		Total	\$ 112,518,000
Projects Under Construction			
11-186-3F	^ Addison Creek Reservoir, SSA	05/22	\$ 75,721,831
13-106-4F	McCook Reservoir Des Plaines Inflow Tunnel, SSA	10/21	107,868,400
13-199-3F	^ Lyons Levee Flood Control Improvements, SSA	11/21	2,358,335
14-263-3F	^ Melvina Ditch Reservoir Improvements, SSA	07/21	15,648,348
15-830-3D	Replacement of Tailrace Stop Logs, Headrace Gates, and Equipment at Lockport Powerhouse, SSA	06/22	12,153,854
16-901-31	Furnish, Deliver, and Install Boiler Controls, SWRP	12/21	1,327,290
17-134-3MR	Odor Control Facilities at Sludge Concentration, Southwest Coarse Screen, Overhead Weir, and Post-Centrifuge Building, SWRP	08/21	16,512,153
17-140-3P	Digester Rehabilitation and Gas Piping Replacement, SWRP	01/22	13,662,645

Projects Under Construction (Continued)		Estimated Substantial Completion Date	Estimated Construction Cost
17-902-31	Installation of Shaftless Screw Conveyors for Aerated Grit Tanks, SWRP	01/21	\$ 2,595,000
18-142-3H	Six Access Shafts Infiltration Mitigation, MSPS	11/21	2,269,000
18-144-3M	Rehabilitation of TARP Pumps, MSPS	12/24	20,509,000
19-157-3P	Installation of Mechanical Mixers, SWRP	02/22	12,400,000
73-161-2H	McCook Reservoir Stages 1 & 2, SSA	09/21	134,702,348
Total			\$ 417,728,204

Projects Under Development

01-103-AS	39th Street Conduit Rehabilitation - Phase II, SSA		\$ 24,700,000
16-128-3D	Battery B Final Settling Tanks, Rehabilitation of Concrete, SWRP		5,000,000
16-129-3D	Battery C Final Settling Tanks, Rehabilitation of Concrete, SWRP		3,000,000
16-130-3D	Battery D Final Settling Tanks, Rehabilitation of Concrete, SWRP		3,000,000
17-132-4F	McCook Reservoir Stage 2 Final Reservoir Prep, SSA		24,796,187
18-143-3D	Rehabilitation of Locomotive Terminal Building, SWRP		2,750,000
18-148-3P	Digester Rehabilitation and Gas Piping Replacement Phase II, SWRP		11,500,000
19-154-3E	Low Voltage Switchgear Replacement, MSPS		9,000,000
19-156-3E	Low Voltage Pump & Blower Switchgear and Aerated Grit MCC Replacement, SWRP		6,750,000
19-855-3E	Lockport Powerhouse and Waterways Control System Replacement, SSA		3,000,000
19-856-3E	TARP Control System Replacement, SSA, CSA, NSA		25,000,000
20-161-3S	Salt Creek 3 Intercepting Sewer Rehabilitation, SSA		7,250,000
20-162-3S	West Side Intercepting Sewer No. 2 Rehabilitation, SSA		2,000,000
20-163-3D	Aeration Battery B Rehabilitation of Concrete, SWRP		25,000,000
20-164-3D	Aeration Battery A Rehabilitation of Concrete, SWRP		25,000,000
21-601-31	Lockport Turbine Generator Rehabilitation, SSA		1,600,000
21-901-31	Rehabilitation of the Overhead Bridge Crane in the Discharge Valve Chamber, MSPS		1,100,000
Total			\$ 180,446,187
Stickney Service Area Grand Total			\$ 710,692,391

**NORTH
SERVICE
AREA (NSA)**



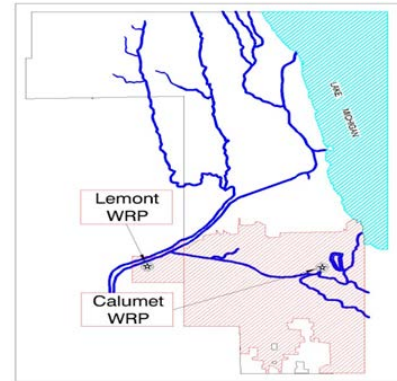
**Terrence J. O'Brien Water Reclamation Plant (OWRP)
John E. Egan Water Reclamation Plant (EWRP)
James C. Kirie Water Reclamation Plant (KWRP)
Hanover Park Water Reclamation Plant (HPWRP)**

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects for 2021 Award			
06-360-3S	Upper Des Plaines Intercepting Sewer 14B Rehabilitation, NSA		\$ 13,053,000
10-047-3S	North Shore 1 Rehabilitation, NSA		22,750,000
15-069-3D	Rehabilitation of Steel Spandrel Beams of Pump and Blower House, OWRP		10,000,000
17-843-3D	Utility Tunnel Cracks and Expansion Joints Rehabilitation, OWRP, KWRP, EWRP, HPWRP		4,100,000
18-702-31	Furnish, Deliver, and Install Disc Filters, EWRP		6,700,000
18-703-31	Furnish, Deliver, and Install Three Bar Screens, KWRP		2,000,000
20-415-3S	Biogas Combined Heat and Power System, EWRP		2,000,000
20-701-31	Furnish, Deliver, and Install Disc Filters and Other Improvements, HPWRP		3,600,000
20-858-3D	Rehabilitation of North Branch Pumping Station & Other Miscellaneous Work, NSA, SSA		5,700,000
Total			\$ 69,903,000
Projects Under Construction			
07-027-3S	North Side Sludge Pipeline Replacement - Section 1, NSA	06/23	\$ 16,365,000
16-079-3D	Rehabilitation of North Branch Pumping Station, NSA	01/21	5,426,812
16-IGA-22	North Branch Dam Removal and River Riparian Connectivity, NSA	08/22	2,500,000
17-844-3P	Furnish and Install Odor Control System, CWRP, HPWRP, and KWRP	01/21	4,198,173
18-IGA-36	Phosphorus Removal Liquid Facilities at the Fox River Water Reclamation District	08/21	7,147,589
19-542-3M	Central Boiler Facility and Electrical Updates, HPWRP	09/22	14,000,000
Total			\$ 49,637,574
Projects Under Development			
06-358-3M	Gate Control Equipment Upgrade at TARP Control Structures, KWRP, NSA		\$ 2,200,000
11-404-3S	Upper Des Plaines Intercepting Sewer 11D, Ext. C Rehabilitation, NSA		5,500,000
12-369-3S	Upper Des Plaines Intercepting Sewer 11D Rehabilitation, NSA		5,500,000
18-540-3P	Plant Improvements, HPWRP		20,000,000
19-083-3P	Upgrade Wilmette Lift Station, NSA		1,500,000
19-084-3P	FST Effluent Conduit Rehab & UV Facility Upgrades, OWRP		2,000,000

**Terrence J. O'Brien Water Reclamation Plant (OWRP)
 John E. Egan Water Reclamation Plant (EWRP)
 James C. Kirie Water Reclamation Plant (KWRP)
 Hanover Park Water Reclamation Plant (HPWRP)**

Projects Under Development (Continued)		Estimated Substantial Completion Date	Estimated Construction Cost
19-375-3P	Phosphorus Removal, KWRP		6,500,000
19-415-3P	Phosphorus Removal, EWRP		\$ 30,000,000
19-541-3P	Digester Rehabilitation, HPWRP		6,000,000
19-543-3E	MCC Replacement at Upper DuPage Reservoir, NSA		250,000
20-085-3P	Fermentation and Ancillary Facilities for Biological Phosphorous Removal Phase I, OWRP		30,000,000
20-086-3P	Fermentation and Ancillary Facilities for Biological Phosphorous Removal Phase II, OWRP		30,000,000
20-087-3P	Chemical Phosphorus Removal, OWRP		14,000,000
21-701-31	Furnish Deliver and Install Elevator Upgrades, NSA		3,450,000
		Total	\$ 156,900,000
		North Service Area Grand Total	\$ 276,440,574

**CALUMET
SERVICE
AREA (CSA)**



Calumet Water Reclamation Plant (CWRP)

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects for 2021 Award			
15-266-4H3	Odor Control Systems at Two TARP Shafts and Decommissioning the Thornton Transitional Reservoir, CSA, Rebid		\$ 20,000,000
20-801-31	Furnish, Deliver and Install Replacement Gearboxes for SEPA(s) 2, 3, 4, & 5, CSA		1,600,000
20-859-3S	Pumping Station Relief Sewers and Collection System Work, Various Locations		7,500,000
	Total		\$ 29,100,000
Projects Under Construction			
15-IGA-14	^{^*} Construction of a Levee along Thorn Creek at Arquilla Park in Glenwood, CSA	09/22	\$ 3,483,000
18-248-3P	Sidestream Enhanced Biological Phosphorus Removal Pilot Study, CWRP	02/21	1,859,000
18-277-3M	Digester Sludge Heating System Upgrades and Boiler Removal, CWRP	12/22	25,567,643
18-803-32	Rehabilitation of Gravity Concentration Tank, CWRP	12/21	2,295,800
77-235-2F	Thornton Composite Reservoir Mining, Land, and Corp Costs, CSA	12/21	52,805,539
	Total		\$ 86,010,982
Projects Under Development			
12-245-3P	Fermentation and Ancillary Facilities for Biological Phosphorus Removal, CWRP		\$ 31,000,000
18-253-3P	Digester Rehabilitation and Gas Piping Replacement, CWRP		15,000,000
18-254-3P	Chemical Phosphorus Removal Facility, CWRP		14,000,000
19-255-3D	Rehabilitation of Pump and Blower House, CWRP		4,000,000
19-256-3P	Digester Rehabilitation and Gas Piping Replacement Phase II, CWRP		10,000,000
19-257-3D	6th Street Construction and Utility Tunnel Rehabilitation and Various Roof Replacements, CWRP		3,100,000
19-258-3E	Switchgear and MCC Replacement, CWRP		23,000,000
19-717-3P	Additional Grit Removal Tank, Chemical Phosphorus Removal Facility, and Construction of New Plant Entrance, LWRP		6,000,000
	Total		\$ 106,100,000
	Calumet Service Area Grand Total		\$ 221,210,982
	Capital Projects Grand Total - All Service Areas		\$ 1,208,343,947

[^] These projects are part of the Stormwater Management Program. Detailed information about this fund and these project fact sheets appear in Section VI of this budget document.

^{*} These projects are funded by the Capital Improvements Bond Fund and the Stormwater Management Fund.

McCook Reservoir Stages 1 & 2, SSA

Project Number	73-161-2H
Service Area	Stickney
Location	Lawndale Avenue Solids Management Area
Engineering Consultant	Army Corps of Engineers
Engineering Contractor	Army Corps of Engineers
Estimated Construction Cost	\$134,702,348
Contract Award Date	May 1999
Substantial Completion Date	September 2021



Project Description The Army Corps of Engineers is responsible for designing and constructing the reservoir features for this project. This work includes groundwater protection, soil and rock wall stabilization, aeration, connecting tunnels, associated gates, valves, shafts and controls, and other miscellaneous features.

The McCook Reservoir will provide 10 billion gallons of storage for combined sewer overflows located at the Lawndale Avenue Solids Management Area facility and will be built in two stages. As the local sponsor, the District will pay 25 percent of the total cost.

Project Justification The McCook Reservoir project is an essential part of the District's Tunnel and Reservoir Plan to prevent flooding and pollution from combined sewer overflows. The McCook Reservoir will provide \$143 million per year in benefits to 3.1 million people in 37 communities.

Project Status Construction

Thornton Composite Reservoir Mining, Land, and Corp Costs, CSA

Project Number 77-235-2F

Service Area Calumet

Location Thornton TARP

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$52,805,539

Contract Award Date June 1998

Substantial Completion Date December 2021



Project Description An agreement was entered into between the District and Material Service Corporation for the mining required for the Thornton Composite Reservoir. The terms of the agreement provide for reimbursement of the costs associated with acquisition of the north lobe of the Thornton Quarry and costs associated with the mining operation and use of the west lobe for the transitional reservoir.

Project Justification This project allows for the use of the Thornton Composite Reservoir to capture combined sewer overflows and for the Thornton Transitional Reservoir to capture flood waters from Thorn Creek.

Project Status Construction

Upper Des Plaines Intercepting Sewer 14B Rehabilitation, NSA

Project Number 06-360-3S

Service Area North

Location Wheeling, IL

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$13,053,000

Contract Award Date March 2021

Substantial Completion Date January 2022



Project Description This project consists of rehabilitating 2,902 feet of 48-inch diameter sewer and 11,902 feet of 69-inch diameter sewer by cured-in-place pipe lining and/or the slip lining method, rehabilitating 27 manholes/structures and the abandonment of one offset manhole.

Project Justification The sewers were inspected by the Maintenance & Operations Department with a closed-circuit television inspection system. The video inspection tapes show cracks (circular and longitudinal), sewage solids deposits, sags, offset joints, root intrusion, infiltration, and concrete erosion. Physical inspection of the manholes revealed cracks and holes in the walls and bases of the manholes and in one offset manhole, which is part of a control structure, and 85 feet of 3.5-foot by 4.5-foot pipe.

Project Status Design

North Side Sludge Pipeline Replacement - Section 1, NSA

Project Number 07-027-3S

Service Area North

Location Skokie, Lincolnwood, and Chicago, IL

Engineering Consultant In house design

Engineering Contractor To be determined

Estimated Construction Cost \$16,365,000

Contract Award Date December 2020

Substantial Completion Date June 2023



Project Description The purpose of this project is to replace Section 1 of the existing North Side Sludge Pipeline and rehabilitate 42 existing structures located in the Villages of Skokie and Lincolnwood and the City of Chicago.

Project Justification Due to external corrosion and damage caused by construction activities of others in the area, the pipeline developed numerous holes over the years resulting in sludge overflowing into the North Shore Channel. In order to increase the reliability of sludge conveyance, the pipeline needs to be rehabilitated and/or replaced. The structures were inspected by the Maintenance & Operations Department in January 2008 with a closed-circuit television inspection system and by physical inspection. The video inspection shows that the piping and valves inside the structures have corroded. Due to the importance of the North Side Sludge Pipeline, the piping and valves in the 42 structures will be removed and replaced. New automatic air release valves will be installed in the remaining existing structures to preserve the useful life of those structures.

Project Status Design

Battery A Final Settling Tanks, Rehabilitation of Concrete and Road Replacement, SWRP

Project Number 08-174-3D

Service Area Stickney

Location Stickney WRP

Engineering Consultant In house design

Engineering Contractor To be determined

Estimated Construction Cost \$7,700,000

Contract Award Date March 2021

Substantial Completion Date February 2022



Project Description This project consists of concrete rehabilitation of Battery A final settling tanks at the Stickney WRP and rehabilitation of a deteriorated and leaking roof deck and deteriorated concrete beams in the coarse screen room of the Racine Avenue Pumping Station. This project will add steel railing and safety davit sleeves at final settling tanks and a permanent safety barrier along the mixed liquor channel.

Project Justification The 80-year old concrete in Battery A final settling tanks is severely deteriorated in some locations. Concrete spalls and debris are falling into the tanks. Rehabilitation of deteriorated concrete will prolong the useful life of the tanks. The addition of railing around final settling tanks and a permanent safety barrier along the mixed liquor channel will safeguard against employees, contractors and/or visitors falling into the tanks and channels. The addition of safety davit sleeves around final settling tanks will allow for the installation of a portable davit hoist making any necessary emergency retrieval of injured person(s) from tanks safer and quicker. Rehabilitation of the deteriorated and leaking roof deck and deteriorated concrete beams at Racine Avenue Pumping Station will restore strength of the beams and deck and prolong the building's useful life.

Project Status Design

North Shore 1 Rehabilitation, NSA

Project Number	10-047-3S
Service Area	North
Location	Kenilworth, Winnetka, and Wilmette, IL
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$22,750,000
Contract Award Date	October 2021
Substantial Completion Date	May 2024



Project Description This project will rehabilitate a 10,110-foot long, six-foot by nine-foot sewer, a 4,257-foot long, six-foot by eight-foot sewer, and 22 manhole structures in Kenilworth, Winnetka and Wilmette. The project will construct three manholes and modify DS-M105E in Evanston.

Project Justification The sewers were inspected by the Maintenance & Operations Department with a closed-circuit television inspection system. The video shows infiltration and concrete/metal deterioration due to hydrogen sulfide. In order to restore the hydraulic and structural integrity of the sewers, they need to be rehabilitated. The manholes and structures exhibit similar signs of deterioration and need to be rehabilitated. Construction of new manholes along the Evanston Intercepting Sewer is necessary to provide access to the sewer at pipe bends and longer segments. Modifications to DS-M105E will disconnect a City of Evanston storm sewer from the combined sewer system. The storm sewer will be reconnected to an outfall to discharge stormwater to the nearest waterway.

Project Status Design

McCook Reservoir Des Plaines Inflow Tunnel, SSA

Project Number	13-106-4F
Service Area	Stickney
Location	Lawndale Avenue Solids Management Area
Engineering Consultant	Black & Veatch Corporation
Engineering Contractor	Walsh Construction Company II, LLC
Estimated Construction Cost	\$107,868,400
Contract Award Date	June 2016
Substantial Completion Date	October 2021



Project Description This project consists of the construction of an approximately 20-foot diameter tunnel that will connect the Des Plaines tunnel directly to the McCook Reservoir and includes a gate shaft, primary gate, backup gate, gate control building, temporary construction access shaft, tunnel portal and highwall stability measures, and an energy dissipation apron with baffle blocks. The project also includes the demolition of an existing concrete tunnel plug, making a live connection to the existing Des Plaines Tunnel System and future McCook Reservoir, installation of reservoir level and tunnel inflow instrumentation, installation of duct banks, conduits, wiring, lighting, and electrical equipment, installation of permanent perimeter fencing, and performance of other work.

Project Justification The McCook Reservoir project is an essential part of the District's Tunnel and Reservoir Plan to prevent flooding and pollution from combined sewer overflows. The tunnel is required to provide adequate conveyance of combined sewer overflows from the Des Plaines tunnel to the reservoir. The tunnel will improve upon the conveyance plan formulated by the Army Corps of Engineers, which includes undesirable flow restrictions.

Project Status Construction

Stickney Effluent Reuse Line, SSA

Project Number	14-107-3S
Service Area	Stickney
Location	Stickney, IL
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$800,000
Contract Award Date	May 2021
Substantial Completion Date	November 2021



Project Description This project consists of the installation of 2,000 linear feet of six-inch diameter pressure pipe by directional drilling and the installation of air relief, blow off, and clean-out structures.

This project will be used to design a force main between the Stickney WRP and Koppers Inc., a distiller of coal tar. The force main will deliver effluent water from the Stickney WRP to the Koppers plant. The District will receive payment for effluent water delivered to the Koppers plant to be used in their industrial processes as gray water. The rate will be determined.

Project Justification This project will represent the first of the effluent reuse opportunities and demonstrate the feasibility and benefits of water reuse in the immediate vicinity of the Stickney WRP. The construction of the effluent line will result in an increase to the labor operating budget.

Project Status Design

Rehabilitation of Steel Spandrel Beams of Pump and Blower House, OWRP

Project Number	15-069-3D
Service Area	North
Location	O'Brien WRP
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$10,000,000
Contract Award Date	May 2021
Substantial Completion Date	October 2023



Project Description This project consists of rehabilitating the pump and blower house building roof and facade components at the O'Brien WRP. Besides protecting, rehabilitating, and structurally strengthening steel frame beams and columns embedded in the masonry wall, the scope of work includes localized roof deck rehabilitation including roof slope remediation, full roofing membrane and insulation replacement, full masonry and flashing rehabilitation at roof parapet walls, localized windows and exterior doors rehabilitation, localized tuck-pointing, and other miscellaneous rehabilitation associated or incidental to the facade/roof rehabilitation project. The District's Structural Architectural Section will be working with RME, Inc., a Chicago-based consulting company. District staff will manage the rehabilitation design process, review and approve all submitted rehabilitation documents, administer the contract, and oversee the construction. In addition, the District will manage the contract budget and payments. The project goal is to rehabilitate the pump and blower house roof and facade and extend the building life span for another 50 to 90 years.

Project Justification The pump and blower house building has not undergone major structural rehabilitation since it was built in 1926. During its 90 years of service, the building experienced maintenance repairs (re-roofing, window repair, and tuck-pointing). During south parapet wall repair in 2013, it was observed that several steel spandrel beams that frame the upper roof and support the pump and blower house south parapet wall were severely corroded. The roof steel beams that are part of the building vertical (gravity) and lateral (wind/seismic) loads resisting system appeared compromised. Additionally, corrosion of the steel can result in severe deterioration of the masonry, water infiltration, and a potential for bulging and failing masonry. The parapet wall distress, which collapsed in May 2013 during the repair, was directly related to the severely corroded steel beams supporting the wall.

Project Status Design

Odor Control Systems at Two TARP Shafts and Decommissioning the Thornton Transitional Reservoir, CSA, Rebid

Project Number	15-266-4H3
Service Area	Calumet
Location	Thornton, IL
Engineering Consultant	Black & Veatch Corporation
Engineering Contractor	To be determined
Estimated Construction Cost	\$20,000,000
Contract Award Date	March 2021
Substantial Completion Date	March 2023



Project Description Work associated with decommissioning of the Thornton Transitional Reservoir includes excavation of existing rock plug in Thorn Creek Connection Tunnel, installation of east and west tunnel plugs in Thorn Creek Diversion Tunnel, placement of mass concrete fill between east tunnel plug and connection tunnel, installation of lining and contact grouting in portions of the connection tunnel and diversion tunnel, removal of concrete beams, rock support and rock in the vicinity of the existing Thornton Transitional Reservoir Portal, removal of sediment in the Thornton Transitional Reservoir, installation of reservoir level measurement equipment, decommissioning the Thornton Transitional Reservoir Dewatering Valve Chamber, construction shaft concrete rehabilitation (adjacent to the valve shaft chamber), installation of aggregate pathways at four monitoring wells, rehabilitation of rockfall netting at the Thornton Composite Reservoir north highwall access ramp, installation of carbon filter odor control systems for the construction and gate shafts and any appurtenant work associated with the items listed above.

Project Justification The District entered into an agreement with Hansen Material Service to extend the lease for use of the Thornton Transitional Reservoir, and the west lobe of the Thornton Quarry, through 2020. This allows the District to utilize the Thornton Transitional Reservoir for holding overbank floodwaters from Thorn Creek while learning to operate the Thornton Composite Reservoir during its initial years. This project finalizes the connection of the Thorn Creek Overflow Structure to the Thornton Composite Reservoir.

Project Status Negotiation / Evaluation

Replacement of Tailrace Stop Logs, Headrace Gates, and Equipment at Lockport Powerhouse, SSA

Project Number	15-830-3D
Service Area	Stickney
Location	Lockport Powerhouse
Engineering Consultant	In-house design
Engineering Contractor	IHC Construction Companies, LLC
Estimated Construction Cost	\$12,153,854
Contract Award Date	June 2019
Substantial Completion Date	June 2022



Project Description This project will design, fabricate, and install tailrace stop logs for Bays 1 and 2. It will also replace headrace gates, tailrace stop logs, and associated hoist systems.

Project Justification Headrace gates in Bays 1 and 2 are not properly functioning. The tailrace stop logs are rusted and are not functional. The tailrace hoist system is not operational. Consequently, the chambers of Bays 1 and 2 cannot be drained, and turbines cannot be inspected and maintained. These issues have delayed maintenance for several years. Ideally, turbines and other accessories require annual inspection and maintenance to prolong their life span.

Project Status Construction

Rehabilitation of North Branch Pumping Station, NSA

Project Number	16-079-3D
Service Area	North
Location	North Branch Pumping Station
Engineering Consultant	In-house design
Engineering Contractor	Path Construction Company Inc.
Estimated Construction Cost	\$5,426,812
Contract Award Date	August 2018
Substantial Completion Date	January 2021



Project Description Provide grouted fiberglass fiber reinforced plastic jackets around the existing concrete columns to protect columns from erosion. Rehabilitate underwater deteriorated concrete of the east wall and under the deck wall. Rehabilitate deteriorated concrete stairs and concrete deck. Restore balustrade and deck lighting.

Project Justification This pumping station has five 300 cubic feet per second discharge pumps that discharge excess storm water into the river. The pipe outlets are a few feet below river water facing downward. The high velocity discharged water has caused severe erosion around the columns generally at the river bottom. As a result, concrete column cross sections have eroded more than 20 percent and, in some cases, up to 50 percent of the original size. Restoration of concrete columns is essential for the safe serviceability of the building. Also, concrete deck and stairs have spalled areas that need to be rehabilitated.

Project Status Construction

A/B and C/D Service Tunnel Rehabilitation - Phase III, SWRP

Project Number 16-127-3D

Service Area Stickney

Location Stickney WRP

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$17,000,000

Contract Award Date March 2021

Substantial Completion Date January 2024



Project Description This project will rehabilitate approximately 1,000 feet of the A/B Service Tunnel north of column line 31 and approximately 1,000 feet of the C/D Service Tunnel north of column line 37. This project continues the scope of work from contracts 04-131-2D and 04-132-3D.

Project Justification Significant structural deterioration has occurred since the tunnels were constructed approximately 80 years ago. Rehabilitating the tunnels will restore capacity, extend their service life, and prevent further damage to the utilities inside the tunnels.

Project Status Design

Furnish, Deliver, and Install Boiler Controls, SWRP

Project Number 16-901-31

Service Area Stickney

Location Stickney WRP

Engineering Consultant In-house design

Engineering Contractor M.G. Electric Service, Inc.

Estimated Construction Cost \$1,327,290

Contract Award Date September 2017

Substantial Completion Date December 2021



Project Description The project will furnish, deliver, and install controls, programming, and other required appurtenances to provide a co-fire implementation of Boilers 3, 4, 5, and 7 using natural gas and digester gas through existing gas trains. Use of co-fire logic and technology shall enable full utilization of available digester gas produced at the plant. Controls for Boilers 1 and 2 will also be upgraded.

Project Justification The existing control system is obsolete and parts are no longer available from the manufacturer.

Project Status Construction

North Branch Dam Removal and River Riparian Connectivity, NSA

Project Number	16-IGA-22
Service Area	North
Location	North Branch Chicago River
Engineering Consultant	Army Corps of Engineers
Engineering Contractor	Industria, Inc.
Estimated Construction Cost	\$2,500,000
Contract Award Date	September 2017
Substantial Completion Date	August 2022



Project Description Riparian connectivity for the North Branch Chicago River will be restored by removing the North Branch Dam and providing a riffled stream bed to allow for passage by fishes, mussels, and canoes. The concrete dam and the concrete stream bed to Albany Avenue will be removed, and concrete will be used to fill the scour hole downstream of the dam. The stream bed will be filled in with more natural materials, and riffles and pools will be constructed with boulders. The project also calls for bank stabilization and habitat restoration from Lawrence Avenue to Peterson Avenue. The Army Corps of Engineers (ACE) will design and construct the project with participation from the District and the Chicago Park District. The total project cost is expected to be \$14,539,000.

Project Justification Removal of the North Branch Dam will allow for a more natural stream environment and encourage aquatic movement and habitat. Streambank stabilization on District property leased by the Chicago Park District will improve usage opportunities at the parks and promote safety.

Project Status Construction

McCook Reservoir Stage 2 Rock Wall Stabilization and Instrumentation, SWRP

Project Number 17-131-4F

Service Area Stickney

Location McCook Reservoir

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$17,268,000

Contract Award Date April 2021

Substantial Completion Date August 2024



Project Description The scope of work consists of stabilizing the near-vertical excavated walls of the reservoir through the installation of rock bolts, rock dowels, cable bolts, chain link wire mesh, and shotcrete at locations where deemed necessary. Work will also include the installation of instrumentation and monitoring devices and related equipment.

Project Justification Preservation and stability of the Stage 2 McCook Reservoir.

Project Status Design

Odor Control Facilities at Sludge Concentration, Southwest Coarse Screen, Overhead Weir, and Post-Centrifuge Building, SWRP

Project Number	17-134-3MR
Service Area	Stickney
Location	Stickney WRP
Engineering Consultant	In-house design
Engineering Contractor	IHC Construction Companies, LLC
Estimated Construction Cost	\$16,512,153
Contract Award Date	September 2019
Substantial Completion Date	August 2021



Project Description Three biofilter facilities will be constructed (one for sludge concentration and overhead weir, one for the southwest coarse screen, and one for the post-centrifuge building). The facilities will include new biofilters, heating, ventilation and air conditioning equipment, ductwork and other ancillary equipment.

Project Justification An odor control system was evaluated for the anticipated Waste Activated Sludge Stripping to Remove Internal Phosphorus (WASSTRIP®) process, existing sludge holding tanks, overhead weir, sludge screens, and coarse screens located at the Stickney WRP. Currently, odorous air from the sludge holding tanks, overhead weir, and sludge screens is collected but not effectively treated by an ozone odor control system. Odorous air from the coarse screens and adjacent dumpster rooms is collected but not effectively treated by a carbon adsorption system. The WASSTRIP® process is forthcoming but will use existing tanks near the sludge holding tanks. Addressing these odorous sources will help the surrounding community and improve working conditions for plant staff.

Project Status Construction

Roof Replacement of the Lue-Hing M&R Complex, SWRP

Project Number 17-135-3V

Service Area Stickney

Location Stickney WRP

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$6,500,000

Contract Award Date May 2021

Substantial Completion Date September 2022



Project Description This project will replace roof areas 1, 2, 3, 5, and 6 of the Monitoring and Research (M&R) Department's laboratory at the Stickney WRP. Scope includes a complete tear off of the existing roof membrane in the specified areas, replacement of the rooftop equipment that has exceeded its useful life, removal of obsolete rooftop equipment, and additional work associated with the M&R Department's east addition at the Stickney WRP.

Project Justification The roof has reached the end of its useful life and needs to be replaced as well as the removal of old, disconnected, and no longer used equipment for safety considerations.

Project Status Design

Digester Rehabilitation and Gas Piping Replacement, SWRP

Project Number	17-140-3P
Service Area	Stickney
Location	Stickney WRP
Engineering Consultant	In-house design
Engineering Contractor	IHC Construction Companies, LLC
Estimated Construction Cost	\$13,662,645
Contract Award Date	November 2019
Substantial Completion Date	January 2022



Project Description	The work will remove all inorganic heavy solids which have accumulated and are not removable through the sludge draw-off system. The work will include rehabilitation of the digester covers and tank walls. Digester gas piping will be rehabilitated or replaced as required and the mixing system components will be rehabilitated to a working condition in Digesters 1 through 12. Also, the digester gas waste gas burners will be rehabilitated.
Project Justification	Anaerobic digesters accumulate dense inorganic solids through the years of operation which reduces the usable volume of the digester and requires periodic draining and cleaning. Recent work by the Maintenance & Operations Department uncovered extensive fouling of the existing digester gas piping. Remediation is required to ensure the proper conveyance of the additional digester gas expended from the conversion of the Imhoff Tanks to primary settling tanks.
Project Status	Construction

Utility Tunnel Cracks and Expansion Joints Rehabilitation, OWRP, KWRP, EWRP, HPWRP

Project Number	17-843-3D
Service Area	North
Location	O'Brien, Kirie, Egan, and Hanover Park WRPs
Engineering Consultant	In House Design
Engineering Contractor	To be determined
Estimated Construction Cost	\$4,100,000
Contract Award Date	July 2021
Substantial Completion Date	May 2023



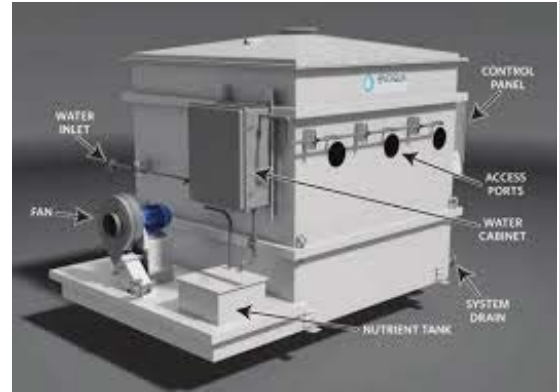
Project Description This project consists of rehabilitating leaking cracks and deteriorated expansion joints inside utility and service tunnels at O'Brien, Kirie, Egan, and Hanover Park WRPs.

Project Justification The service tunnels and operating galleries at the North Service Area WRPs (O'Brien, Kirie, Egan, and Hanover Park WRPs) are of varying ages ranging from approximately 50 to 90 years old. Many of these tunnels were built as a part of the original plant construction. Over time, several of the tunnel expansion joints have deteriorated and leaking cracks have developed in the tunnel walls and slabs. The tunnels/galleries and associated utilities are essential to each plant's functionality and need to remain operational indefinitely. Rehabilitating the deteriorated expansion joints and leaking cracks will extend their useful life and prevent further damage to the utilities inside the tunnels.

Project Status Design

Furnish and Install Odor Control System, CWRP, HPWRP, and KWRP

Project Number	17-844-3P
Service Area	Calumet and North
Location	Calumet, Hanover Park, and Kirie WRPs
Engineering Consultant	In-house design
Engineering Contractor	IHC Construction Companies, LLC
Estimated Construction Cost	\$4,198,173
Contract Award Date	February 2019
Substantial Completion Date	January 2021



Project Description The work at the Calumet WRP will replace the odor control unit at the high level influent pump station to effectively treat the exhaust from the junction chamber. The existing unit could not effectively address the odor concentrations. The new odor control unit will reduce the labor required to change media by 80 hours per year and will reduce the cost of media by \$20,000 annually. The work at the Hanover Park WRP will install odor control units to treat the pretreatment building (including grit tanks), coarse screen exhaust, and gravity thickening belt exhaust. The work at the Kirie WRP will install an odor control unit to treat the north and south pump house exhaust.

Project Justification The purpose of this project is to install new odor control systems at various existing facilities within the Calumet, Hanover Park, and Kirie WRPs. These existing facilities have been emitting odorous air that has been negatively affecting District staff and neighboring communities, including an elementary school adjacent to the Hanover Park WRP. Currently, the odorous facilities either do not have an existing odor control system, or they have a system that is not effective. This project will reduce the odor emissions that affect the District's staff and neighbors and has the potential to reduce influent chlorination costs.

Project Status Construction

Installation of Shaftless Screw Conveyors for Aerated Grit Tanks, SWRP

Project Number	17-902-31
Service Area	Stickney
Location	Stickney WRP
Engineering Consultant	In-house design
Engineering Contractor	IHC Construction Companies, LLC
Estimated Construction Cost	\$2,595,000
Contract Award Date	December 2017
Substantial Completion Date	January 2021
Project Description	This project is to furnish, deliver, and install grit screw conveyors at the Stickney WRP.
Project Justification	The existing chain and flight collector system needs to be rebuilt every four to five years. The screw conveyor installed in the east end of Aerated Grit Tank #4 was initially converted in 1998 and replaced in 2008. The average annual maintenance cost for the chain and flight tanks since 1998 is \$30,530. By comparison, the average annual cost for the screw conveyor tank is estimated at \$22,800.
Project Status	Construction



Six Access Shafts Infiltration Mitigation, MSPS

Project Number 18-142-3H

Service Area Stickney

Location Mainstream Pumping Station

Engineering Consultant To be determined

Engineering Contractor To be determined

Estimated Construction Cost \$2,269,000

Contract Award Date December 2020

Substantial Completion Date November 2021



Project Description This project will rehabilitate six shafts at the Mainstream Pumping Station (the north elevator main and ventilation shafts, south elevator main and ventilation shafts, dewatering shaft, and discharge shaft) to address groundwater infiltration in the shafts.

Project Justification Groundwater infiltration currently enters the elevator shafts and causes damage to the elevator equipment necessitating costly rehabilitation and service shutdown.

Project Status Design

Rehabilitation of TARP Pumps, MSPS

Project Number 18-144-3M

Service Area Stickney

Location Mainstream Pumping Station

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$20,509,000

Contract Award Date November 2020

Substantial Completion Date December 2024



Project Description The purpose of this project is to completely overhaul TARP Pumps 1 and 3 in the South Pump House and Pump 5 in the North Pump House of the Mainstream Pumping Station, including the associated motors and discharge cone valves and actuators, in order to restore capacity and reliability. The complete overhaul of the pump and motor involves the furnishing and installing of new parts, refurbishing existing salvageable parts, replacing motor exciter panels, and upgrading pump control components.

Project Justification The overhaul will reduce the maintenance labor required, allow for better pump and motor monitoring, and improve reliability. Once the overhaul is complete, there will be a reduction in the electrical energy usage to power pumps, as the pump will operate more efficiently by being able to pump more fluid in less time. The overhaul will also extend the useful life of the pumps and motors, which have been in service since May 1985.

Project Status Design

Sidestream Enhanced Biological Phosphorus Removal Pilot Study, CWRP

Project Number	18-248-3P
Service Area	Calumet
Location	Calumet WRP
Engineering Consultant	In-house design
Engineering Contractor	Independent Mechanical Industries, Inc.
Estimated Construction Cost	\$1,859,000
Contract Award Date	January 2020
Substantial Completion Date	February 2021



Project Description The Calumet WRP has attempted to remove phosphorus through enhanced biological phosphorus removal (EBPR). Due to the influent sewage characteristics, this has proven to be impossible without the addition of carbon to assist the process or major infrastructure changes. Before initiating major infrastructure changes at a plant of Calumet WRP's size, the Phosphorus Task Force would like to attempt Sidestream EBPR (S2EBPR), which uses Return Activated Sludge (RAS) fermentation, to assist with EBPR at a pilot scale level. This will entail isolating two tanks in Battery A, redirecting roughly 20 percent of RAS from Battery A into these two channels, allowing this RAS to ferment, and then reintroducing the fermented RAS to the mixed liquor flow. Pumps and mixers will be installed for the pilot test, which is expected to last for approximately one year.

Project Justification Per the District's 2019 update to the 2015-2020 Strategic Business Plan: Goal 2 - Excellence, the District will potentially identify an approach to reduce the amount of external carbon needed for biological phosphorus (Bio-P) test with this S2EBPR pilot. If the pilot is successful, this Bio-P approach could be used, rather than chemical phosphorus removal, to meet the current National Pollutant Discharge Elimination System permit. Chemical phosphorus removal would require the addition of ferric or alum to remove phosphorus, increasing operating costs by added chemical and from sludge processing.

By removing phosphorus from the Calumet WRP's effluent, the District will reduce phosphorus discharged to the receiving stream and mitigate eutrophication in the Gulf of Mexico, thus improving the environment.

Project Status Construction

Digester Sludge Heating System Upgrades and Boiler Removal, CWRP

Project Number 18-277-3M

Service Area Calumet

Location Calumet WRP

Engineering Consultant In-house design

Engineering Contractor IHC

Estimated Construction Cost \$25,567,643

Contract Award Date December 2019

Substantial Completion Date December 2022



Project Description Removal of sludge heating boiler systems and installation of steam-to-hot water heat exchanger systems at the Digester Complex. Installation of steam and condensate piping with supports for the new system. Replacement of sludge heat exchangers (total of 12) in Clusters 1, 2 and 3. Re-purposing of old compressor building for electrical equipment. Cleaning of 11 digester tanks (Tank No. 7 does not require cleaning). Replacement of internal digester gas draw-off and gas mixing piping, sandblasting and coating underside of covers in all 12 digester tanks.

Project Justification This work will reduce the demands on the Maintenance & Operations Department's personnel by replacing inefficient and maintenance-intensive equipment.

Project Status Construction

Furnish, Deliver, and Install Disc Filters, EWRP

Project Number 18-702-31

Service Area North

Location Egan WRP

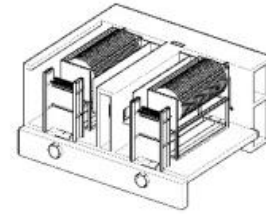
Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$6,700,000

Contract Award Date March 2021

Substantial Completion Date September 2021



Project Description This project will replace three pairs of tertiary filter beds with six disc filters.

Project Justification The designed maximum capacity of the secondary treatment is 60 million gallons per day (MGD). The maximum tertiary capacity is 44 MGD. During a backwash cycle the total tertiary capacity would drop to 34 MGD. The Egan WRP has six pairs of filter beds. Installing disc filters in Filter Beds 1, 2, and 6 can increase filtering capacity from 34 to 60 MGD with no loss in capacity during a backwash cycle. The disc filters will reduce the filter backwash from eight percent to less than five percent. The enclosed disc filters will reduce the midge flies in the filter building.

Project Status Design

Furnish, Deliver, and Install Three Bar Screens, KWRP

Project Number 18-703-31

Service Area North

Location Kirie WRP

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$2,000,000

Contract Award Date March 2021

Substantial Completion Date April 2023



Project Description This project is to furnish, deliver, and install three bar screens at the Kirie WRP.

Project Justification The current screens are 35 years old and their ability to capture debris has diminished significantly due to corrosion on the bars. Switching to a smaller screen opening will increase capture rates and reduce the amount of rags and debris in the return activated sludge channel. Because of the current screens' diminished performance, debris accumulates and prevents the return activated sludge butterfly valves from operating properly, which negatively impacts treatment operations and increases maintenance costs.

Project Status Planning

Rehabilitation of Gravity Concentration Tank, CWRP

Project Number	18-803-32
Service Area	Calumet
Location	Calumet WRP
Engineering Consultant	In-house design
Engineering Contractor	Independent Mechanical Industries, Inc.
Estimated Construction Cost	\$2,295,800
Contract Award Date	March 2020
Substantial Completion Date	December 2021



Project Description The scope of this project is to provide all the necessary labor, material, and appurtenances to rehabilitate the Cluster 1 gravity concentration tanks at the Calumet WRP. Rehabilitation includes the replacement of the scum arms, scrapers, baffles, sludge inlet piping, rake arm assembly, column assembly, drive unit, and notch weirs, as well as the rehabilitation of the distribution and collection boxes and hardware. A torque limiting system will be included on each main drive unit, and an abandoned chemical tank and associated piping will be removed. All four tanks in this cluster will be out of service for the duration of the project, which will improve efficiencies by reducing ventilation needs and allowing similar work to be performed on all tanks simultaneously.

Project Justification Rake arm assemblies in Cluster 1 have rotted at the water line to the point where skimming is no longer functional, and a skimmer arm on one tank has collapsed due to long-term corrosion effects. In addition, the steel notch weirs and trough baffles in these tanks have deteriorated badly and are missing in many places, resulting in loss of flow control. This rehabilitation will utilize new corrosion resistant materials and coatings that will restore the proper operation of these tanks.

Project Status Construction

Phosphorus Removal Liquid Facilities at the Fox River Water Reclamation District

Project Number	18-IGA-36
Service Area	North
Location	Fox River Water Reclamation District Albin D. Pagorski Water Reclamation Facility
Engineering Consultant	Not Applicable
Engineering Contractor	To be determined
Estimated Construction Cost	\$7,147,589
Contract Award Date	April 2020
Substantial Completion Date	August 2021
Project Description	Cost share project with Fox River Water Reclamation District to construct new facilities to remove phosphorus from liquid stream (biological phosphorus removal) processes.
Project Justification	Process alteration and new facilities are needed to meet new National Pollutant Discharge Elimination System Permit standards.
Project Status	Construction



Boilers 3, 4, 5 and MCC Replacement, SWRP

Project Number 19-155-3M

Service Area Stickney

Location SWRP Boiler Building

Engineering Consultant In house design

Engineering Contractor To be determined

Estimated Construction Cost \$13,000,000

Contract Award Date November 2021

Substantial Completion Date September 2023



Project Description New replacement boilers will be installed and will have co-firing of digester gas and natural gas to maximize the available digester gas. Existing boilers and motor control centers (MCCs) Nos. 3, 4, and 5 are at the end of their useful lives and require excessive maintenance. A deaerator will also be installed to provide for complete redundancy. Upgrades also include the boiler chemical systems and controls, the boiler MCCs and lighting.

Project Justification Existing boilers and MCCs Nos. 3, 4, and 5 are at the end of their useful lives and require excessive maintenance.

Project Status Design

Installation of Mechanical Mixers, SWRP

Project Number 19-157-3P

Service Area Stickney

Location SWRP

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$12,400,000

Contract Award Date October 2020

Substantial Completion Date February 2022



Project Description This project consists of furnishing and installing mechanical mixers in the first pass of each aeration tank in Aeration Batteries A, C, and D. This includes all electrical equipment and infrastructure upgrades.

Project Justification This project is required to properly mix the anaerobic zones in the biological phosphorus removal process.

Project Status Construction

Chemical Addition Backup System, SWRP

Project Number 19-159-3P

Service Area Stickney

Location Stickney

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$8,000,000

Contract Award Date January 2021

Substantial Completion Date September 2021



Project Description The purpose of this project is to provide a secondary Phosphorus removal system in the event that the biological phosphorus system is interrupted. This will allow the treatment plant to achieve compliance with the National Pollutant Discharge Elimination System (NPDES) permit phosphorus effluent limit during any upsets with the biological process. Without a working biological removal process, the annual chemical costs are estimated to be \$11 million to meet the 2021, 1mg/L effluent phosphorus concentration limit. The District has established a working biological phosphorus removal process at the Stickney WRP. The process has proven to be effective in achieving the 2030 phosphorous effluent requirement of .5 mg/L. The District believes that this system will only be used as a back-up system for unforeseen problems with the biological removal process.

Project Justification The District's NPDES permit will require a 1.0 ppm effluent limit for phosphorus. The District currently employs enhanced biological phosphorus removal treatment operations and a sidestream phosphorus recovery facility to meet these limitations. At times the phosphorus loading to the plant can result in excrescences. This new facility will allow chemical polishing to ensure that the limitations are consistently met.

Project Status Design

Central Boiler Facility and Electrical Updates, HPWRP

Project Number	19-542-3M
Service Area	North
Location	Hanover Park WRP
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$14,000,000
Contract Award Date	November 2020
Substantial Completion Date	September 2022



Project Description This project will remove two natural gas boilers and provide five new boilers (two natural gas and three digester gas/natural gas) boilers in the Pump and Blower Building. Five digester gas/natural gas boilers will be removed from the Digester Complex. All associated mechanical piping, electrical, control, civil and structural work needed to provide hot water for process and building heating demands will be completed. Replace digester gas piping and remove and replace all electrical equipment, such as motor control center, motors, conduit, gas alarm system, fire alarm system, lighting, etc., with explosion proof equipment in the classified areas to meet National Fire Protection Association (NFPA) 820 requirements.

Project Justification The boilers in the Digester Complex are 10 to 20 years old and do not perform properly as the control systems are not reliable due to hydrogen sulfide gas related corrosion. They need to be removed to comply with NFPA 820 requirements. Centralized boiler operation will maximize the use of available digester gas. Existing electrical equipment in the Digester Complex does not meet the NFPA 820 requirement and needs to be replaced with explosion-proof rated equipment or relocated to an unclassified location. The natural gas boilers in the Pump and Blower Building are more than 35 years old, parts are no longer supported by the original equipment manufacturer and procuring the replacement parts has been increasingly difficult and costly. Also, the State of Illinois Boiler Inspector recommended the boilers be operated in low fire only, due to their poor conditions.

Project Status Design

TARP Mainstream Drop Shaft DS-M73E at Armitage Avenue, SSA

Project Number 20-160-4H

Service Area Stickney

Location Stickney Service Area

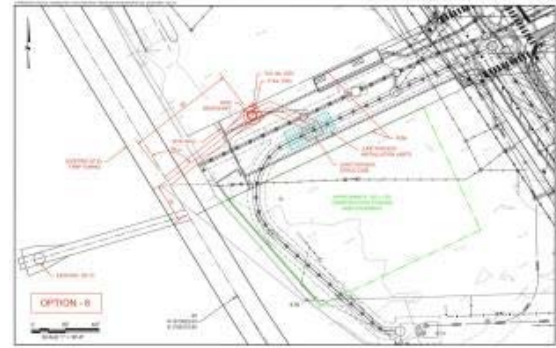
Engineering Consultant In House

Engineering Contractor To Be Determined

Estimated Construction Cost \$9,600,000

Contract Award Date April 2021

Substantial Completion Date March 2022



Project Description This project includes making a new overflow connection to a structure built on MWRD's interceptor, diverting that flow to a new drop shaft, and making a live connection from that shaft to the existing Mainstream Tunnel. The new shaft will be constructed within the proposed Armitage Avenue right of way.

Project Justification Recent modeling has shown that the TARP connection for three combined sewer outfalls located on the east bank of the Chicago River between Webster Avenue and McLean Avenue is not sufficient to handle more than a six month storm. Flow from all three outfalls is conveyed by the West Side Intercepting Sewer 9. The capacity of West Side Intercepting Sewer 9 is limited as the flow goes through a siphon under the river. A new drop shaft will convey this flow to the Mainstream Tunnel upstream of the siphon, so that it does not back up and discharge to the outfalls while there is still capacity in TARP.

Project Status Design

Biogas Combined Heat and Power System, EWRP

Project Number 20-415-3S

Service Area North

Location Egan WRP

Engineering Consultant To be determined

Engineering Contractor To be determined

Estimated Construction Cost \$2,000,000

Contract Award Date July 2021

Substantial Completion Date December 2021



Project Description Installation of a biogas combined heat and power system.

Project Justification The combined heat and power system will utilize biogas, which is typically flared, to produce electricity and recover the heat from the engine for beneficial reuse (hot water heat recovery). The biogas, a byproduct of wastewater treatment, will be beneficially reused.

Project Status Planning

Furnish, Deliver, and Install Disc Filters and Other Improvements, HPWRP

Project Number	20-701-31
Service Area	North
Location	Hanover Park WRP
Engineering Consultant	In house design
Engineering Contractor	To Be Determined
Estimated Construction Cost	\$3,600,000
Contract Award Date	March 2021
Substantial Completion Date	August 2023



Project Description This project is to furnish, deliver, and install disc filters at the Hanover Park WRP.

Project Justification Filter beds 3 and 4 have a current capacity of 3.4 million gallons per day (MGD) combined with a design capacity of 2.5 MGD each. The disc filters have a combined capacity of 12 MGD. The traveling bridge filters need to have their media replaced. The disc filters will reduce the filter backwash from eight percent to less than one percent. The enclosed disc filters will reduce the midge flies in the filter building. This contract will also install chemical tanks and containment for disinfection and two process water pumps.

Project Status Planning

Furnish, Deliver, and Install Replacement Gearboxes for SEPA(s) 2, 3, 4, & 5, CSA

Project Number	20-801-31
Service Area	Calumet
Location	SEPA(s) 2, 3, 4 & 5
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$1,600,000
Contract Award Date	March 2021
Substantial Completion Date	December 2022



Project Description This project will furnish, deliver, and install a replacement gearbox and an associated upper and lower bearing, for each of the Sidestream Elevated Pool Aeration (SEPA) Stations #2, #3, #4, and #5 in the Calumet Service Area.

Project Justification Due to changes in the permit that require average dissolved oxygen levels to be increased to 3.0 gm/L to 5.0 mg/L from March through July and 3.5 mg/L from August through February, normal operation may require all SEPA screw pumps to be operated. The SEPA stations have been in service for over 25 years and failures of the oil seals and bearings have increased. This project will help maintain the reliability of these stations and ensure the District continues to meet the waterway dissolved oxygen requirements of the Illinois Environmental Protection Agency.

Project Status Planning

Rehabilitation of North Branch Pumping Station & Other Miscellaneous Work, NSA, SSA

Project Number 20-858-3D

Service Area North and Stickney

Location North Branch Pumping Station & Webster Avenue Aeration Station

Engineering Consultant In house design

Engineering Contractor To be determined

Estimated Construction Cost \$5,700,000

Contract Award Date July 2021

Substantial Completion Date February 2022

Project Description Replace deteriorated concrete deck, stairs, and railings at the North Branch Pumping Station (NBPS). Replace flap gates and removeable slabs in the connecting structure at Drop Shaft DS-91 near the NBPS. Replace roof on Blower House Building at Webster Avenue Aeration Station.

Project Justification The NBPS is nearly 100 years old and requires structural rehabilitation in order to properly maintain the facility. The concrete deck, stairs, and railings are deteriorated and need to be replaced. The nearby drop shaft structure (DS-91) also requires rehabilitation. In addition to the work at the NBPS, the roof on the Blower House at the Webster Avenue Aeration Station also needs to be replaced.

Project Status Under Development



Pumping Station Relief Sewers and Collection System Work, Various Locations

Project Number 20-859-3S

Service Area Calumet, North, and Stickney

Location SSA: Proviso Township; CSA: Palos Township; NSA: Des Plaines, IL

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$7,500,000

Contract Award Date December 2021

Substantial Completion Date August 2022



Project Description This contract will include: 1) construction of a 48-inch diameter sewer connection to TARP to relieve Calumet Intercepting Sewer 18F Ext. A and the Palos Hills Pumping Station during wet weather flow, 2) construction of a 30-inch diameter sewer connection to TARP to relieve Berkeley-Hillside and Broadview-Bellwood Intercepting Sewers and the Westchester Pumping Station during wet weather flow, 3) rehabilitation work at the Upper Des Plaines Drop Shaft 5 by means of slip lining or form and pour, 4) rehabilitation of 100 feet of 108-inch pipe by either CIPP lining or Geopolymer lining, 5) rehabilitation of 100 feet of the drop shaft exit conduit with Geopolymer, 6) replacing deteriorated louvers and grating, 7) installing louvers and grating at Drop Shaft 8, 8) removal of Gate 11, replacing Gate 13, and installing a new actuator at Control Structure 10, 8) installing a weir in the Upper Des Plaines Tunnel near Drop Shaft 1/1A, and related work, 9) installing gratings at Drop Shaft N-19 and the manhole at Sta. 98+51 of the Cal-Sag Relief Sewer.

Project Justification Project will reduce the incidents of sanitary sewer overflows during wet weather events.

Project Status Design

Replacement of Telemetry, Various Locations

Project Number 20-861-3E

Service Area Calumet, North, and Stickney

Location District-wide

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$1,300,000

Contract Award Date November 2021

Substantial Completion Date November 2022



Project Description This project is to furnish, deliver, and install replacement communications equipment and services for the existing copper phone lines that provide visibility and control of various District remote sites from their respective supervisory plants. The equipment selected will provide secure, bidirectional, periodic commands and readings over cellular radio link to the telecommunications provider's network, as well as the ability to retrieve diagnostic data of the networking equipment itself. The contractor will provide turnkey installation from the Supervisory Control and Data Acquisition interface to the complete field installation.

Project Justification Existing point-to-point copper telemetry lines have been labeled as obsolete by AT&T, which is the District's current service provider. Although the District has entered into a two-year contract with AT&T that includes these copper services, continued telemetry service beyond the end of the current contract is not guaranteed. Additionally, it is expected that the operating costs for a new communications system will realize actual savings of more than 30 percent.

Project Status Under Development

Furnish, Deliver, and Install Coarse Screens, SWRP

Project Number 20-903-31

Service Area Stickney

Location Stickney WRP

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$6,000,000

Contract Award Date January 2021

Substantial Completion Date December 2023



Project Description This project will include the removal of the existing climber-style southwest coarse screens at the Stickney WRP and furnishing, delivering and installing new chain and sprocket-style coarse screens.

Project Justification The southwest coarse screens at the Stickney WRP protect the main sewage pumps in the Pump & Blower Building from debris in the influent flow. The current climber-style screens have a number of issues. The hydraulic systems for each coarse screen have caused frequent failures and the annual maintenance costs for the screens are exceedingly high. Also, the coarse screens see heavy debris and the bar screen spacing is too fine for this application. Because of this, the screens are frequently "blinded" due to the extended cycle time required for climber screens. This causes additional maintenance costs as well as issues with the operation of the main sewage pumps downstream of the screens. This project will replace the existing southwest coarse screens with more heavy-duty, reliable, chain and sprocket-style screens and significantly reduce maintenance costs and operational issues caused by the current coarse screens.

Project Status Design

Sludge Pumping Improvements, Various Locations

Project Number	21-603-31
Service Area	Calumet, North, and Stickney
Location	Stickney, O'Brien and Egan WRPs
Engineering Consultant	In-house design
Engineering Contractor	To Be Determined
Estimated Construction Cost	\$4,000,000
Contract Award Date	March 2021
Substantial Completion Date	December 2023

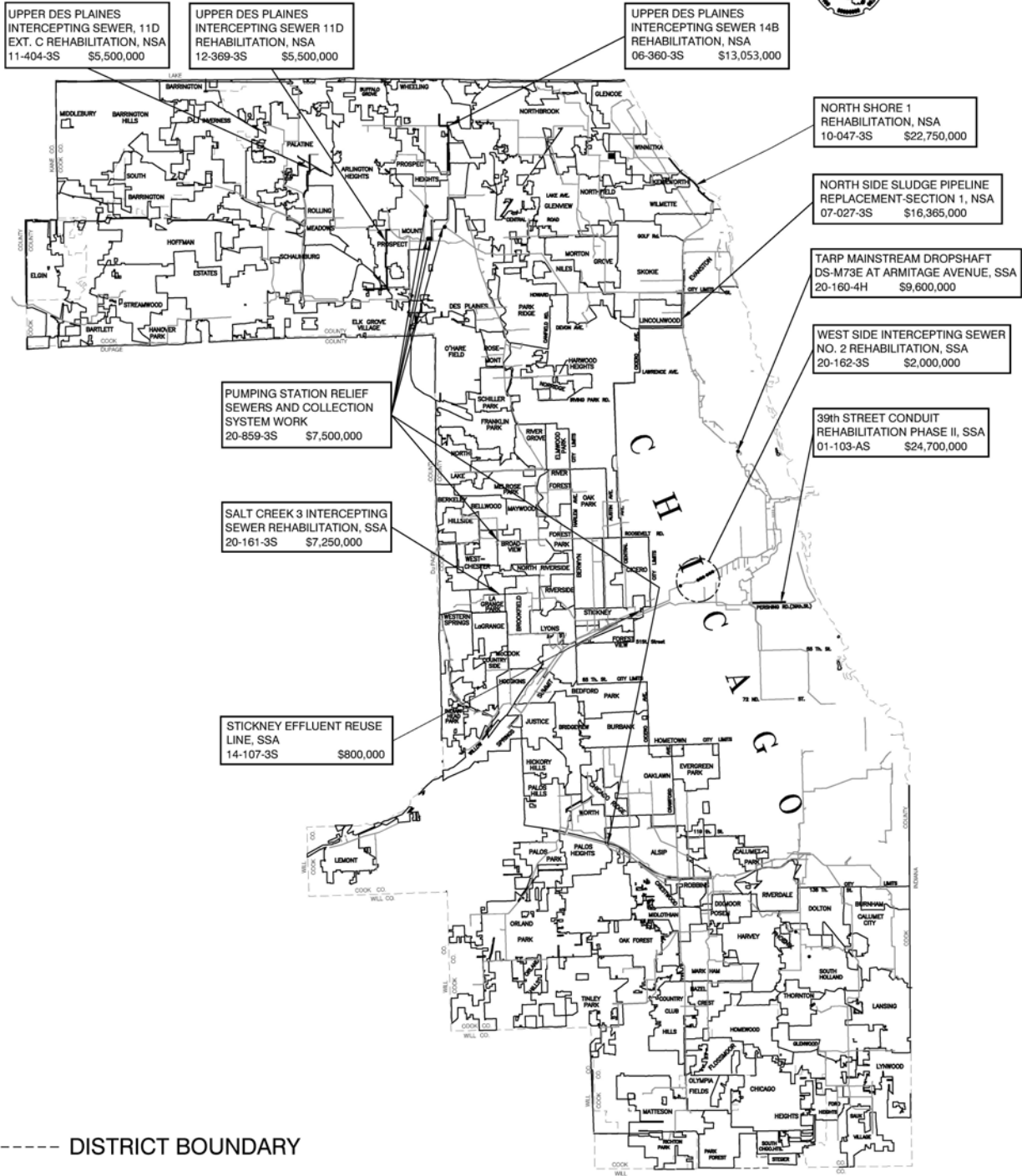


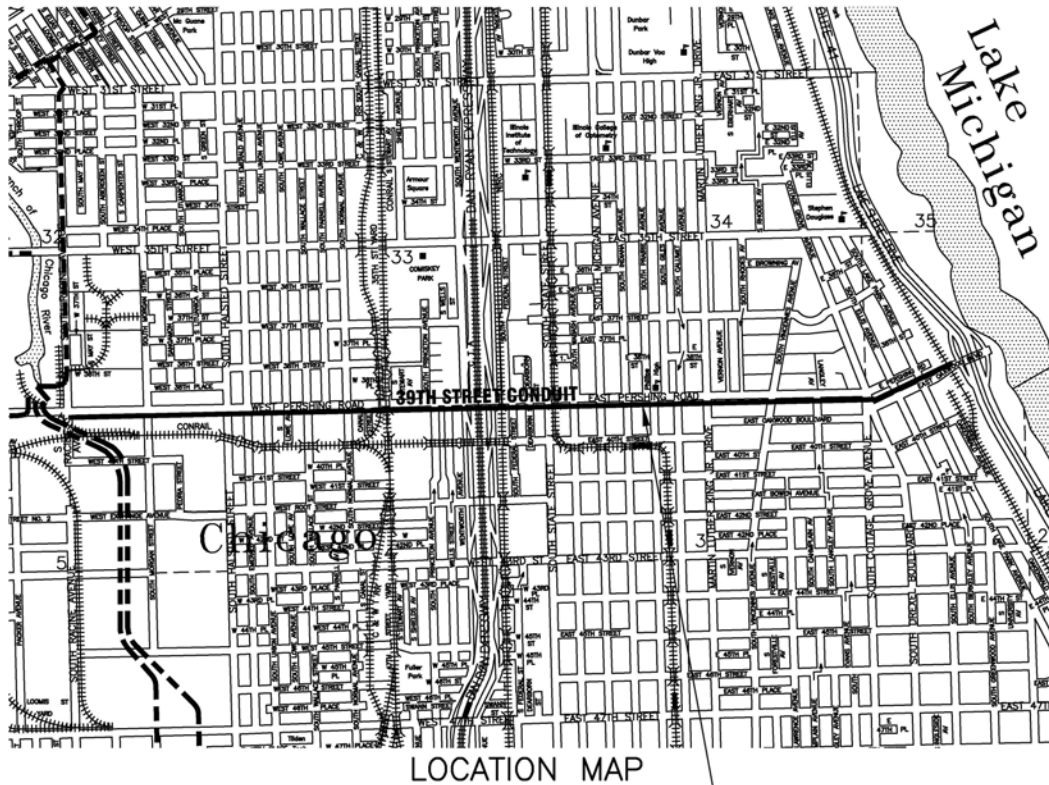
Project Description The purpose of the project is to furnish, deliver, and install non-clog centrifugal pumps to replace existing screw-centrifugal pumps in the Waste Activated and Primary Sludge Pumping streams at the Stickney plant as well as install higher capacity sludge pumping systems at the Egan and O'Brien Water Reclamation Plants.

Project Justification Existing Stickney sludge pumps installed under another contract do not provide reliable pumping. Installation of various non-clog centrifugal pumps will restore reliable pumping capacity for the separated sludge streams now in place throughout the plant. The Egan to O'Brien sludge feed pumping system requires increased capacity due to the suspension of dewatering centrifuging. The O'Brien to Stickney sludge pumping system requires additional variable speed pumping capability.

Project Status Design

SEWER DESIGN PROJECT MAP
2021





39th STREET CONDUIT REHABILITATION -
 PHASE II, SSA
 REHABILITATE 20-FOOT DIAMETER
 CONDUIT FROM LAKE SHORE DRIVE TO
 THE RACINE AVENUE PUMPING STATION
 COST: \$24,700,000

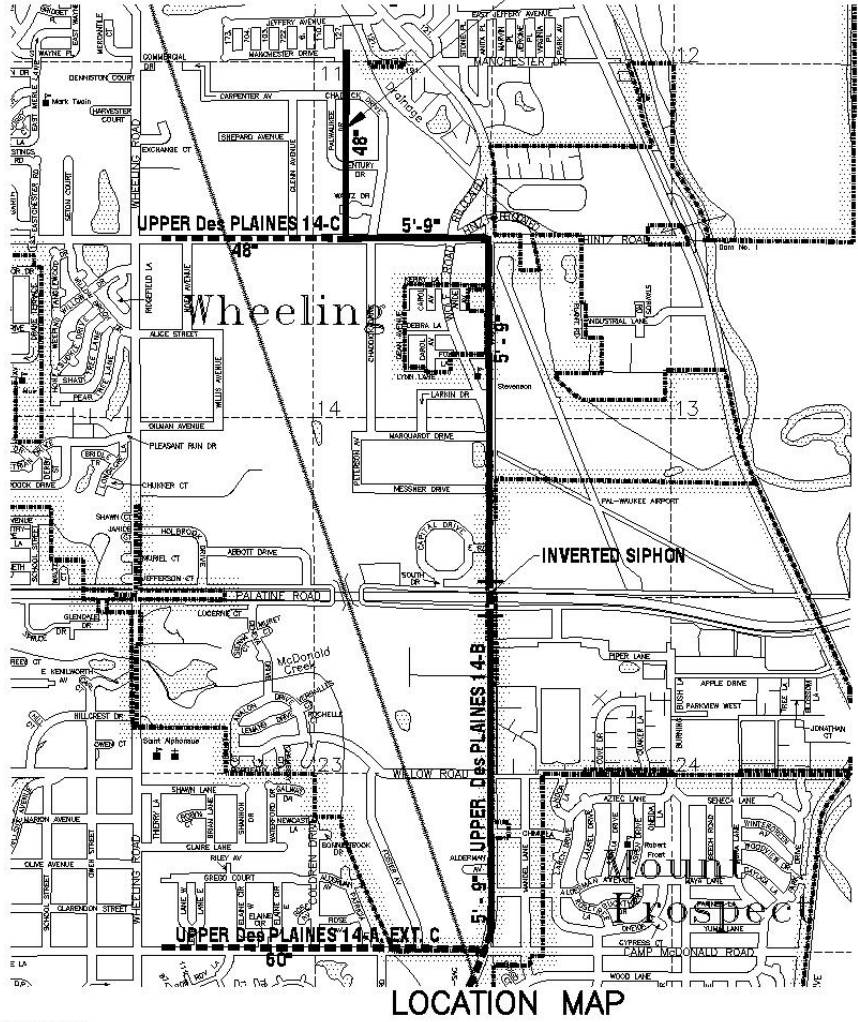
LEGEND:

- = SEWER TO BE REHABILITATED
- - - -** = EXISTING SEWER

39th STREET CONDUIT REHABILITATION - PHASE II, SSA
CONTRACT 01-103-AS



UPPER DES PLAINES INTERCEPTING SEWER 14B
 REHABILITATION, NSA
 2,902 FEET OF 48-INCH SEWER
 11,902 FEET OF 60-INCH SEWER
 27 MANHOLES/STRUCTURES
 ABANDONING 1 OFFSET MANHOLE
 COST: \$13,053,000



LEGEND:

- = SEWER TO BE REHABILITATED
-** = EXISTING SEWER

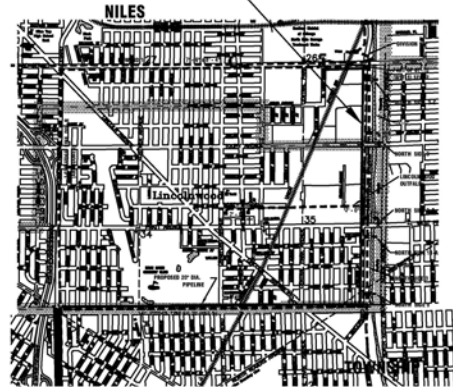
**UPPER DES PLAINES INTERCEPTING SEWER 14B REHABILITATION, NSA
 CONTRACT 06-360-3S**



NORTH SIDE SLUDGE PIPELINE REPLACEMENT - SECTION 1, NSA
19,000 FEET OF 20-INCH DIAMETER FORCE MAIN
AIR RELIEF, BLOW OFF & CLEANOUT STRUCTURES
REHABILITATION OF 42 STRUCTURES
COST: \$16,365,000





LOCATION MAP

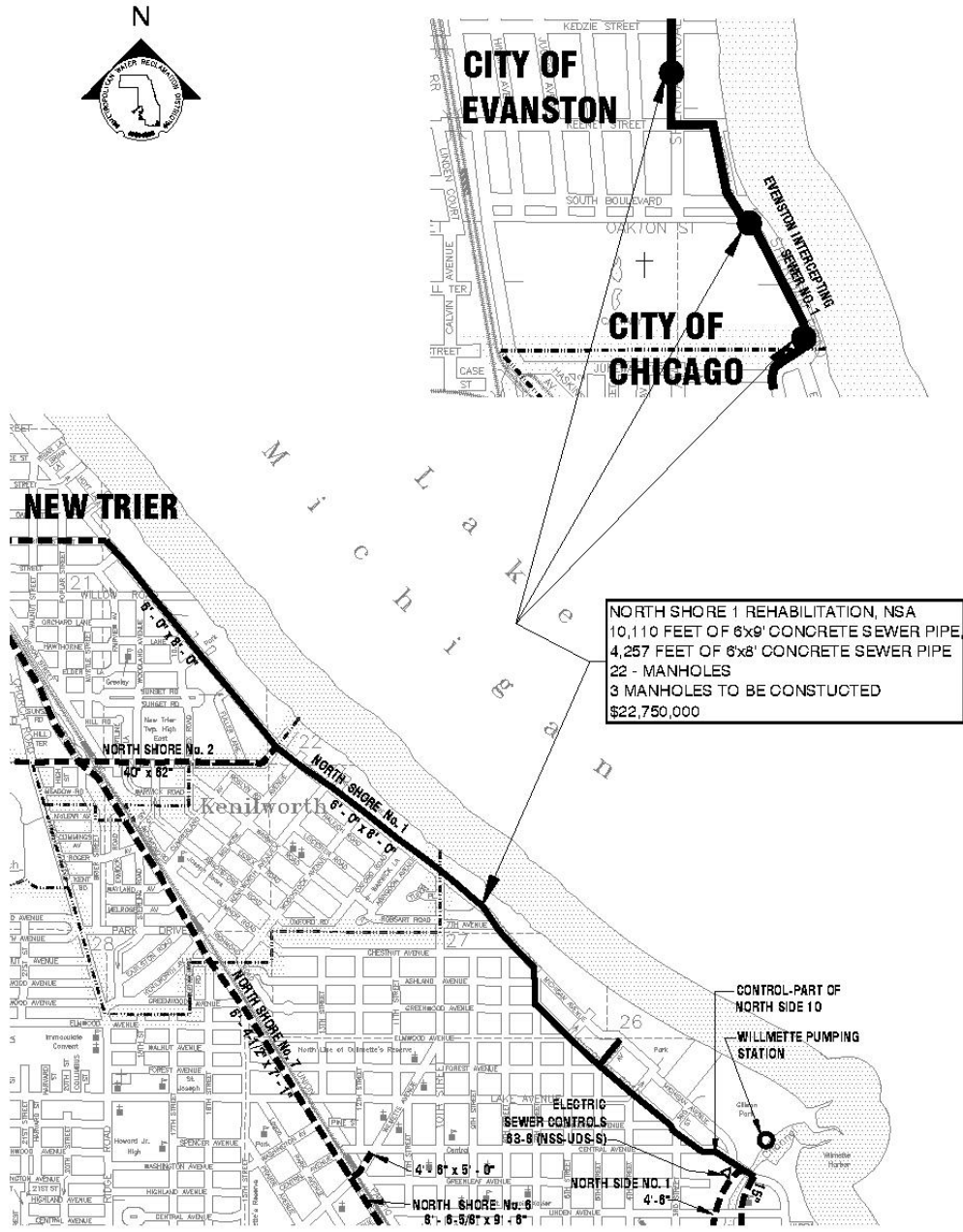


LOCATION MAP

LEGEND:

-  = SEWER TO BE REHABILITATED
-  = EXISTING SEWER

**NORTH SIDE SLUDGE PIPELINE REPLACEMENT - SECTION 1, NSA
CONTRACT 07-027-3S**



NORTH SHORE 1 REHABILITATION, NSA
 10,110 FEET OF 6'x8' CONCRETE SEWER PIPE
 4,257 FEET OF 8'x8' CONCRETE SEWER PIPE
 22 - MANHOLES
 3 MANHOLES TO BE CONSTRUCTED
 \$22,750,000

LOCATION MAP

LEGEND:

- = SEWER TO BE REHABILITATED
-** = EXISTING SEWER

**NORTH SHORE 1 REHABILITATION, NSA
 CONTRACT 10-047-3S**



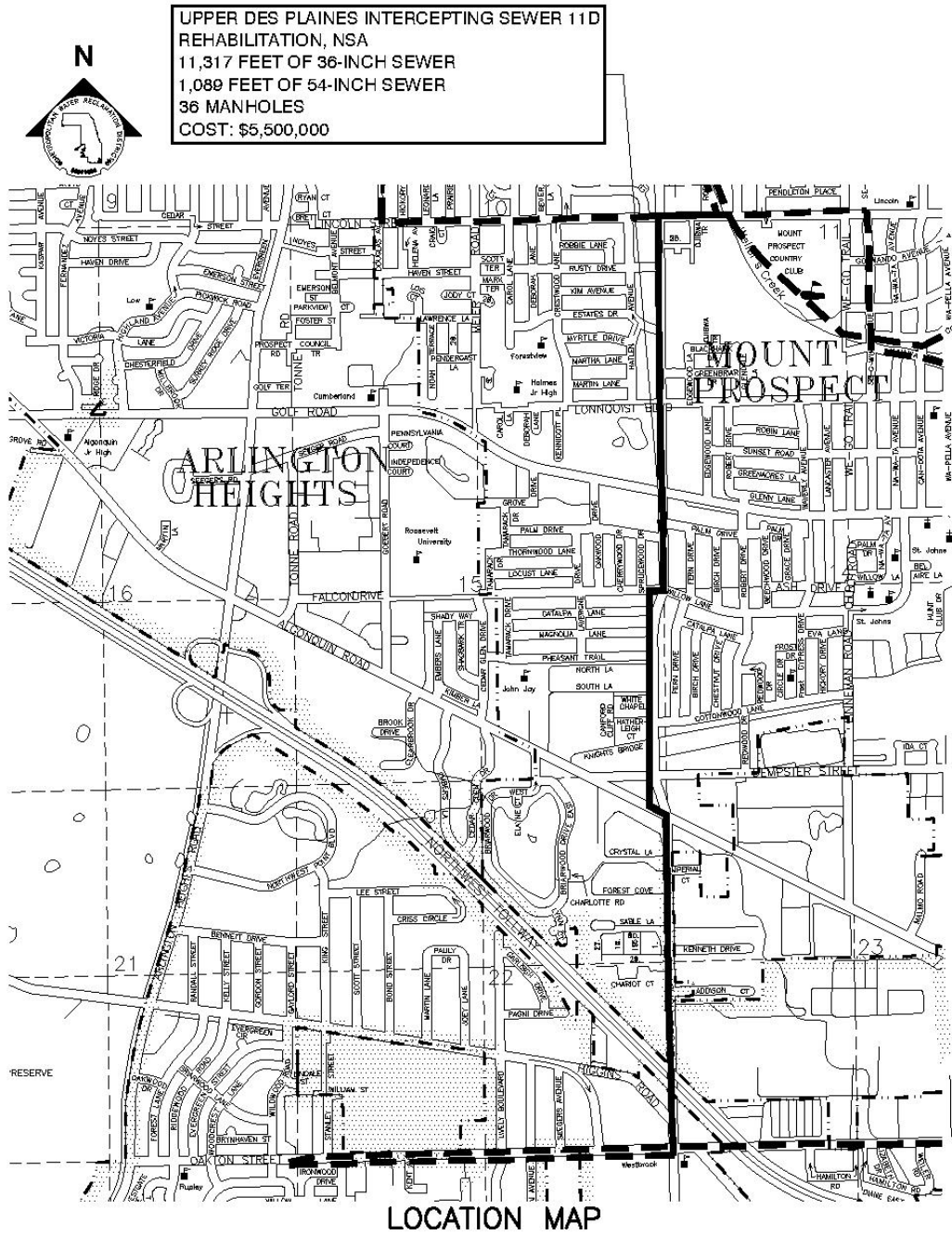
LOCATION MAP

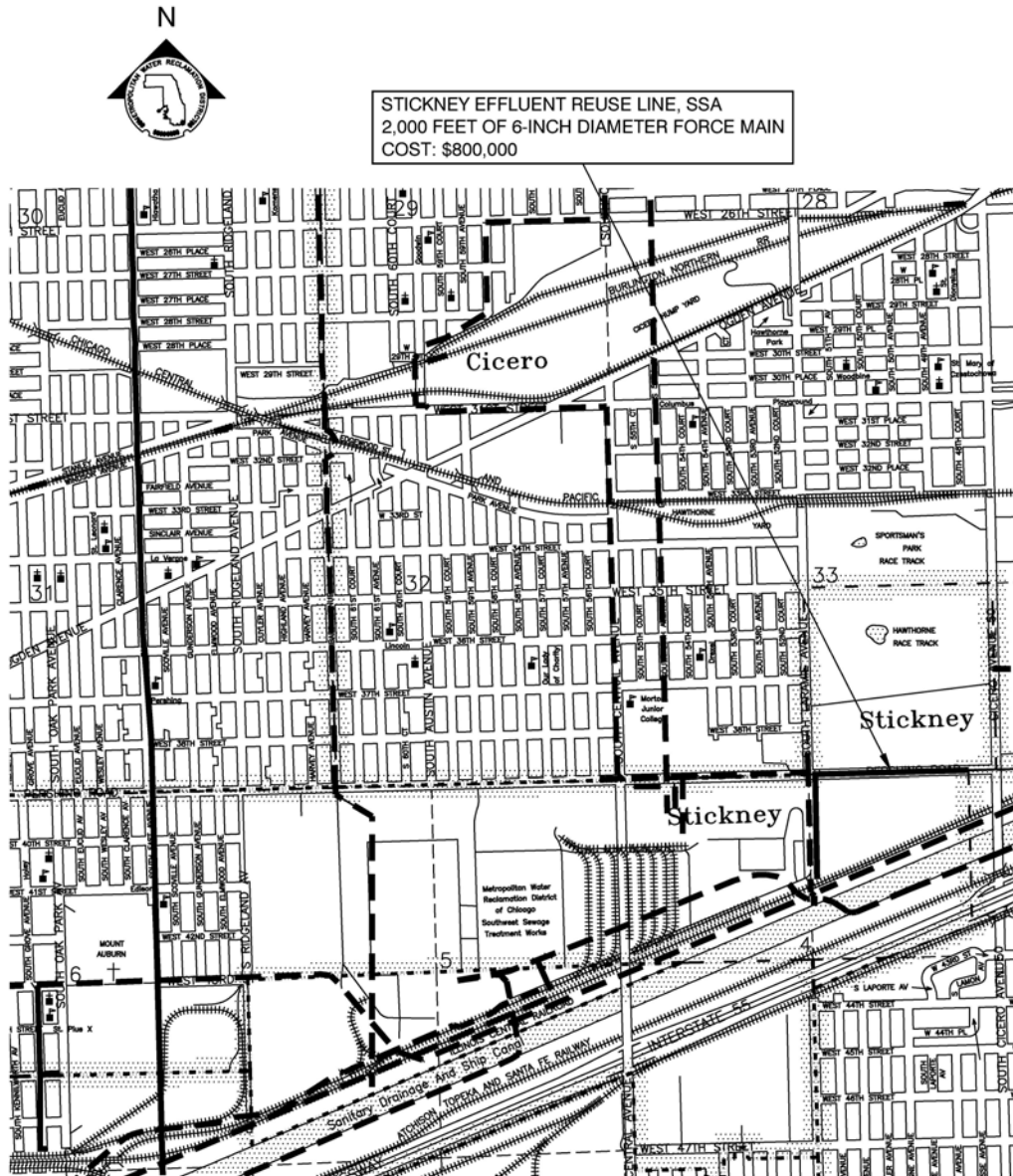
UPPER DES PLAINES INTERCEPTING SEWER 11D, EXT. C REHABILITATION, NSA 10,828 FEET OF 36-INCH DIAMETER SEWER 24 MANHOLES AND ONE CONNECTING STRUCTURE COST: \$5,500,000

LEGEND:

- = SEWER TO BE REHABILITATED
- - - -** = EXISTING SEWER

UPPER DES PLAINES INTERCEPTING SEWER 11D, EXT. C REHABILITATION, NSA CONTRACT 11-404-3S





LOCATION MAP

LEGEND:

- = SEWER TO BE REHABILITATED
- - -** = EXISTING SEWER

**STICKNEY EFFLUENT REUSE LINE, SSA
CONTRACT 14-107-3S**



TARP MAINSTREAM DROPSHAFT DS-M73E AT ARMITAGE AVENUE, SSA
CONTRACT 20-160-4H
COST: \$9,600,000



LOCATION MAP

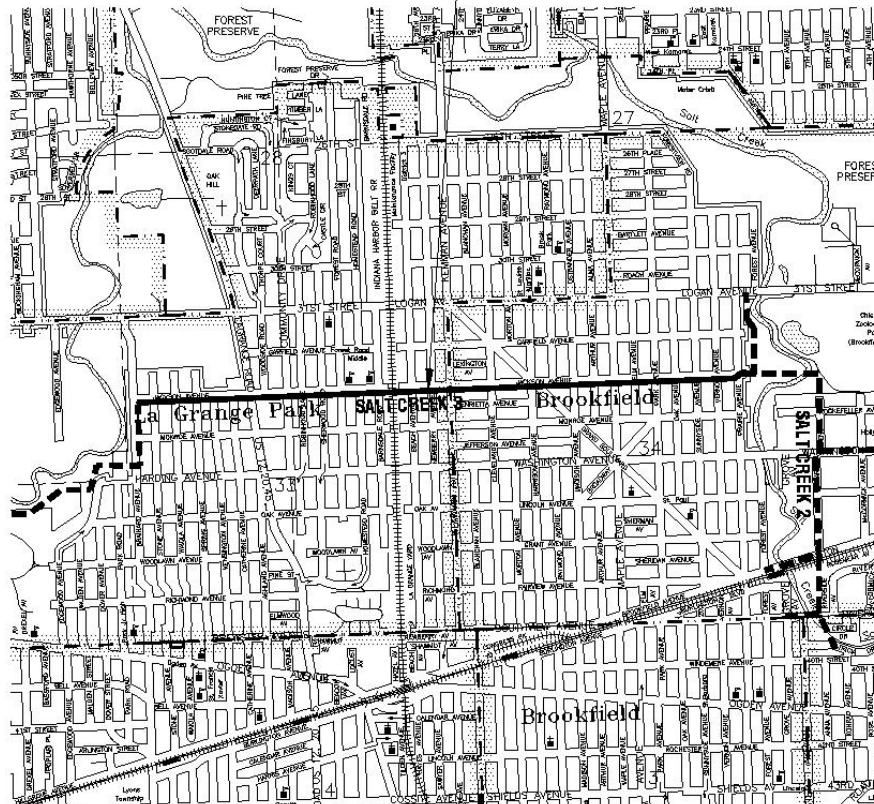
LEGEND:

- = PROPOSED DROP SHAFT
- = EXISTING SEWER

**TARP MAINSTREAM DROPSHAFT DS-M73E AT ARMITAGE AVENUE, SSA
CONTRACT 20-160-4H**



SALT CREEK 3 INTERCEPTING SEWER REHABILITATION, SSA
 11,000 FEET OF 42"x60" CONCRETE SEWER PIPE
 18-MANHOLES
 FILLING VOIDS IN SEWER INVERT
 CONTRACT 20-161-3S
 COST: \$7,250,000



LOCATION MAP

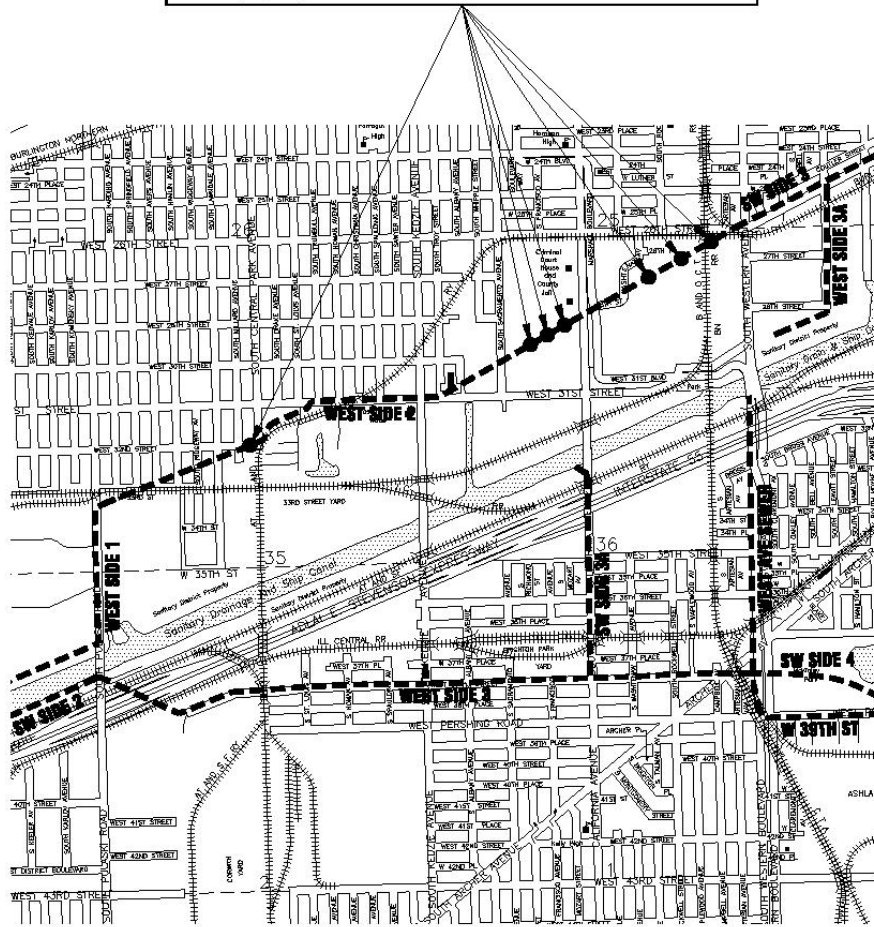
LEGEND:

- = SEWER TO BE REHABILITATED
- = EXISTING SEWER

**SALT CREEK 3 INTERCEPTING SEWER REHABILITATION, SSA
 CONTRACT 20-161-3S**



WEST SIDE INTERCEPTING SEWER NO. 2 REHABILITATION, SSA
 7-POINT REPAIRS
 CONTRACT 20-162-3S
 COST: \$2,000,000

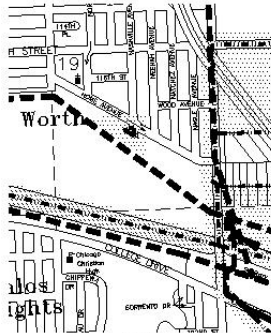


LOCATION MAP

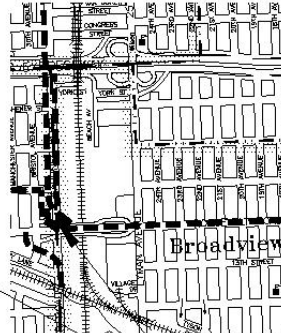
LEGEND:

- = LOCATION OF POINT REPAIRS
- = EXISTING SEWER

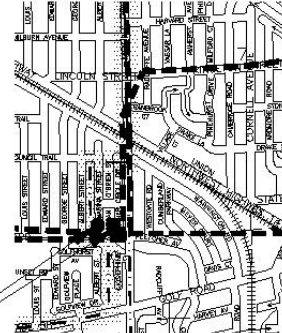
**WEST SIDE INTERCEPTING SEWER NO. 2 REHABILITATION, SSA
 CONTRACT 20-162-3S**



**WESTCHESTER
PUMPING STATION**

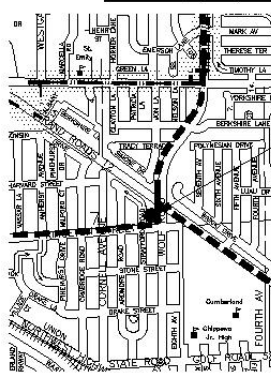


**CALUMET 20R2
SHAFT**

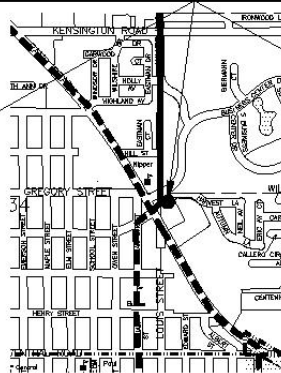


DS-5 & CS-8

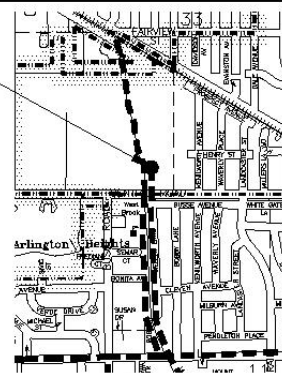
PUMPING STATION RELIEF SEWERS AND COLLECTION SYSTEM WORK, VARIOUS LOCATIONS
 100 FEET OF 108" DIA. SEWER TO BE REHABILITATED
 75 FEET OF 108" DIA. DROP SHAFT TO BE REHABILITATED
 REPLACEMENT OF METAL APPURTENANCES
 REPLACEMENT OF CONTROL GATE STEM AND OTHER PARTS
 REPLACEMENT OF SLIDE GATE AND GROOVES
 INSTALLATION OF LOUVER SYSTEM AND GRATING
 INSTALLATION OF SUPPRESSION WEIR
 109 FEET OF 48" DIA. SEWER TO BE INSTALLED
 250 FEET OF 30" DIA. SEWER TO BE INSTALLED
 CONTRACT 20-859-3S
 COST: \$7,500,000



CS-10



**DS-8
LOCATION MAPS**



DS-1

LEGEND:

- = SEWER TO BE REHABILITATED
- = EXISTING SEWER

**PUMPING STATION RELIEF SEWERS AND COLLECTION SYSTEM WORK,
 VARIOUS LOCATIONS
 CONTRACT 20-859-3S**

Stormwater Management Capital Improvements Bond Fund Program

Awards in 2021

Project Name	Project Number	Est. Construction Cost	Duration (days)	Est. Award Date
* Addison Creek Channel Improvements, SWRP	11-187-3F	\$ 21,350	683	Jun 2021
Total 2021 Awards		\$ 21,350		

Projects Under Construction

Projects under construction in the Capital Improvements Bond Fund were appropriated in prior years using the full encumbrance (obligation) method of budgetary accounting. The construction contract award amount and the anticipated project duration are provided in this table.

Project Name	Project Number	Est. Construction Cost	Duration (days)	Award Date
* Construction of a Levee along Thorn Creek at Arquilla Park in Glenwood, CSA	15-IGA-14	\$ 3,483	2,145	Nov 2016
Melvina Ditch Reservoir Improvements, SSA	14-263-3F	15,648	1,351	Nov 2017
Addison Creek Reservoir, SSA	11-186-3F	75,722	1,223	Jan 2019
Lyons Levee Flood Control Improvements, SSA	13-199-3F	2,358	382	Nov 2020
Total Projects Under Construction		\$ 97,211		

*This project is funded by the Capital Improvements Bond Fund and the Stormwater Management Fund. Refer to Section VI Stormwater Management Fund for more information about the Stormwater Management Capital
Note: All cost figures are in thousands of dollars; inflation factor is 0 percent.

50000 CAPITAL IMPROVEMENTS BOND FUND

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:	Cost	Percent
1. COLLECTION FACILITIES: Award five construction projects: North Shore 1 Rehabilitation, NSA, Upper Des Plaines Intercepting Sewer 14B Rehabilitation, NSA, and three other projects.	\$ 45,403,000	18.9%
2. TREATMENT FACILITIES: Award 11 construction projects: A/B and C/D Service Tunnel Rehabilitation - Phase III, SWRP, Boilers 3, 4, 5, and MCC Replacement, SWRP, Rehabilitation of Steel Spandrel Beams of Pump and Blower House, OWRP, and eight other projects.	\$ 84,600,000	35.2%
3. SOLIDS PROCESSING AND DISPOSAL FACILITIES: Award two construction projects: Sludge Pumping Improvements, Various Locations, and Biogas Combined Heat & Power System, EWRP.	\$ 6,000,000	2.5%
4. FLOOD AND POLLUTION CONTROL: Award six construction projects: Addison Creek Channel Improvements, SWRP, Odor Control Systems at Two TARP Shafts and Decommissioning the Thornton Transitional Reservoir, CSA, McCook Reservoir Stage 2 Rock Wall Stabilization and Instrumentation, SWRP, and three other projects.	\$ 75,518,000	31.4%
5. LAND AND RIGHT-OF-WAY ACQUISITION COSTS: Acquisition of land for the expansion of reservoir projects and payments for land easements.	\$ 1,000,000	0.4%
6. PROJECT SUPPORT: Administration, design, and construction inspection for current and future contracts, funding support, and construction services, such as concrete and soil testing.	\$ 27,755,700	11.6%
Totals	\$ 240,276,700	100.0%

MEASURABLE GOAL:	2019 Actual	2020 Estimated	2021 Proposed
Award contracts for the continued implementation of the District's Capital Improvement Program.			
Number of projects proposed	21	18	24
Number of contracts awarded	8	10	24
<p>The projects proposed for each year are based upon the requirements dictated by the Capital Improvement Program. The number of actual projects awarded may not, on face value, quantify performance. There are several factors that could either increase or decrease the number of projects awarded. Some of these factors are project size, project complexity, and unforeseen obstacles. The numbers are provided only as a general indicator of performance.</p>			

50000 CAPITAL IMPROVEMENTS BOND FUND

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change	
Number	Name	Actual	FTEs	Dollars	Dollars	Percent
1700	Collection Design	\$ 990,332	2021	— \$ —	\$ (1,500,000)	(100.0)
			2020	— \$ 1,500,000		
1800	Collection Construction	\$ 10,712,101	2021	— \$ 49,473,200	\$ 23,678,200	91.8
			2020	— \$ 25,795,000		
2700	Treatment Design	\$ 733,117	2021	— \$ 83,600	\$ (2,916,400)	(97.2)
			2020	— \$ 3,000,000		
2800	Treatment Construction	\$ 11,739,299	2021	— \$ 94,515,000	\$ (10,111,700)	(9.7)
			2020	— \$ 104,626,700		
3700	Solids Processing Design	\$ 63,738	2021	— \$ —	\$ —	—
			2020	— \$ —		
3800	Solids Processing Construction	\$ 1,006,000	2021	— \$ 6,415,000	\$ (11,045,100)	(63.3)
			2020	— \$ 17,460,100		
4341	Flood Mitigation Projects Planning and Design	\$ 940,370	2021	— \$ 1,538,000	\$ 38,000	2.5
			2020	— \$ 1,500,000		
4343	Flood Mitigation Projects Construction	\$ 35,154,622	2021	— \$ 23,467,500	\$ 1,050,000	4.7
			2020	— \$ 22,417,500		
4344	Flood Mitigation Projects Contracted with Other Governments	\$ 152,821	2021	— \$ —	\$ —	—
			2020	— \$ —		
4345	Flood Mitigation Projects Land and Easements	\$ 2,422,183	2021	— \$ —	\$ —	—
			2020	— \$ —		
4700	Flood and Pollution Control Design	\$ 466,475	2021	— \$ 2,250,000	\$ (1,274,400)	(36.2)
			2020	— \$ 3,524,400		
4800	Flood and Pollution Control Construction	\$ 9,698,979	2021	— \$ 61,784,400	\$ (2,189,300)	(3.4)
			2020	— \$ 63,973,700		
5800	Solids Disposal Construction	\$ 4,389,765	2021	— \$ 500,000	\$ —	—
			2020	— \$ 500,000		
7740	Land and Easements	\$ —	2021	— \$ 250,000	\$ —	—
			2020	— \$ 250,000		
Totals		\$ 78,469,802	2021	— \$ 240,276,700	\$ (4,270,700)	(1.7)%
			2020	— \$ 244,547,400		

Projects budgeted in the Capital Improvements Bond Fund are prioritized based on operational needs, design time frames, and available funding. Year-over-year variances in program area budgets are the result of project timing within the five-year capital planning cycle. The Capital Improvements Bond Fund is budgeted on an obligation basis, meaning the projects are budgeted at their full value in the year they are awarded, whether the project expenditures occur in the same budget year or not.

401 50000	Fund: Capital Improvements Bond Department: Engineering	LINE ITEM ANALYSIS						
		2019	2020				2021	
Account Number	Account Name	Expenditure	Original Appropriation *	Adjusted Appropriation 09/30/20 **	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
612090	Reprographic Services	\$ —	\$ 10,000	\$ 20,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ —
612250	Court Reporting Services	6,699	31,000	42,865	37,302	14,400	31,000	—
612400	Intergovernmental Agreements	3,794,363	9,861,700	21,228,594	18,084,967	6,176,900	200,000	—
612430	Payments for Professional Services	367,025	85,000	1,546,266	1,461,266	809,800	83,600	—
612440	Preliminary Engineering Reports and Studies	—	250,000	250,000	—	—	250,000	—
612450	Professional Engineering Services for Construction Projects	2,081,205	9,274,400	11,079,189	3,207,976	3,790,800	3,538,000	—
612470	Personal Services for Post-Award Engineering for Construction Projects	1,498,021	—	4,788,594	4,788,594	993,700	—	—
612490	Contractual Services, N.O.C.	70,596	—	—	—	—	—	—
612780	Safety Repairs and Services	—	100,000	100,000	—	—	100,000	—
200	TOTAL CONTRACTUAL SERVICES	7,817,908	19,612,100	39,055,507	27,590,105	11,795,600	4,212,600	—
645600	Collection Facilities Structures	93,523	500,000	9,798,021	9,257,373	2,245,500	5,277,500	—
645620	Waterway Facilities Structures	38,364,708	39,188,200	105,459,551	66,343,179	7,715,500	52,347,500	—
645630	Army Corps of Engineers Services	4,205,923	18,131,400	42,565,413	24,410,234	8,774,600	18,131,400	—
645650	Process Facilities Structures	6,484,733	37,455,000	73,572,214	68,810,328	10,553,100	43,450,000	—
645680	Buildings	5,225,945	500,000	7,878,779	7,378,779	6,406,500	500,000	—
645690	Capital Projects, N.O.C.	922,662	—	96,239	96,239	96,200	—	—
645700	Preservation of Collection Facility Structures	4,432,394	48,504,600	51,978,343	30,969,228	877,100	49,995,700	—
645720	Preservation of Waterway Facility Structures	795,448	5,427,000	18,932,661	15,519,554	3,631,600	12,985,000	—
645750	Preservation of Process Facility Structures	749,967	56,161,600	99,441,025	60,784,950	10,000,000	32,740,000	—
645780	Preservation of Buildings	4,179,435	17,625,000	26,578,636	9,021,414	2,000,000	18,325,000	—
500	TOTAL CAPITAL PROJECTS	65,454,738	223,492,800	436,300,883	292,591,278	52,300,100	233,752,100	—
656010	Land	793,339	300,000	300,000	—	—	750,000	—
600	TOTAL LAND	793,339	300,000	300,000	—	—	750,000	—
667340	Payments for Easements	14,052	250,000	250,000	12,470	13,000	250,000	—
727102	Principal - Capital Lease	2,722,175	—	34,877,432	34,877,432	2,820,500	—	—
727112	Interest - Capital Lease	1,667,589	—	8,927,013	8,927,013	1,570,800	—	—

401 50000	Fund: Capital Improvements Bond Department: Engineering	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation *	Adjusted Appropriation 09/30/20 **	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
767300	Bond Issuance Costs	—	892,500	892,500	—	—	1,312,000	—
700	TOTAL FIXED AND OTHER CHARGES	4,403,817	1,142,500	44,946,945	43,816,915	4,404,300	1,562,000	—
TOTAL CAPITAL IMPROVEMENTS BOND FUND		\$ 78,469,802	\$ 244,547,400	\$ 520,603,334	\$ 363,998,298	\$ 68,500,000	\$240,276,700	\$ —
<p>* The Capital Improvements Bond Fund is budgeted and accounted for on an obligation basis.</p> <p>** The appropriation in the Capital Improvements Bond Fund is adjusted to carry forward open value of contracts from the prior year.</p> <p>NOTES: 1. Amounts may not add up due to rounding. 2. Estimated Expenditure may exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end. 3. The Capital Improvements Bond Fund appropriation is controlled on the Summary Object level.</p>								

SECTION VI

STORMWATER MANAGEMENT FUND

Stormwater Management is organized with all revenues and expenditures accounted for in a separate fund. The District assumed responsibility for stormwater management following the passage of Public Act 93-1049 in November 2004. This law gives the District responsibility for stormwater management for all of Cook County, including areas that currently lie outside the District's boundaries.

The District has established six watershed planning councils. The purpose of the watershed planning councils is to advise the District on the development and implementation of the countywide stormwater management plan, representing concerns of local governments. Municipal leagues are responsible for coordinating the activities of the watershed planning councils.

Stormwater Management Fund:

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Appropriations, Expenditures, and Budgeted FTE Positions, 2012 - 2021	438
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Project List	444
Projects Listed by Service Area	447
Project Fact Sheets	451
Project Exhibits	503
Objectives and Program Summary	509
Performance Data	511
Line Item Analysis	513
Position Analysis	515

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 8, 2020

Mr. Brian A. Perkovich
Executive Director
OFFICE

Dear Sir:

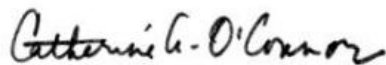
Subject: 2021 Program for the Stormwater Management Fund

The Stormwater Management Fund's program for 2021, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the 2021 initiatives in alignment with and in support of the Strategic Business Plan. The budget requests include all amendments as directed by you during the Executive Director Budget Hearings in August of this year.

The narrative provides a summary of the fund, 2021 major initiatives and challenges, and 2020 accomplishments. Supporting schedules of objectives, performance, and staffing levels present three years of detailed budgetary information.

Thank you for the opportunity to present the proposed Stormwater Management Fund budget for 2021.

Respectfully submitted,



Catherine A. O'Connor
Director of Engineering

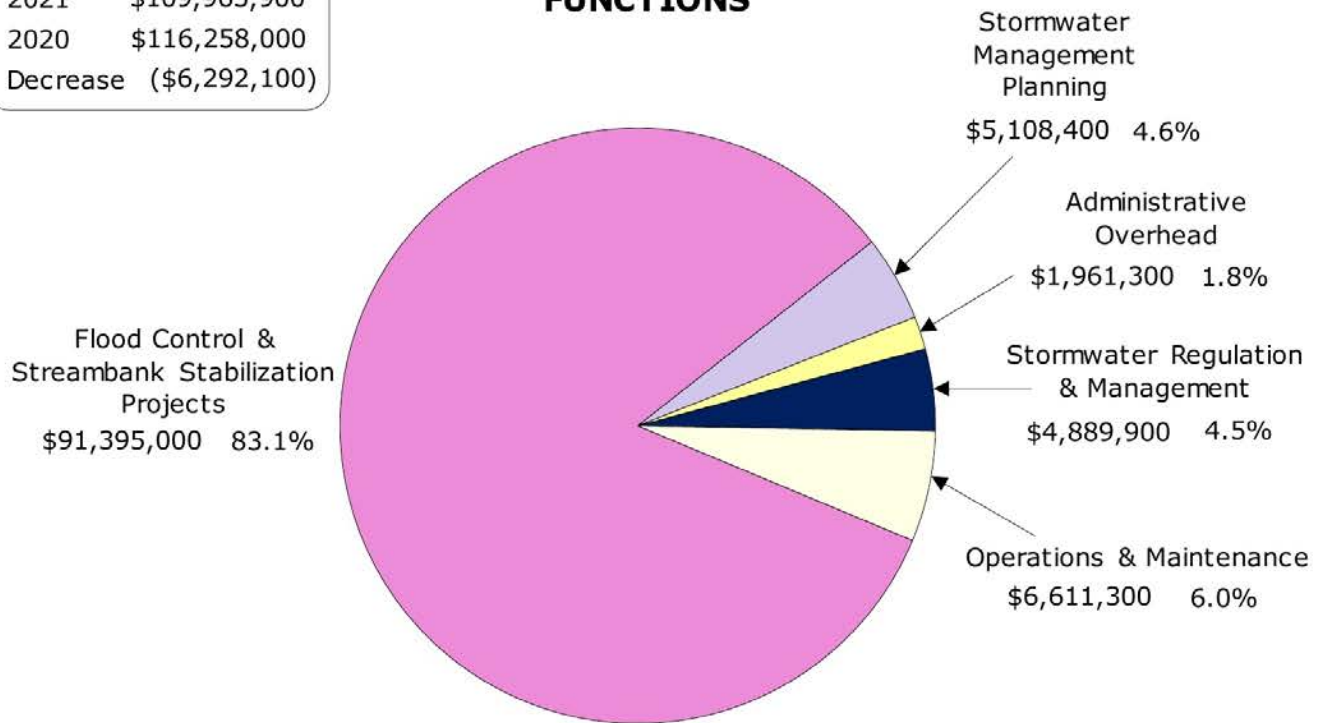


John P. Murray
Director of Maintenance & Operations

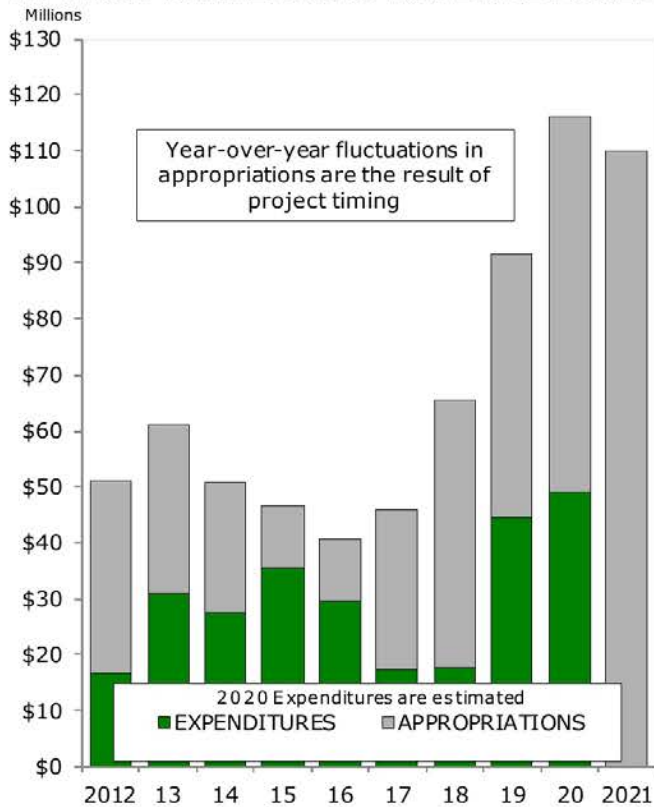
STORMWATER MANAGEMENT FUND

2021	\$109,965,900
2020	\$116,258,000
Decrease	(\$6,292,100)

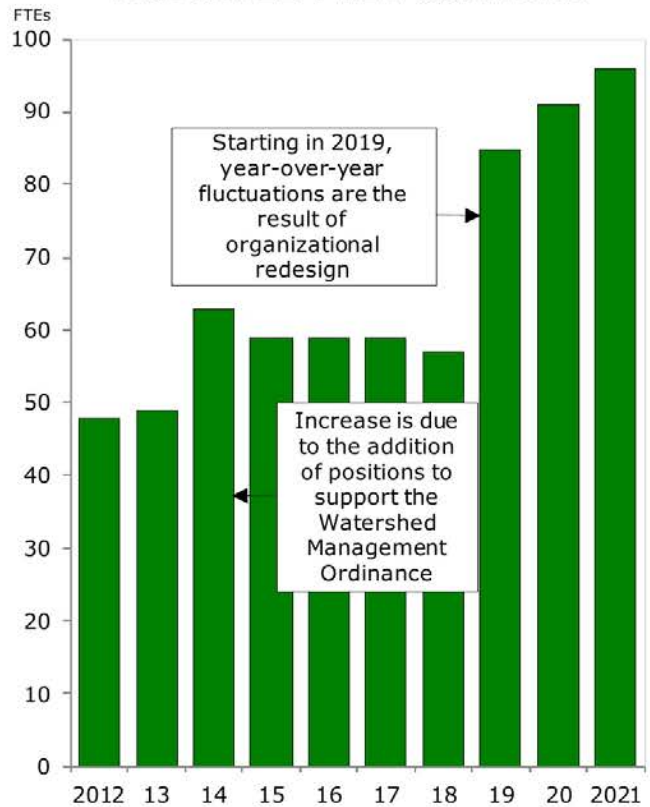
FUNCTIONS



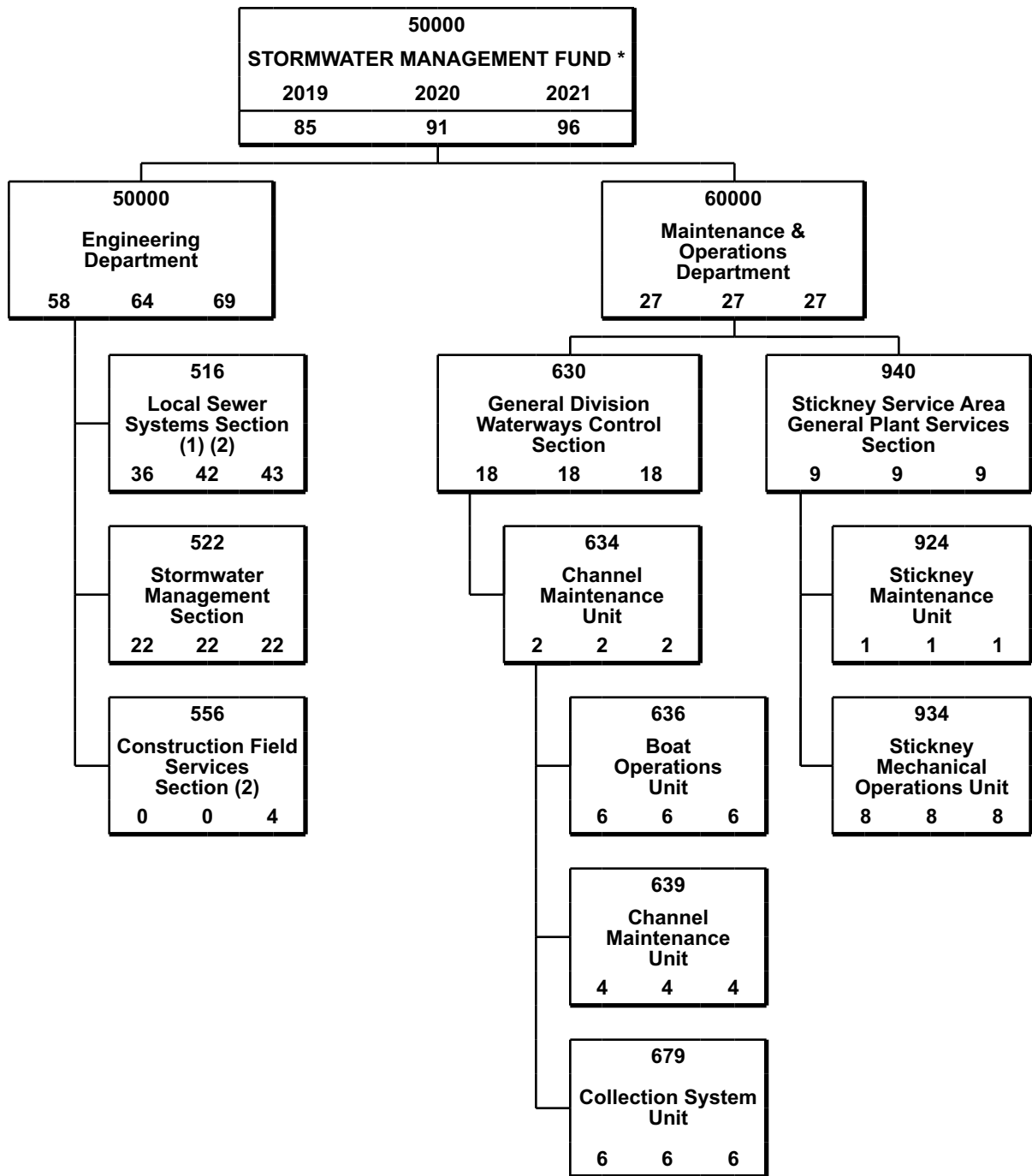
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



STORMWATER MANAGEMENT FUND



* Positions funded by the Stormwater Management Fund are operationally controlled by the Engineering and Maintenance & Operations Departments.

(1) Effective 01/01/19, 27 positions were transferred from the Engineering Department - Corporate Fund to the Stormwater Management Fund.

(2) Effective 01/01/21, six positions were transferred from the Engineering Department - Corporate Fund to the Stormwater Management Fund.

STORMWATER MANAGEMENT FUND

The mission of the Stormwater Management Fund is to protect the safety of Cook County's residents and minimize flooding damage by coordinating, planning, implementing, financing, and operating regional stormwater management projects and to develop and enforce reasonable rules with respect to watershed development.

Fund Summary

The Stormwater Management Fund consolidates the stormwater management activities of the Engineering and Maintenance & Operations Departments and supports the activities outlined in the Cook County Stormwater Management Plan, which serves as a framework for the District's countywide Stormwater Management Program. Under this program, the District has completed Detailed Watershed Plans (DWPs) for all six major watersheds in Cook County, initiated a Stormwater Management Capital Improvement Program, initiated a Small Streams Maintenance Program (SSMP), and adopted and implemented the Watershed Management Ordinance (WMO). Through a variety of engineered solutions, both green and gray, and flood-prone property acquisitions, the District's Stormwater Management Program addresses both regional and local flooding problems throughout Cook County. The District has made significant investments in developing over 170 capital stormwater projects since it assumed the authority for stormwater management in 2004. The implementation of these projects, which range in both size and scope, provide flood protection for thousands of homes, businesses, and critical infrastructure. The Stormwater Management Fund supports the work of the Local Sewer Systems Section (LSSS), which is responsible for the implementation and enforcement of the WMO. The WMO regulates developments throughout Cook County, sewer construction within the District's service area, and requires compliance with the Infiltration/Inflow Control Program. Information on the Stormwater Management Program and WMO can be found at www.mwrd.org.

Summary of 2020 Accomplishments

May of 2020 marked the third consecutive May on record with the greatest total rainfall in the region. There have not been any significant claims for delays on District's Stormwater Management contracts due to these rainfall events; however, the increasing rainfall patterns have reinforced the need for the District to assist local communities in their efforts to address the impacts of flooding. To accomplish this, the District called for Green Infrastructure project submittals in a solicitation for District assistance. The District also called for Local Stormwater and Flood-Prone Property Acquisitions projects. Additional accomplishments in 2020 include:

- Completed construction of a capital improvement project to stabilize Addison Creek streambanks;
- Entered into Intergovernmental Agreements (IGA) for acquisition of 52 flood-prone properties within the City of Des Plaines, Northlake, Palos Hills, Prospect Heights, and in unincorporated Palatine Township;
- Required construction of 253 million gallons of volume control, detention, and floodplain compensatory storage, in conjunction with development throughout Cook County, as a result of WMO enforcement;
- Amended the WMO on May 7, 2020, to allow the regional stormwater detention and volume control trading program pilot study in the Lower Des Plaines River and Little Calumet River watershed planning areas to commence. References to current rainfall data were also updated;
- Conducted technical advisory committee meetings to present changes to the WMO and Technical Guidance Manual (TGM) when updates were applicable;
- Updated the TGM based on the WMO Amendment;
- Provided Global Positioning System (GPS) units to local municipalities as a resource to begin mapping their sewer systems in a Geographic Information System or to improve their existing sewer system map;
- Began receiving permit submittals electronically as well as electronic payments as a result of the COVID-19 pandemic.

Budget Highlights

The 2021 appropriation for the Stormwater Management Fund is \$109,965,900, a decrease of \$6,292,100, or 5.4 percent, from 2020. The staffing level has increased from 91 to 96 positions, which includes the transfer in of six Corporate Fund LSSS positions and the drop of one Administrative Clerk. Two of the transferred positions will assist with the administration of the WMO. The remaining four transferred positions will be responsible for the construction oversight of Stormwater Management Program's capital improvement projects. The increase in operational costs due to these position changes will be partially offset by revenues generated from WMO permit review fees.

Significant features of the 2021 Budget are:

- Prioritize and implement new Green Infrastructure projects from 2020 solicitations;
- Continue engineering design for Regional and Local stormwater projects and begin construction of projects that have completed final design and have been approved by the Board of Commissioners;
- Identify partnership opportunities to assist in implementing local drainage improvements and acquisition of flood-prone properties;

- Initiate six stormwater master plans to define stormwater needs, anticipated projects, and potential costs of those projects to address flooding issues in each of the study areas;
- Award the Addison Creek Channel Improvements projects in Bellwood, Broadview, Melrose Park, Northlake, Stone Park, and Westchester, the Midlothian Creek Diversion Channel project in Robbins, and the Calumet Union Drainage Ditch Streambank Stabilization project in Markham;
- Continue the SSMP to reduce flooding in urbanized areas;
- Continue to expand the online content related to the Chicago Area Waterway System and the SSMP to provide educational materials, as well as general information regarding the management of the system before, during, and after a storm.

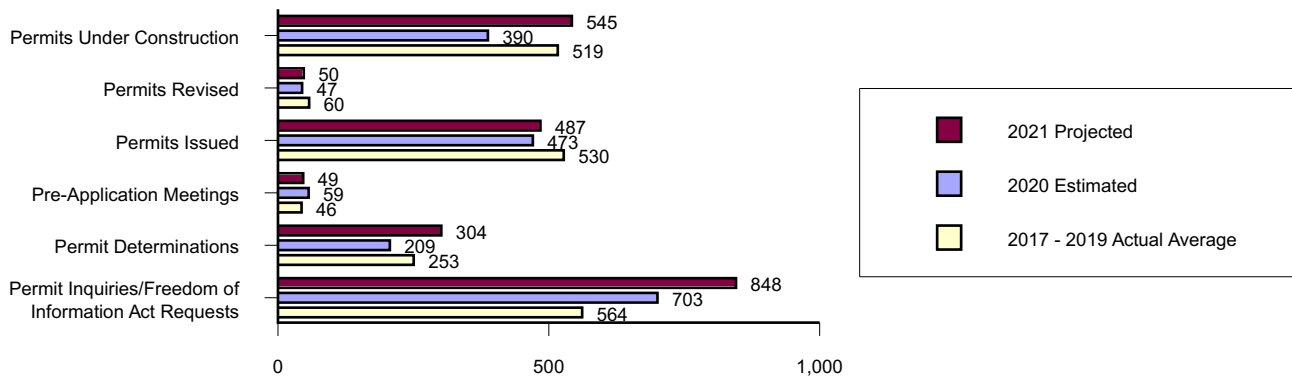
2021 Initiatives in Support of the Strategic Business Plan Include the Following:

• **Add Value**

The Stormwater Management Capital Improvement Program utilizes a cost-benefit analysis developed for the recommended alternatives in the DWPs as the primary basis for prioritizing individual projects. Under the Green Infrastructure, Phase II, and flood-prone property acquisition programs, projects are prioritized based on the number of structures benefited, the cost per structure, and other factors.

The WMO requires the timely review of permit applications. In 2020, the average review time for an initial submittal was 14 working days and the average re-submittal response time was six working days. As illustrated in the Permit Activity exhibit, LSSS staff will issue an estimated 487 total permits in 2021, with an estimated average time from initial submittal to permit issuance of 44 working days. The number of total permits issued averaged 530 annually from 2017-2019.

Permit Activity



After permit issuance and once construction is in progress, LSSS staff conduct site inspections to verify the work is in compliance with the approved permit. The total number of permits under construction is shown on the Permit Activity exhibit. LSSS staff meet with engineers and contractors on-site to address unknown field conditions with acceptable design revisions to minimize project delays. The total number of permit revisions is shown on the Permit Activity exhibit. LSSS staff issue and process an average of six permit violations annually.

• **Excellence**

The Engineering Department recently completed five Stormwater Master Plan pilot studies to identify solutions to flooding of structures experienced in storms up to and including the 100-year design event. The findings of these studies revealed that exorbitant investments by the District and the local communities would be necessary to protect structures from flooding through traditional gray or blended green and gray infrastructure. As the District moves forward with its stormwater master planning effort for the entire county, the lessons learned in the pilot studies will be applied, and an adaptive approach will be utilized to find ways to address community issues that considers local communities’ capacity and identifies potential partnership opportunities to help fund multi-objective solutions centered on stormwater management. The District has hired two engineering consultant firms to provide program management services, one for the combined sewer areas and another for separate sewer areas. They have prepared individual study profiles for the next six Master Plans and are making assessments for future Master Plans to ultimately create a vision to address flooding throughout Cook County. Planning, design, permit review, and permit approval are conducted with the goal of excellence in mind. Work is completed timely, accurately, and with the consideration given to the service to our regulated community.

On May 7, 2020, the Board of Commissioners amended the WMO to initiate an innovative pilot program under which applicants may meet requirements for stormwater detention and/or volume control by using offsite facilities. While the WMO has allowed for use of offsite detention and volume control facilities since its inception, this option was only available when an applicant could

demonstrate that they have a site limitation or constraint that prevents them from providing the required detention and volume control on their development site. During the pilot study period, a portion of the required stormwater detention and volume control for sites in the Lower Des Plaines River and Little Calumet River watershed planning areas may be located offsite. The LSSS will monitor the level of interest in this option as well as the feasibility of meeting the requirements of the program during the pilot study period.

- **Leading Partnerships**

The District has initiated a Green Infrastructure Program that facilitates the planning, design, and construction of multiple Green Infrastructure projects throughout Cook County, in partnership with a variety of stakeholders. Annually, the District solicits Green Infrastructure partnership opportunities through a call for projects from local municipalities and agencies in Cook County. Currently, the District is partnered with the City of Chicago Department of Water Management and the Chicago Public Schools to design and construct large Green Infrastructure projects at 34 Chicago Public School campuses. The District has partnered with other local municipalities to design and construct over 140 regional and local stormwater management projects.

While design and construction of ongoing District projects were not directly impacted by the COVID-19 pandemic, some minor delays in contract advertisement and award were encountered related to the operational adjustment to telecommuting. The impacts of the COVID-19 pandemic on our partner agencies contributed to the cancellation of projects previously approved for funding assistance from the District. In 2020, the following partner-led projects were canceled at the request of the local jurisdiction: Clarkson Park Green Infrastructure Improvements in Northfield, NSA, Evanston/Skokie School District 65 Green Infrastructure at Orrington Elementary School, NSA, Permeable Pavement Installation at Poplar Creek Public Library in Streamwood, NSA, Permeable Pavement and Rain Gardens in Posen, CSA, Green Infrastructure in Calumet City, CSA, Parking Lot Improvements Project in Evanston, NSA, and Cornell Avenue Green Infrastructure Project in Dolton, CSA.

In 2020, projects under construction in partnership with municipalities included: Addison Creek Reservoir, Addison Creek Streambank Stabilization, Buffalo Creek Reservoir Expansion, Lyons and McCook Levee Improvements Projects, Melvina Ditch Streambank Stabilization, Natalie Creek Flood Control, Green Alley projects in Cicero, Harwood Heights, Lyons, and Maywood, Green Infrastructure Retrofits at Bartlett, Northlake, Thornton School District 154, and Union Ridge School District 86, and New Storm Sewers in Mount Prospect and Lincolnwood. The District developed the WMO and TGM in partnership with all stakeholders and remains committed to them and their concerns. LSSS staff respond to thousands of telephone and written inquiries from consulting engineers, developers, citizens, and public officials regarding the WMO.

- **Information Technology**

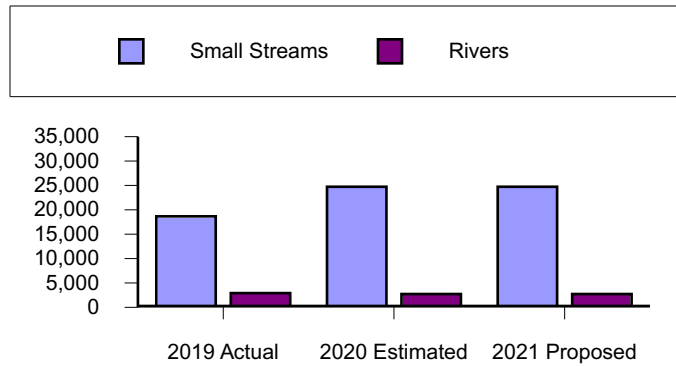
In 2017, the District purchased six GPS units to provide sewer system owners with resources to begin mapping their sewer systems in a Geographic Information System or to improve their existing sewer system maps. In return, sewer system owners provide the District with their sanitary, storm, and combined sewer data. To obtain GPS equipment and related software at no cost, sewer system owners must enter into an IGA with the District. As of July 2020, nine municipalities have entered into an IGA with the District to utilize the GPS units.

In 2017, the LSSS began collaborating with the Information Technology Department to develop a new permit database. The existing database has been in use since the early 1990's and utilizes software that is no longer supported. The new database is being developed in-house and will allow applicants to complete fields in permit application forms and submit forms with electronic signatures through a web-based interface. The database will feature tools to facilitate reporting as well as researching permit information. The transition of LSSS operations to the new database will be completed in 2021.

SMALL STREAMS MAINTENANCE PROGRAM

Through the management of the SSMP, the Maintenance & Operations Department works to reduce flooding in urbanized areas. Cook County has little elevation fluctuation; therefore, its streams tend to move slowly and are naturally prone to flooding. Many developed areas were originally uninhabited muddy marshes with meandering streams that often overtopped their banks. The streams that flow through the neighborhoods of Cook County are more than just a scenic part of the landscape or a habitat for wildlife. They serve the vital function of draining stormwater and preventing flooding. In order to function properly, the streams must be maintained. The SSMP's top priorities are removing blockages such as log jams, beaver dams, and other material and debris from the streams and preventing future blockages by removing dead and unhealthy trees and invasive species, such as buckthorn and honeysuckle, which choke out native vegetation from the streambanks.

Cubic Yards of Debris Removed from Small Streams and Rivers in Cook County



CAPITAL IMPROVEMENT PROGRAM

The focus of many of the Stormwater Capital Improvement Program projects is on regional waterways in highly urbanized areas. During the design of these projects, the District focuses on utilizing natural methods for addressing streambank erosion, including the use of biostabilization measures, such as vegetated geogrids, geocells, turf reinforcing mats, and native vegetation, wherever practical.

The Board of Commissioners prioritizes potential projects arising from the DWPs on a countywide basis. Two categories have been established for DWP projects. The first category is streambank stabilization, which involves addressing critical active streambank erosion threatening public safety, structures, and/or infrastructure. The second category is flood control, which addresses regional overbank flooding.

A map of streambank stabilization project locations is provided on page 504, while maps of flood control projects including reservoirs, Green Infrastructure, and other projects the District is implementing with local municipalities can be found on pages 505 - 508.

FLOOD-PRONE PROPERTY ACQUISITION PROGRAM

The District’s statutory authority for Stormwater Management in Cook County (70 ILCS 2605/7h) was amended in 2014 to allow for the acquisition of flood-prone properties. Subsequent to amending the Cook County Stormwater Management Plan to be consistent with Public Act 98-0652, the District’s Board of Commissioners adopted a policy on selection and prioritization of projects for acquiring flood-prone property, which is comprised of three distinct components, as follows:

- Local Sponsorship Assistance Program: The District’s top priority will be to facilitate the Illinois Emergency Management Agency’s federally funded program by assisting local sponsor communities in providing their share of the cost for property acquisition;
- District Initiated Program: The cost of a property acquisition alternative will be estimated for any approved project and compared to the estimated cost of the structural project determined through a preliminary engineering analysis. Should the cost of the property acquisition alternative be less than the structural project, and the benefits at least equivalent, the acquisition alternative will be pursued in lieu of the structural project;
- Local Government Application Program: The District will consider applications directly from local governments requesting property acquisition of specific flood-prone structures.

The District solicited applications from municipalities and townships for assistance with the acquisition of flood-prone structures located throughout Cook County and entered into IGAs to partner with five communities to acquire 52 flood-prone residential structures. These acquisitions will be completed in 2021 and 2022. As a result of the 2020 application process, additional agreements will be negotiated to assist local communities with flood-prone property acquisitions in the future.

Stormwater Management Fund Program

Awards in 2021

Project Name	Project Number	Est. Construction Cost	2021 Appropriation	Duration (days)	Est. Award Date
Streambank Stabilization Project along Calumet Union Drainage Ditch, CSA	10-882-BF	\$ 2,476	\$ 2,401	1,260	Jan 2021
Demolition for the Addison Creek Channel Improvements, SSA	11-187-AF	505	505	186	Jan 2021
Stormwater Storage Areas in Nilcs, NSA	18-IGA-31	2,000	2,000	66	Jan 2021
Diversion Channel for Flood Control Project on Midlothian Creek in Robbins, CSA	14-253-AF	7,981	4,800	479	Feb 2021
South Homan Green Alley in Chicago, SSA	19-IGA-20	155	155	59	Feb 2021
Winchester Avenue Green Infrastructure Project in Calumet Park, CSA	18-IGA-02	360	360	89	Mar 2021
Lake Katherine Commuter Parking Lot in Palos Heights, CSA	18-IGA-14	184	184	89	Mar 2021
Wetland and Park Storage Projects in Winnetka, NSA	18-IGA-24	500	500	304	Mar 2021
Storm Sewers and Outfall in Forest View, SSA	18-IGA-28	1,000	1,000	179	Mar 2021
Storm Sewers and Outfall to Flagg Creek in Western Springs, SSA	18-IGA-32	753	753	179	Mar 2021
Green Streets Project in Ford Heights, CSA	19-IGA-12	357	357	59	Mar 2021
119th Place Bioswale and Permeable Alley in Blue Island, CSA	20-IGA-03	250	250	107	Mar 2021
Cottage Park Bioswales and Native Plantings in Burnham, CSA	20-IGA-05	50	50	80	Mar 2021
Metra Station Permeable Paver Parking Lot in Chicago Ridge, CSA	20-IGA-07	228	228	41	Mar 2021
Green Alleys Project in Harwood Heights, NSA	20-IGA-11	353	353	89	Mar 2021
Flood Control Project on 1st Avenue from Roosevelt Road to Cermak Road, SSA	14-111-5F	5,200	5,200	226	Apr 2021
Flood Control Project on Midlothian Creek in Robbins, CSA	14-253-5F	11,000	4,270	503	Apr 2021
Calumet River Gateway Garden in Chicago, CSA	20-IGA-06	539	539	106	Apr 2021
Forest Preserves Green Infrastructure Parking Lot Retrofit in Unincorporated Proviso Township, SSA	20-IGA-10	203	203	115	Apr 2021
Flood Control in the vicinity of 131st Street and Cypress Lane in Palos Heights, CSA	14-259-5F	134	134	209	May 2021
Permeable Parking Lot and Green Infrastructure Demonstration Project in Midlothian, CSA	18-IGA-12	84	84	89	May 2021
Barbara Vick Outdoor Classrooms in Chicago, CSA	19-IGA-03	100	100	59	May 2021
* Addison Creek Channel Improvements, SWRP	11-187-3F	21,350	1,323	683	Jun 2021
Flood Control Project in the Worth Woods Subdivision in Worth, CSA	14-256-5F	2,500	1,600	340	Jun 2021
Streambank Stabilization Project on Tinley Creek, CSA	19-IGA-22	3,806	695	1,387	Jul 2021
Public Library Green Parking Lot in Park Ridge, NSA	19-IGA-17	650	650	59	Aug 2021
Culvert Upsizing and Channel Improvements on Boca Rio Ditch in Oak Forest, CSA	18-IGA-26	519	519	133	Sep 2021
Flood Control Project for Deer Creek, CSA	10-884-BF	6,500	100	677	Oct 2021
Total 2021 Awards		\$ 69,736	\$ 29,313		

Projects Under Construction

Project Name	Project Number	Est. Construction Cost	2021 Appropriation	Duration (days)	Award Date
Installation of Green Infrastructure at Chicago Public Schools, Various Locations	15-IGA-20	\$ 16,000	\$ 4,584	2,299	Sep 2016
* Construction of a Levee along Thorn Creek at Arquilla Park in Glenwood, CSA	15-IGA-14	387	387	2145	Nov 2016
Flood Control Project on Natalie Creek in Oak Forest and Midlothian, CSA	14-252-5F	7,738	1,101	1,025	Sep 2018
Groveland Avenue Levee Improvements in Riverside, SSA	18-IGA-20	2,506	1,006	1,499	Dec 2018
Pilot Study for Investigating Technology to Address Basement Backups, CSA	16-IGA-20	400	400	918	Jun 2019
Streambank Stabilization Project along Midlothian Creek in Tinley Park, CSA	19-IGA-21	867	309	1,303	Mar 2020
Streambank Stabilization Project on Melvina Ditch in Oak Lawn and Chicago Ridge, CSA	13-248-5F	9,847	8,847	531	Apr 2020
Storm Sewers Connection to Existing Des Plaines River Outfall in Forest Park, SSA	18-IGA-21	1,955	978	304	Jun 2020
Expansion of Existing Detention Basin in Orland Park, CSA	18-IGA-33	558	58	223	Sep 2020
Public Works Facility Demonstration Rain Garden in Oak Park, SSA	19-IGA-11	20	20	269	Sep 2020
Permeable Parking and Bioswale at Liberty Green Annex in Berwyn, SSA	20-IGA-02	85	85	196	Sep 2020
Garfield Park Community Eco Orchard in Chicago, SSA	18-IGA-05	500	500	299	Oct 2020
Washington Street Green Infrastructure Parking Lot Improvements in Lansing, CSA	19-IGA-13	250	250	240	Oct 2020
Green Alley Improvements Project in Oak Park, SSA	19-IGA-14	475	475	239	Oct 2020
Addison Green Alley in Chicago, SSA	19-IGA-18	150	150	240	Oct 2020
Bioswale and Bike Path Replacement in Bartlett, NSA	20-IGA-01	125	50	240	Oct 2020
Green Alleys Water Management Project in Lyons, SSA	20-IGA-12	500	500	209	Oct 2020
Acquisition of Flood-Prone Properties in Des Plaines, Phase III, NSA	20-IGA-22	800	800	728	Oct 2020
Green Alley Program in Skokie, NSA	20-IGA-18	190	190	186	Nov 2020
Flood Control Project in the vicinity of 135th Street and Central Avenue in Crestwood, CSA	14-258-5F	9,300	9,300	302	Dec 2020
South Laflin Green Alley in Chicago, SSA	19-IGA-19	102	102	210	Dec 2020
Total Projects Under Construction		\$ 52,754	\$ 30,091		

Projects Under Development

Project Name	Project Number	Est. Construction Cost	2021 Appropriation	Duration (days)	Est. Award Date
Flood Control Project on Willow Road at McDonald Creek Tributary A in Prospect Heights, NSA	20-IGA-23	\$ 1,800	\$ —	318	Jan 2022
Flood Control Project on Farmers Creek, NSA	12-056-AF	1,000	—	253	Mar 2022
Flood Control Project on Prairie Creek, NSA	12-056-BF	13,100	—	713	Mar 2022
Flood Control Project on the West Fork of the North Branch of the Chicago River, NSA	16-IGA-18	6,600	—	478	Apr 2022
Flood Control Project on Central Road from Des Plaines River to Greenwood Road, NSA	14-065-5F	12,000	—	662	Jul 2022
Flood Control Project for the Washington Street Area in Blue Island, CSA	14-260-5F	5,700	—	665	Jul 2022
Flood Control Project along Plainfield Road in Countryside, La Grange, McCook, and Lyons Township, SSA	14-112-5F	17,000	—	669	Aug 2022
Flood Control Project on Calumet-Sag Tributary C in Bremen Township and Midlothian, CSA	14-257-5F	3,600	—	305	Sep 2022
Total Future Awards		<u>\$ 60,800</u>			
Cumulative Projects Under Construction, 2021 Awards, and Future Awards		\$ 183,290			

* This project is funded by the Capital Improvements Bond Fund and the Stormwater Management Fund.

Refer to Section V Capital Budget for more information about Stormwater Management projects funded by alternative bonds.

Note: All cost figures are in thousands of dollars; inflation factor is 0 percent.

The Stormwater Management local cost-sharing programs for Green Infrastructure projects and stormwater projects, along with flood-prone property acquisitions and projects that are in the preliminary stages of design, will continue to be a priority for the District in addressing flooding due to increased intense rain events that overwhelm current infrastructure throughout Cook County. The table below provides planned expenditures for the fiscal years 2022-2025 not included in the detailed list of Projects Under Development presented above.

2022-2025 Projects Under Development

Projects	2022	2023	2024	2025	Total 2022-2025
Green Infrastructure Projects Intergovernmental Agreements	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 20,000
Local Stormwater Projects Intergovernmental Agreements	5,000	5,000	5,000	5,000	20,000
Flood-Prone Property Acquisitions	5,000	5,000	5,000	5,000	20,000
Future Stormwater Projects (projects currently under preliminary design)	—	5,000	5,000	20,000	30,000
Anticipated District Stormwater Projects from Master Planning	—	—	5,000	15,000	20,000
Total	\$ 15,000	\$ 20,000	\$ 25,000	\$ 50,000	\$ 110,000

Note: All cost figures are in thousands of dollars; inflation factor is 0 percent.

CAPITAL PROJECTS LISTED BY SERVICE AREA - STORMWATER MANAGEMENT FUND

The following is a list of stormwater, pay-as-you-go capital projects within the District’s three major service areas. They are presented by their association with a water reclamation plant (WRP) and by their completion status: projects under construction, for 2021 award, or under development.

**STICKNEY
SERVICE
AREA (SSA)**



Stickney Water Reclamation Plant (SWRP)

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects for 2021 Award			
11-187-3F	* Addison Creek Channel Improvements, SWRP		\$ 21,350,000
11-187-AF	Demolition for the Addison Creek Channel Improvements, SSA		505,000
14-111-5F	Flood Control Project on 1st Avenue from Roosevelt Road to Cermak Road, SSA		5,200,000
18-IGA-28	Storm Sewers and Outfall in Forest View, SSA		1,000,000
18-IGA-32	Storm Sewers and Outfall to Flag Creek in Western Springs, SSA		752,937
19-IGA-20	South Homan Green Alley in Chicago, SSA		155,000
20-IGA-10	Forest Preserves Green Infrastructure Parking Lot Retrofit in Unincorporated Proviso Township, SSA		203,107
	Total		\$ 29,166,044
Projects Under Construction			
15-IGA-20	Installation of Green Infrastructure at Chicago Public Schools, Various Locations	12/22	\$ 16,000,000
18-IGA-05	Garfield Park Community Eco Orchard in Chicago, SSA	07/21	500,000
18-IGA-20	Groveland Avenue Levee Improvements in Riverside, SSA	01/23	2,506,028
18-IGA-21	Storm Sewers Connection to Existing Des Plaines River Outfall in Forest Park, SSA	04/21	1,955,206
19-IGA-11	Public Works Facility Demonstration Rain Garden in Oak Park, SSA	06/21	20,000
19-IGA-14	Green Alley Improvements Project in Oak Park, SSA	06/21	475,000
19-IGA-18	Addison Green Alley in Chicago, SSA	06/21	150,000
19-IGA-19	South Laflin Green Alley in Chicago, SSA	07/21	101,500
20-IGA-02	Permeable Parking and Bioswale at Liberty Green Annex in Berwyn, SSA	04/21	85,000
20-IGA-12	Green Alleys Water Management Project in Lyons, SSA	05/21	500,000
	Total		\$ 22,292,734
Projects Under Development			
14-112-5F	Flood Control Project along Plainfield Road in Countryside, La Grange, McCook, and Lyons Township, SSA		\$ 17,000,000
	Total		\$ 17,000,000
	Stickney Service Area Grand Total		\$ 68,458,778

**NORTH
SERVICE
AREA (NSA)**



Terrence J. O'Brien Water Reclamation Plant (OWRP)

Projects for 2021 Award

18-IGA-24	Wetland and Park Storage Projects in Winnetka, NSA		\$	500,000
18-IGA-31	Stormwater Storage Areas in Niles, NSA			2,000,000
19-IGA-17	Public Library Green Parking Lot in Park Ridge, NSA			650,000
20-IGA-11	Green Alleys Project in Harwood Heights, NSA			353,203
			Total	\$ 3,503,203

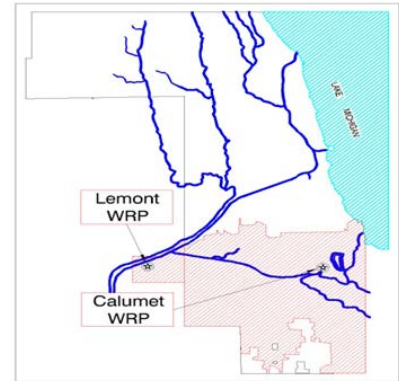
Projects Under Construction

20-IGA-01	Bioswale and Bike Path Replacement in Bartlett, NSA	06/21	\$	125,000
20-IGA-18	Green Alley Program in Skokie, NSA	05/21		190,000
20-IGA-22	Acquisition of Flood-Prone Properties in Des Plaines, Phase III, NSA	10/22		800,000
			Total	\$ 1,115,000

Projects Under Development

12-056-AF	Flood Control Project on Farmers Creek, NSA		\$	1,000,000
12-056-BF	Flood Control Project on Prairie Creek, NSA			13,100,000
14-065-5F	Flood Control Project on Central Road from Des Plaines River to Greenwood Road, NSA			12,000,000
16-IGA-18	Flood Control Project on the West Fork of the North Branch of the Chicago River, NSA			6,600,000
20-IGA-23	Flood Control Project on Willow Road at McDonald Creek Tributary A in Prospect Heights, NSA			1,800,000
			Total	\$ 34,500,000
			North Service Area Grand Total	\$ 39,118,203

**CALUMET
SERVICE
AREA (CSA)**



Calumet Water Reclamation Plant (CWRP)

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects for 2021 Award			
10-882-BF	Streambank Stabilization Project along Calumet Union Drainage Ditch, CSA		\$ 2,475,513
10-884-BF	Flood Control Project for Deer Creek, CSA		6,500,000
14-253-5F	Flood Control Project on Midlothian Creek in Robbins, CSA		11,000,000
14-253-AF	Diversion Channel for Flood Control Project on Midlothian Creek in Robbins, CSA		7,981,087
14-256-5F	Flood Control Project in the Worth Woods Subdivision in Worth, CSA		2,500,000
14-259-5F	Flood Control in the vicinity of 131st Street and Cypress Lane in Palos Heights, CSA		134,000
18-IGA-02	Winchester Avenue Green Infrastructure Project in Calumet Park, CSA		360,000
18-IGA-12	Permeable Parking Lot and Green Infrastructure Demonstration Project in Midlothian, CSA		84,029
18-IGA-14	Lake Katherine Commuter Parking Lot in Palos Heights, CSA		184,000
18-IGA-26	Culvert Upsizing and Channel Improvements on Boca Rio Ditch in Oak Forest, CSA		519,300
19-IGA-03	Barbara Vick Outdoor Classrooms in Chicago, CSA		100,000
19-IGA-12	Green Streets Project in Ford Heights, CSA		356,500
19-IGA-22	Streambank Stabilization Project on Tinley Creek, CSA		3,806,000
20-IGA-03	119th Place Bioswale and Permeable Alley in Blue Island, CSA		250,000
20-IGA-05	Cottage Park Bioswales and Native Plantings in Burnham, CSA		50,000
20-IGA-06	Calumet River Gateway Garden in Chicago, CSA		538,764
20-IGA-07	Metra Station Permeable Paver Parking Lot in Chicago Ridge, CSA		227,847
		Total	\$ 37,067,040
Projects Under Construction			
13-248-5F	Streambank Stabilization Project on Melvina Ditch in Oak Lawn and Chicago Ridge, CSA	09/21	\$ 9,847,000
14-252-5F	Flood Control Project on Natalie Creek in Oak Forest and Midlothian, CSA	06/21	7,737,911
14-258-5F	Flood Control Project in the vicinity of 135th Street and Central Avenue in Crestwood, CSA	10/21	9,300,000
15-IGA-14 *	Construction of a Levee along Thorn Creek at Arquilla Park in Glenwood, CSA	09/22	387,000

Calumet Water Reclamation Plant (CWRP)

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects Under Construction (continued)			
16-IGA-20	Pilot Study for Investigating Technology to Address Basement Backups, CSA	12/21	\$ 400,000
18-IGA-33	Expansion of Existing Detention Basin in Orland Park, CSA	04/21	558,000
19-IGA-13	Washington Street Green Infrastructure Parking Lot Improvements in Lansing, CSA	05/21	250,000
19-IGA-21	Streambank Stabilization Project along Midlothian Creek in Tinley Park, CSA	09/23	866,500
Total			\$ 29,346,411
Projects Under Development			
14-257-5F	Flood Control Project on Calumet-Sag Tributary C in Bremen Township and Midlothian, CSA		\$ 3,600,000
14-260-5F	Flood Control Project for the Washington Street Area in Blue Island, CSA		5,700,000
Total			\$ 9,300,000
Calumet Service Area Grand Total			\$ 75,713,451
Capital Projects Grand Total - All Service Areas			\$ 183,290,432

* These projects are funded by the Capital Improvements Bond Fund and the Stormwater Management Fund.

Streambank Stabilization Project along Calumet Union Drainage Ditch, CSA

Project Number 10-882-BF

Service Area Calumet

Location Markham, IL

Engineering Consultant Michael Baker International, Inc.

Engineering Contractor To be determined

Estimated Construction Cost \$2,475,513

Contract Award Date January 2021

Substantial Completion Date June 2024

Project Description This project will stabilize approximately 3,559 linear feet of the Calumet Union Drainage Ditch, between Sunset and Central Park Avenues, in the City of Markham. The project will require one year of monitoring and maintenance after substantial completion.

Project Justification This project will protect 42 residential structures and infrastructure in imminent danger of failure from active streambank erosion and flooding.

Project Status Design



Flood Control Project for Deer Creek, CSA

Project Number	10-884-BF
Service Area	Calumet
Location	Ford Heights, IL
Engineering Consultant	Black & Veatch Corporation, Inc.
Engineering Contractor	To be determined
Estimated Construction Cost	\$6,500,000
Contract Award Date	October 2021
Substantial Completion Date	August 2023
Project Description	This project will reduce flooding damages by increasing channel conveyance and raising a berm for about 3,000 feet between U.S. Route 30 and Hammond Lane in the Village of Ford Heights. The project includes the construction of vegetated berm, stabilization of bank slopes, and placement of pools and rock riffles as well as diverse riparian plantings.
Project Justification	This project will help alleviate public health and safety concerns by reducing overbank flooding, which affects approximately 270 structures in the Village of Ford Heights.
Project Status	Negotiation / Evaluation



Addison Creek Reservoir, SSA

Project Number 11-186-3F

Service Area Stickney

Location Bellwood, IL

Engineering Consultant Christopher B. Burke Engineering, Ltd.

Engineering Contractor IHC Construction Companies, LLC

Estimated Construction Cost \$75,721,831



Contract Award Date January 2019

Substantial Completion Date May 2022

Project Description This project will create an approximately 600 acre-foot flood control reservoir in Bellwood just north of Washington Boulevard and east of Addison Creek. This project includes reservoir excavation and installation of necessary appurtenances for operation of the facility, such as control structure, inlet structure, spillway, piping, and a pump station.

Project Justification This project, along with the Addison Creek Channel Improvements project, will help alleviate public health and safety concerns by reducing overbank flooding to approximately 2,200 structures along Addison Creek from Northlake to Broadview. Approximately 1,700 of 2,200 benefiting structures will be removed from the floodplain. In addition to providing flood control benefits, this reservoir will serve as compensatory storage for the channel improvement project. The District will operate and maintain the control and inlet structures, spillway, piping and pump station, while the Village of Bellwood will maintain the grounds including landscaping, fencing, and access roadways. The impact of these operations on the District will be minor and are expected to result in redirecting manpower toward facility operations with no net change in total position costs, and with a negligible impact on the District's overall energy budget.

Project Status Construction

This project is funded under the Capital Improvements Bond Fund. See Section V Capital Budget for additional information.

Addison Creek Channel Improvements, SWRP

Project Number	11-187-3F
Service Area	Stickney
Location	Northlake, Melrose Park, Stone Park, Bellwood, Westchester, and Broadview, IL
Engineering Consultant	Hey & Associates, Inc.
Engineering Contractor	To be determined
Estimated Construction Cost	\$42,700,000
Contract Award Date	June 2021
Substantial Completion Date	May 2023
Project Description	This project will improve channel conveyance in Northlake, Melrose Park, Stone Park, Bellwood, Westchester, and Broadview. The project includes various types of channel improvements, such as open channel, gabions, sheet piles, riprap, and stream clearing.
Project Justification	This project, along with the Addison Creek Reservoir project, will help alleviate public health and safety concerns by reducing overbank flooding to approximately 2,200 structures along Addison Creek from Northlake to Broadview. The compensatory storage required for these channel improvements will be provided with the Addison Creek Reservoir project.
Project Status	Design



This project is partially funded under the Capital Improvements Bond Fund. See Section V Capital Budget for additional information (Capital Improvements Bond Fund = \$21,350,000; Stormwater Management Fund = \$21,350,000).

Demolition for the Addison Creek Channel Improvements, SSA

Project Number 11-187-AF

Service Area Stickney

Location Melrose Park, Northlake, Stone Park, and Bellwood, IL

Engineering Consultant Not Applicable

Engineering Contractor To be determined

Estimated Construction Cost \$505,000



Contract Award Date January 2021

Substantial Completion Date July 2021

Project Description This project will demolish 13 mobile home trailers and 15 residential homes for the Addison Creek Channel Improvement project.

Project Justification Mobile home trailers and residential homes were acquired by the District and are posing a safety risk to their respective communities by remaining abandon. There are 13 mobile home trailers in Melrose Park, one residential home in Northlake, 11 residential homes in Stone Park, and three residential homes in Bellwood.

Project Status Design

Lyons Levee Flood Control Improvements, SSA

Project Number 13-199-3F

Service Area Stickney

Location Lyons, IL

Engineering Consultant MC Consulting, Inc.

Engineering Contractor To be determined

Estimated Construction Cost \$2,358,335



Contract Award Date November 2020

Substantial Completion Date November 2021

Project Description The Lyons Levee is located on the east bank of the Des Plaines River and is approximately 4,000 feet long, beginning at Joliet Road at the upstream end and extending approximately 700 feet downstream of 47th Street. The scope of the project involves the restoration and improvement of the levee to a condition that will elevate the levee to modern design standards and flood protection.

Project Justification Safety/Regulatory. This project will provide protection against overtopping of the levee during a 100-year storm event. Overtopping has resulted in major flooding in 2013, impacting the Village of Forest View that is located east of the levee. Overtopping could also jeopardize the ComEd substation that is located east of Forest View and create the potential for power disruptions or failures at Midway Airport and the Stickney Water Reclamation Plant.

Project Status Construction

This project is funded under the Capital Improvements Bond Fund. See Section V Capital Budget for additional information.

Streambank Stabilization Project on Melvina Ditch in Oak Lawn and Chicago Ridge, CSA

Project Number	13-248-5F
Service Area	Calumet
Location	Oak Lawn and Chicago Ridge, IL
Engineering Consultant	MWH Americas, Inc.
Engineering Contractor	Rausch Infrastructure, LLC
Estimated Construction Cost	\$9,847,000
Contract Award Date	April 2020
Substantial Completion Date	September 2021
Project Description	This project consists of streambank stabilization along Melvina Ditch from 95th Street to 99th Street. This project is intended to address areas of critical erosion, which threaten structures. This project is located in the Cal-Sag Channel Watershed.
Project Justification	Capacity Needs, Economic Benefit, Safety/Regulatory, and Flood Control. The banks have deteriorated due to hydraulic erosion and slope failures, potentially compromising roadways and structures that are in the vicinity.
Project Status	Construction



Flood Control Project on 1st Avenue from Roosevelt Road to Cermak Road, SSA

Project Number 14-111-5F

Service Area Stickney

Location Unincorporated Cook County, IL

Engineering Consultant Ciorba Group, Inc.

Engineering Contractor To be determined

Estimated Construction Cost \$5,200,000



Contract Award Date April 2021

Substantial Completion Date November 2021

Project Description This project will increase the 1st Avenue drainage conveyance capacity by replacing existing storm sewer system with two parallel trunk sewers ranging in size from 18-inches to 48-inches on the east side and 18-inches to 36-inches on the west side. Multiple bioswales, in conjunction with the "daylighting" of lateral sewers and the installation of underdrains, will also be installed along Cook County Forest Preserve areas, east of 1st Avenue.

Project Justification The proposed improvements will address flooding along 1st Avenue between Roosevelt Road and Cermak Road, which impairs hospital and ambulance personnel access to the Loyola University Medical Center.

Project Status Design

Flood Control Project on Natalie Creek in Oak Forest and Midlothian, CSA

Project Number	14-252-5F
Service Area	Calumet
Location	Oak Forest and Midlothian, IL
Engineering Consultant	Burns & McDonnell Engineering Co., Inc.
Engineering Contractor	IHC Construction Companies, LLC
Estimated Construction Cost	\$7,737,911
Contract Award Date	September 2018
Substantial Completion Date	June 2021
Project Description	The scope of the project is to install flood control measures along Natalie Creek from 157th Street and Central Park in Oak Forest to 146th Street and Pulaski Road in Midlothian. This project is in the Little Calumet River Watershed.
Project Justification	The scope of this project is to address overbank flooding by upsizing restrictive culverts, widening the channel at several locations, and creating a new stormwater storage basin along Natalie Creek. The project increases the level of protection to existing residential and commercial structures and will provide flood reduction benefits for 237 structures.
Project Status	Construction



Flood Control Project on Midlothian Creek in Robbins, CSA

Project Number 14-253-5F

Service Area Calumet

Location Robbins, IL

Engineering Consultant Donohue & Associates, Inc.

Engineering Contractor To be determined

Estimated Construction Cost \$11,000,000



Contract Award Date April 2021

Substantial Completion Date August 2022

Project Description This two-phase project on Midlothian Creek in Robbins will include the construction of a diversion channel to the Calumet-Sag Channel, channel improvements on Midlothian Creek, and the construction of a naturalized detention area to resemble a park setting.

Project Justification The project will provide flood relief for an estimated 92 structures in Robbins.

Project Status Design

Diversion Channel for Flood Control Project on Midlothian Creek in Robbins, CSA

Project Number 14-253-AF

Service Area Calumet

Location Robbins, IL

Engineering Consultant Donohue & Associates, Inc.

Engineering Contractor To be determined

Estimated Construction Cost \$7,981,087

Contract Award Date February 2021

Substantial Completion Date June 2022

Project Description The diversion channel is the Phase I of the flood control project that will create a naturalized wetland detention along with channel improvements to resemble a park setting. This project is located in the Little Calumet River Watershed.

Project Justification The project will provide flood relief for an estimated 92 structures in Robbins.

Project Status Design



Flood Control Project in the Worth Woods Subdivision in Worth, CSA

Project Number 14-256-5F

Service Area Calumet

Location Worth, IL

Engineering Consultant Robinson Engineering, Ltd.

Engineering Contractor To be determined

Estimated Construction Cost \$2,500,000

Contract Award Date June 2021

Substantial Completion Date May 2022



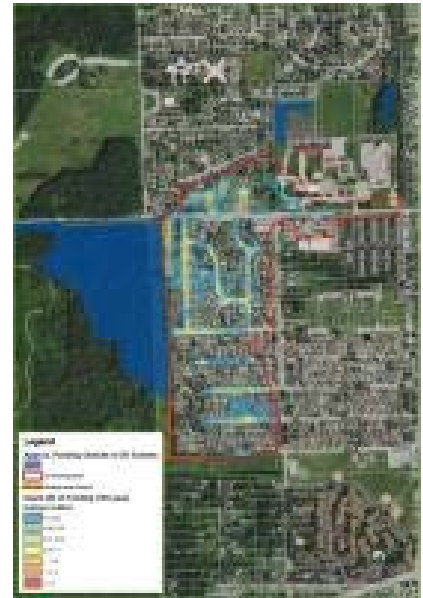
Project Description This project will construct a swale and a 24-inches to 72-inches storm sewer, in the vicinity of 112th Place and Beloit Avenue, with an outlet to Lucas-Berg Quarry in the Village of Worth. The project is located in the Calumet-Sag Channel Watershed. The Village will be responsible for ownership and maintenance of the improvements.

Project Justification This project will reduce flooding for an estimated 19 structures in the Village of Worth.

Project Status Design

Flood Control Project in the vicinity of 135th Street and Central Avenue in Crestwood, CSA

Project Number	14-258-5F
Service Area	Calumet
Location	Crestwood, IL
Engineering Consultant	HR Green, Inc.
Engineering Contractor	To be determined
Estimated Construction Cost	\$9,300,000
Contract Award Date	December 2020
Substantial Completion Date	October 2021
Project Description	The flood control project will involve the installation of a new storm sewer along 135th Street and existing storage and conveyance improvements for a detention basin on the Nathan Hale School property and Crestwood Drainage Ditch. This project is located in the Calumet-Sag Channel Watershed.
Project Justification	The project will provide flood relief for 82 structures with the potential to protect additional structures once local storm sewers are upsized.
Project Status	Design



Flood Control in the vicinity of 131st Street and Cypress Lane in Palos Heights, CSA

Project Number 14-259-5F

Service Area Calumet

Location Palos Heights, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$134,000

Contract Award Date May 2021

Substantial Completion Date December 2021



Project Description This project will involve the demolition of a property at 13040 South Cypress Lane and the installation of a swale at this location along with the installation of a new downstream storm sewer and outfall to Navajo Creek.

Project Justification This flood control project will protect three residential properties at risk from a 100-year storm event.

Project Status Design

Melvina Ditch Reservoir Improvements, SSA

Project Number	14-263-3F
Service Area	Stickney
Location	Stickney Township
Engineering Consultant	V3 Companies of Illinois, Ltd.
Engineering Contractor	F.H. Paschen, S.N. Nielsen and Associates, LLC
Estimated Construction Cost	\$15,648,348
Contract Award Date	November 2017
Substantial Completion Date	July 2021



Project Description This project consists of expanding the existing Melvina Ditch Reservoir by 195 acre-feet to increase its storage capacity (up to a 118 percent increase), modifying the pumping station to accommodate the reservoir expansion, and installing a new emergency overflow weir to reduce the likelihood of reservoir overtopping. Reservoir expansion will include work within the existing reservoir footprint on District property and includes additional private properties around the perimeter of the reservoir. Local stakeholders gave feedback and a reservoir expansion configuration was selected. Additional work includes the installation of an emergency overflow/high water bypass structure and three flap gates and the replacement of the existing elliptical culverts at the outlet of the Melvina Ditch Reservoir Pumping Station with dual box culverts and a stormwater chamber. Construction limits are immediately adjacent to the pumping station and in the 87th Street right-of-way as needed to install the culverts and to replace any disturbed utilities in conflict with the installation. Storm pumps will be removed and serviced and the impellers will be lengthened.

Project Justification This project will reduce flooding for an estimated 430 structures in the City of Burbank and the Village of Oak Lawn.

Project Status Construction

This project is funded under the Capital Improvements Bond Fund. See Section V Capital Budget for additional information.

Construction of a Levee along Thorn Creek at Arquilla Park in Glenwood, CSA

Project Number	15-IGA-14
Service Area	Calumet
Location	Glenwood, IL
Engineering Consultant	Not Applicable
Engineering Contractor	To be determined
Estimated Construction Cost	\$3,870,000
Contract Award Date	November 2016
Substantial Completion Date	September 2022
Project Description	This project will provide a levee at Arquilla Park to protect residential structures from overbank flooding. The Village of Glenwood is responsible for the design, construction, operation, and maintenance of this project.
Project Justification	The project will protect approximately 31 residential structures from overbank flooding along Thorn Creek.
Project Status	Cost Sharing Agreement



This project is partially funded under the Capital Improvements Bond Fund. See Section V Capital Budget for additional information (Capital Improvements Bond Fund = \$3,483,000; Stormwater Management Fund = \$387,000).

Installation of Green Infrastructure at Chicago Public Schools, Various Locations

Project Number 15-IGA-20

Service Area Calumet, North, and Stickney

Location All Service Areas

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$16,000,000



Contract Award Date September 2016

Substantial Completion Date December 2022

Project Description The District, the Chicago Department of Water Management, and the Chicago Public Schools are partnering to design and install playgrounds at various Chicago Elementary Schools utilizing Green Infrastructure. The projects will reduce flooding, reduce the load on the combined sewer system, and educate students and neighbors about Green Infrastructure techniques and purpose.

Project Justification The Chicago Public Schools Green Infrastructure project will reduce the current load to the combined sewer systems and alleviate flooding within the project areas.

Project Status Cost Sharing Agreement

Pilot Study for Investigating Technology to Address Basement Backups, CSA

Project Number 16-IGA-20

Service Area Calumet

Location Chicago, IL

Engineering Consultant City of Chicago

Engineering Contractor City of Chicago

Estimated Construction Cost \$400,000



Contract Award Date June 2019

Substantial Completion Date December 2021

Project Description The District and the City of Chicago, through its Departments of Water Management and Transportation, are partnering to conduct a pilot study to evaluate potential runoff reduction and flood protection alternatives. The City will draft the Intergovernmental Agreement.

Project Justification This is an Intergovernmental and Cost Sharing Agreement with the City of Chicago, which is responsible for design, construction, operation, and maintenance pertaining to this project. The District provides funding assistance. The results of the pilot study will provide valuable information for consideration in future efforts to address flooding in the region.

Project Status Design

Winchester Avenue Green Infrastructure Project in Calumet Park, CSA

Project Number 18-IGA-02

Service Area Calumet

Location Calumet Park, IL

Engineering Consultant Not Applicable

Engineering Contractor To be determined

Estimated Construction Cost \$360,000

Contract Award Date March 2021

Substantial Completion Date June 2021



Project Description The Village of Calumet Park will be installing a roadside bioswale and permeable pavers in the parking lane of Winchester Avenue for the public benefit of reducing flooding in the general area. The location is between 124th Street and 127th Street, between Lincoln Avenue and Winchester Avenue. The District will be providing reimbursement funding for up to \$360,000 of the estimated construction cost through an Intergovernmental Agreement. The Village of Calumet Park will be responsible for operations and maintenance.

Project Justification The Winchester Avenue Green Infrastructure project will reduce the current load to the combined sewer system and alleviate flooding within the project area.

Project Status Cost Sharing Agreement

Garfield Park Community Eco Orchard in Chicago, SSA

Project Number 18-IGA-05

Service Area Stickney

Location Chicago, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$500,000

Contract Award Date October 2020

Substantial Completion Date July 2021

Project Description The City of Chicago's project will construct food forests in the area of 5th Avenue between Mozart Avenue and Kedzie Avenue. The District will be providing reimbursement funding for up to 55.6 percent of the estimated \$900,000 construction cost through an Intergovernmental Agreement.

Project Justification Curb cuts and runnels will be included to route water to areas with native plantings to reduce the current load to the combined sewer system and to help alleviate flooding within the project area.

Project Status Cost Sharing Agreement



Permeable Parking Lot and Green Infrastructure Demonstration Project in Midlothian, CSA

Project Number 18-IGA-12

Service Area Calumet

Location Midlothian, IL

Engineering Consultant Not Applicable

Engineering Contractor To be determined

Estimated Construction Cost \$84,029

Contract Award Date May 2021

Substantial Completion Date August 2021

Project Description This project will install a permeable pavement parking lot, a bioswale, and a rain garden located at 147th Street and Keystone Avenue. The District will be providing reimbursement funding for up to 52.1 percent of the estimated \$161,173 construction cost through an Intergovernmental Agreement. The Village of Midlothian will be responsible for operations and maintenance.

Project Justification This project will reduce the current load to the combined sewer system and alleviate flooding within the project area.

Project Status Cost Sharing Agreement



Lake Katherine Commuter Parking Lot in Palos Heights, CSA

Project Number	18-IGA-14
Service Area	Calumet
Location	Palos Heights, IL
Engineering Consultant	Not Applicable
Engineering Contractor	To be determined
Estimated Construction Cost	\$184,000
Contract Award Date	March 2021
Substantial Completion Date	June 2021
Project Description	The City of Palos Heights will be installing a permeable parking lot along with rain gardens, bioswales, and a detention basin at Lake Katherine located at Harlem Avenue and College Drive (Illinois Route 83). The District will be providing reimbursement funding for up to 29.0 percent of the estimated \$634,000 construction cost through an Intergovernmental Agreement.
Project Justification	The parking lot and other Green Infrastructure will reduce the current load to the combined sewer system and alleviate flooding within the project area.
Project Status	Negotiation / Evaluation



Groveland Avenue Levee Improvements in Riverside, SSA

Project Number 18-IGA-20

Service Area Stickney

Location Riverside, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$2,506,028



Contract Award Date December 2018

Substantial Completion Date January 2023

Project Description The Groveland Avenue levee, located in the Village of Riverside (Village), will be improved by raising the levee with a sheet pile floodwall. A pumping station will be built to drain the land side of the levee. An adjacent street will be raised or protected by additional flood walls. The Village will enter into a Project Partnership Agreement with the Army Corps of Engineers as its local sponsor. The District will enter into an Intergovernmental Agreement with the Village to provide the non-federal share of the design and construction costs.

Project Justification This project increases the level of protection the levee provides to adjacent homes.

Project Status Cost Sharing Agreement

Storm Sewers Connection to Existing Des Plaines River Outfall in Forest Park, SSA

Project Number	18-IGA-21
Service Area	Stickney
Location	Forest Park, IL
Engineering Consultant	Not Applicable
Engineering Contractor	To be determined
Estimated Construction Cost	\$1,955,206
Contract Award Date	June 2020
Substantial Completion Date	April 2021
Project Description	The Village of Forest Park will construct and connect a storm sewer system to an existing outfall to the Des Plaines River. The proposed system will prevent surface water from entering into the current combined system and will reduce basement and overland flooding. The Village of Forest Park will own, maintain, and operate the subject improvements following the completion of this project.
Project Justification	This project will protect 273 structures from basement and overland flooding.
Project Status	Construction



Wetland and Park Storage Projects in Winnetka, NSA

Project Number 18-IGA-24

Service Area North

Location Winnetka, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$500,000

Contract Award Date March 2021

Substantial Completion Date December 2021

Project Description This project will provide a wetland and an underground stormwater storage area near the Skokie River and will be designed, constructed, operated, and maintained by the Village of Winnetka.

Project Justification The project will reduce flooding for an estimated 474 structures in the Village of Winnetka.

Project Status Negotiation / Evaluation



Culvert Upsizing and Channel Improvements on Boca Rio Ditch in Oak Forest, CSA

Project Number 18-IGA-26

Service Area Calumet

Location Oak Forest, IL

Engineering Consultant Not Applicable

Engineering Contractor To be determined

Estimated Construction Cost \$519,300

Contract Award Date September 2021

Substantial Completion Date February 2022

Project Description This project will replace existing deteriorated roadway culverts, upsize and install an 8-inches by 4-inches box culvert near 151st Street and Boca Rio Drive, install three sedimentation basins along Boca Rio Ditch south of 151st Street and install streambank stabilization improvements along Boca Rio Ditch north of 151st Street in Oak Forest.

Project Justification This project will reduce the risk of flooding for 28 residential structures and enhance water quality along Boca Rio Ditch.

Project Status Negotiation / Evaluation



Storm Sewers and Outfall in Forest View, SSA

Project Number 18-IGA-28

Service Area Stickney

Location Forest View, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$1,000,000



Contract Award Date March 2021

Substantial Completion Date August 2021

Project Description This project will construct storm sewers and outfall for a residential area in Forest View.

Project Justification This project will provide flood reduction benefits for an estimated 14 structures for a residential area in Forest View.

Project Status Negotiation / Evaluation

Stormwater Storage Areas in Niles, NSA

Project Number 18-IGA-31

Service Area North

Location Niles, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$2,000,000

Contract Award Date January 2021

Substantial Completion Date April 2021

Project Description The Village of Niles will construct two open water and one underground stormwater storage areas, near Greenwood Avenue to provide residential and commercial flood relief.

Project Justification This project will protect over 87 structures from a 100-year storm event.

Project Status Negotiation / Evaluation



Storm Sewers and Outfall to Flagg Creek in Western Springs, SSA

Project Number 18-IGA-32

Service Area Stickney

Location Western Springs, IL

Engineering Consultant Not Applicable

Engineering Contractor To be determined

Estimated Construction Cost \$752,937

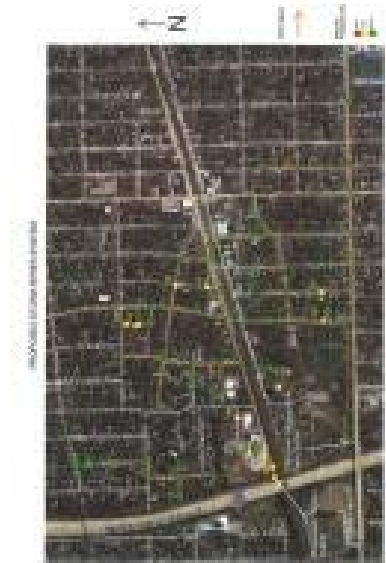
Contract Award Date March 2021

Substantial Completion Date August 2021

Project Description This project will construct a new storm sewer outfall to Flagg Creek located in/near Spring Rock Park just north of 47th Street and east of I-294 and was identified in the 2012 Sewer Overflow Long-Term Control Plan.

Project Justification This project will provide relief to 16 acres and 42 structures.

Project Status Negotiation / Evaluation



Expansion of Existing Detention Basin in Orland Park, CSA

Project Number 18-IGA-33

Service Area Calumet

Location Orland Park, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$558,000

Contract Award Date September 2020

Substantial Completion Date April 2021

Project Description This project will expand the Grasslands regional detention basin in the Village of Orland Park.

Project Justification This project will provide upstream storage and flood protection for the Grasslands Subdivision by reducing flooding for an estimated 30 structures in the Village of Orland Park.

Project Status Negotiation / Evaluation



Barbara Vick Outdoor Classrooms in Chicago, CSA

Project Number 19-IGA-03

Service Area Calumet

Location Chicago, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$100,000

Contract Award Date May 2021

Substantial Completion Date July 2021

Project Description Chicago Public Schools will construct outdoor classrooms and natural play areas at Barbara Vick Early Childhood and Family Center, including areas for sand, a train, dirt digging, gardening, gathering, messy materials, nature art, natural landscaping, and permeable play surfacing located at 2554 West 113th Street in Chicago. Chicago Public Schools will be responsible for operations and maintenance.

Project Justification The project will reduce the current load to the combined sewer system and help alleviate flooding within the project area.

Project Status Negotiation / Evaluation



Public Works Facility Demonstration Rain Garden in Oak Park, SSA

Project Number 19-IGA-11

Service Area Stickney

Location Oak Park, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$20,000

Contract Award Date September 2020

Substantial Completion Date June 2021

Project Description The District will design a demonstration rain garden for the Public Works Facility in Oak Park. The Village of Oak Park will be responsible for operations and maintenance.

Project Justification This project will reduce the current load to the combined sewer system and alleviate flooding within the project area.

Project Status Cost Sharing Agreement



Green Streets Project in Ford Heights, CSA

Project Number 19-IGA-12
Service Area Calumet
Location Ford Heights, IL
Engineering Consultant Not Applicable
Engineering Contractor Not Applicable
Estimated Construction Cost \$356,500



Contract Award Date March 2021
Substantial Completion Date May 2021

Project Description The Village of Ford Heights will construct roadside bioswales located in the street right-of-way along Cottage Grove Avenue, Park Avenue, Drexel Avenue, Werline Avenue, Seeley Avenue, bounded by 10th Place and 11th Place, and also south and west of Ellis Avenue and south of 11th Street. The Village will be responsible for operations and maintenance.

Project Justification The project will reduce the current load to the storm sewer system and help alleviate flooding within the project area.

Project Status Cost Sharing Agreement

Washington Street Green Infrastructure Parking Lot Improvements in Lansing, CSA

Project Number	19-IGA-13
Service Area	Calumet
Location	Lansing, IL
Engineering Consultant	Not Applicable
Engineering Contractor	Not Applicable
Estimated Construction Cost	\$250,000
Contract Award Date	October 2020
Substantial Completion Date	May 2021
Project Description	The Village of Lansing will construct bioswales within and next to a parking lot located at 3300 Washington Street at the intersection of Roy and Washington Streets. The Village will be responsible for operations and maintenance.
Project Justification	The project will reduce the current load to the combined sewer system and help alleviate flooding within the project area.
Project Status	Negotiation / Evaluation



Green Alley Improvements Project in Oak Park, SSA

Project Number 19-IGA-14

Service Area Stickney

Location Oak Park, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$475,000

Contract Award Date October 2020

Substantial Completion Date June 2021

Project Description The Village of Oak Park will construct permeable pavers in six alleys in various locations. The Village will be responsible for operations and maintenance.

Project Justification The project will reduce the current load to the combined sewer system and help alleviate flooding within the project area.

Project Status Negotiation / Evaluation



Public Library Green Parking Lot in Park Ridge, NSA

Project Number 19-IGA-17

Service Area North

Location Park Ridge, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$650,000

Contract Award Date August 2021

Substantial Completion Date October 2021

Project Description This project will construct a permeable paver parking lot and rain gardens located at 20 South Prospect Avenue in Park Ridge. Park Ridge will be responsible for operations and maintenance.

Project Justification The project will reduce the current load to the combined sewer system and help alleviate flooding within the project area.

Project Status Negotiation / Evaluation



Addison Green Alley in Chicago, SSA

Project Number 19-IGA-18

Service Area Stickney

Location Chicago, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$150,000

Contract Award Date October 2020

Substantial Completion Date June 2021

Project Description This project will construct a green alley near 1900 West Eddy in the 47th Ward in the City of Chicago.

Project Justification This project will reduce the current load to the combined sewer system and help alleviate flooding within the project area.

Project Status Negotiation / Evaluation



South Laflin Green Alley in Chicago, SSA

Project Number 19-IGA-19

Service Area Stickney

Location Chicago, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$101,500

Contract Award Date December 2020

Substantial Completion Date July 2021

Project Description This project will be constructing a green alley near 725 South Laflin in the 28th Ward in the City of Chicago.

Project Justification This project will reduce the current load to the combined sewer system and help alleviate flooding within the project area.

Project Status Negotiation / Evaluation



South Homan Green Alley in Chicago, SSA

Project Number 19-IGA-20

Service Area Stickney

Location Chicago, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$155,000

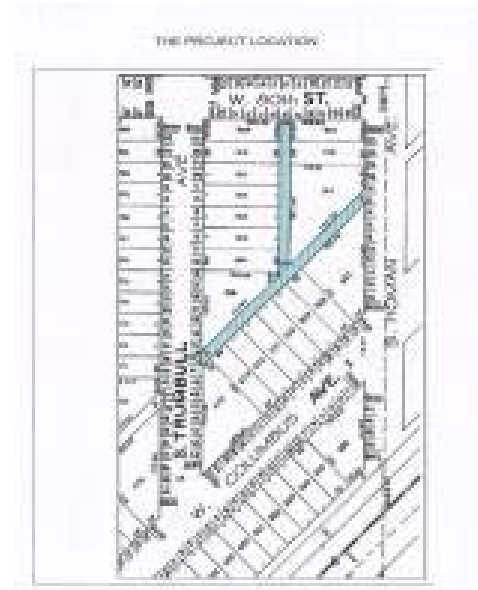
Contract Award Date February 2021

Substantial Completion Date April 2021

Project Description The City of Chicago will be replacing an alley with permeable pavement in the 18th Ward. The alley is bounded by West 80th Street, South Homan Avenue, West Columbus Avenue, and South Trumbull Avenue. The District will be providing reimbursement funding for up to \$155,000 of the estimated construction cost through an Intergovernmental Agreement. The City of Chicago will be responsible for operations and maintenance.

Project Justification The project will reduce the current load to the combined sewer system and help alleviate flooding within the project area.

Project Status Negotiation / Evaluation



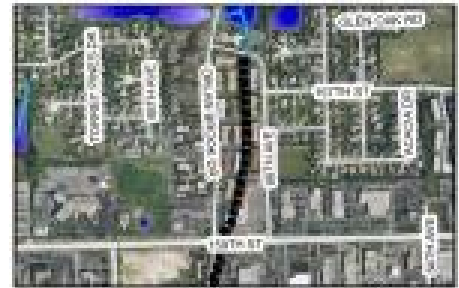
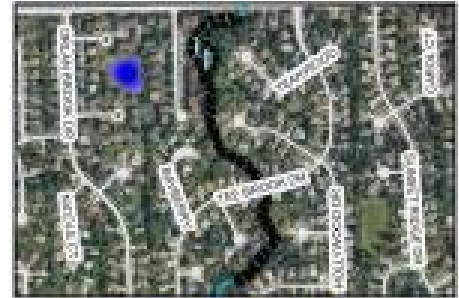
Streambank Stabilization Project along Midlothian Creek in Tinley Park, CSA

Project Number	19-IGA-21
Service Area	Calumet
Location	Tinley Park, IL
Engineering Consultant	Michael Baker International, Inc.
Engineering Contractor	To be determined
Estimated Construction Cost	\$866,500
Contract Award Date	March 2020
Substantial Completion Date	September 2023
Project Description	This project proposes to stabilize banks located along approximately 500 linear feet of Midlothian Creek in the Village of Tinley Park between 66th Court and Hickory Street. The project will use bioengineering techniques such as geolifts, live stake vegetation and gentler slopes to stabilize the bank. Rock vanes will also be used to redirect stream flow. The Village will prepare the contract documents, perform the work, and will be responsible for long-term operations and maintenance.
Project Justification	This project will protect structures and infrastructure in imminent danger of failure from active streambank erosion and flooding.
Project Status	Negotiation / Evaluation



Streambank Stabilization Project on Tinley Creek, CSA

Project Number	19-IGA-22
Service Area	Calumet
Location	Orland Park, IL
Engineering Consultant	Michael Baker International, Inc.
Engineering Contractor	To be determined
Estimated Construction Cost	\$3,806,000
Contract Award Date	July 2021
Substantial Completion Date	May 2025
Project Description	This project proposes to stabilize banks located along approximately 4,000 linear feet of Tinley Creek in the Village of Orland Park. The work is divided into two locations between 151st Street and Oriole Court and between 86th Avenue and 159th Street. The project will use bioengineering techniques such as geolifts, live stake vegetation, and gentler slopes to stabilize both banks.
Project Justification	This project will protect structures and infrastructure in imminent danger of failure due to active streambank erosion.
Project Status	Negotiation / Evaluation



Bioswale and Bike Path Replacement in Bartlett, NSA

Project Number 20-IGA-01

Service Area North

Location Bartlett, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$125,000

Contract Award Date October 2020

Substantial Completion Date June 2021

Project Description The Village of Bartlett will construct a bioswale with native plantings along a proposed bike path. The Village will be responsible for operations and maintenance.

Project Justification The project will alleviate flooding within the project area by reducing runoff into the local storm sewer system.

Project Status Negotiation / Evaluation



Permeable Parking and Bioswale at Liberty Green Annex in Berwyn, SSA

Project Number 20-IGA-02

Service Area Stickney

Location Berwyn, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$85,000

Contract Award Date September 2020

Substantial Completion Date April 2021

Project Description The Berwyn Park District will construct a permeable paver off-street parking area and bioswale. The Park District will be responsible for operations and maintenance.

Project Justification This project will reduce the current load to the combined sewer system and alleviate flooding and basement backups within the project area.

Project Status Negotiation / Evaluation



119th Place Bioswale and Permeable Alley in Blue Island, CSA

Project Number 20-IGA-03

Service Area Calumet

Location Blue Island, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$250,000

Contract Award Date March 2021

Substantial Completion Date June 2021

Project Description The City of Blue Island will construct a new bioretention area in a vacant, low-lying lot and a permeable alley using permeable pavers. The City of Blue Island will be responsible for operations and maintenance.

Project Justification This project will reduce the current load to the combined sewer system and alleviate flooding within the project area.

Project Status Negotiation / Evaluation



Cottage Park Bioswales and Native Plantings in Burnham, CSA

Project Number 20-IGA-05

Service Area Calumet

Location Burnham, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$50,000

Contract Award Date March 2021

Substantial Completion Date May 2021

Project Description The Village of Burnham will use bioswales, rain gardens, and native plantings to manage the stormwater on site at Cottage Park. Native plantings will be restored at the east side of the park. The Village of Burnham will be responsible for operations and maintenance.

Project Justification This project will reduce the current load to the combined sewer system and alleviate flooding within the project area.

Project Status Negotiation / Evaluation



Calumet River Gateway Garden in Chicago, CSA

Project Number 20-IGA-06

Service Area Calumet

Location Chicago, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$538,764

Contract Award Date April 2021

Substantial Completion Date July 2021

Project Description The City of Chicago will construct the Calumet River Gateway Garden to manage stormwater on this site and from nearby impervious surfaces using a dry river bed and green infrastructure. The City of Chicago will be responsible for operations and maintenance.

Project Justification This project will reduce the current load to the combined sewer system and alleviate flooding within the project area.

Project Status Negotiation / Evaluation



Metra Station Permeable Paver Parking Lot in Chicago Ridge, CSA

Project Number 20-IGA-07

Service Area Calumet

Location Chicago Ridge, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$227,847

Contract Award Date March 2021

Substantial Completion Date April 2021

Project Description The Village of Chicago Ridge will reconstruct the Metra Station parking lot with permeable pavers. The Village of Chicago Ridge will be responsible for operations and maintenance.

Project Justification This project will reduce the current load to the combined sewer system and alleviate flooding within the project area.

Project Status Negotiation / Evaluation



Forest Preserves Green Infrastructure Parking Lot Retrofit in Unincorporated Proviso Township, SSA

Project Number 20-IGA-10

Service Area Stickney

Location Unincorporated Proviso Township, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$203,107

Contract Award Date April 2021

Substantial Completion Date July 2021

Project Description The Forest Preserves of Cook County will retrofit an entire parking lot with porous unit paving and retrofit approximately 2,000 square feet of bioretention into the four parking lot islands. The Forest Preserves of Cook County will be responsible for operations and maintenance.

Project Justification This project will reduce the current load to the combined sewer system and alleviate flooding within the project area.

Project Status Negotiation / Evaluation



Green Alleys Project in Harwood Heights, NSA

Project Number 20-IGA-11

Service Area North

Location Harwood Heights, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$353,203

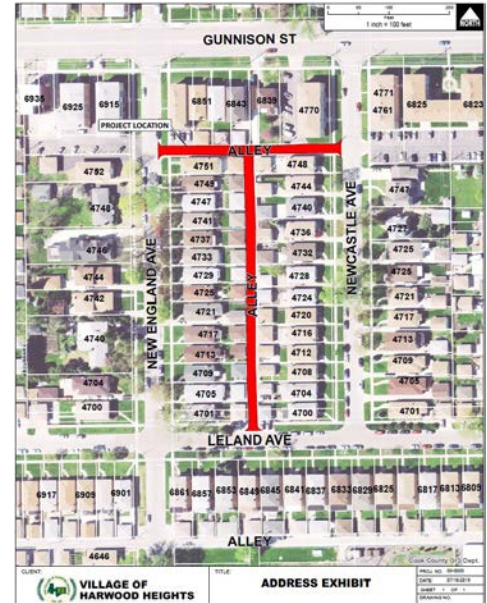
Contract Award Date March 2021

Substantial Completion Date June 2021

Project Description The Village of Harwood Heights will convert two impervious alleys into permeable pavement alleys. The Village of Harwood Heights will be responsible for operations and maintenance.

Project Justification This project will reduce the current load to the combined sewer system and alleviate flooding within the project area.

Project Status Negotiation / Evaluation



Green Alleys Water Management Project in Lyons, SSA

Project Number 20-IGA-12

Service Area Stickney

Location Lyons, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$500,000

Contract Award Date October 2020

Substantial Completion Date May 2021

Project Description The Village of Lyons will convert two impervious alleys into green alleys. The Village of Lyons will be responsible for operations and maintenance.

Project Justification This project will reduce the current load to the combined sewer system and alleviate flooding within the project area.

Project Status Negotiation / Evaluation



Green Alley Program in Skokie, NSA

Project Number 20-IGA-18

Service Area North

Location Skokie, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$190,000



Contract Award Date November 2020

Substantial Completion Date May 2021

Project Description The Village of Skokie will improve three existing alleys with permeable pavement. The Village of Skokie will be responsible for operations and maintenance.

Project Justification This project will reduce the current load to the combined sewer system and alleviate flooding within the project area.

Project Status Negotiation / Evaluation

Acquisition of Flood-Prone Properties in Des Plaines, Phase III, NSA

Project Number 20-IGA-22

Service Area North

Location Des Plaines, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$800,000

Contract Award Date October 2020

Substantial Completion Date October 2022

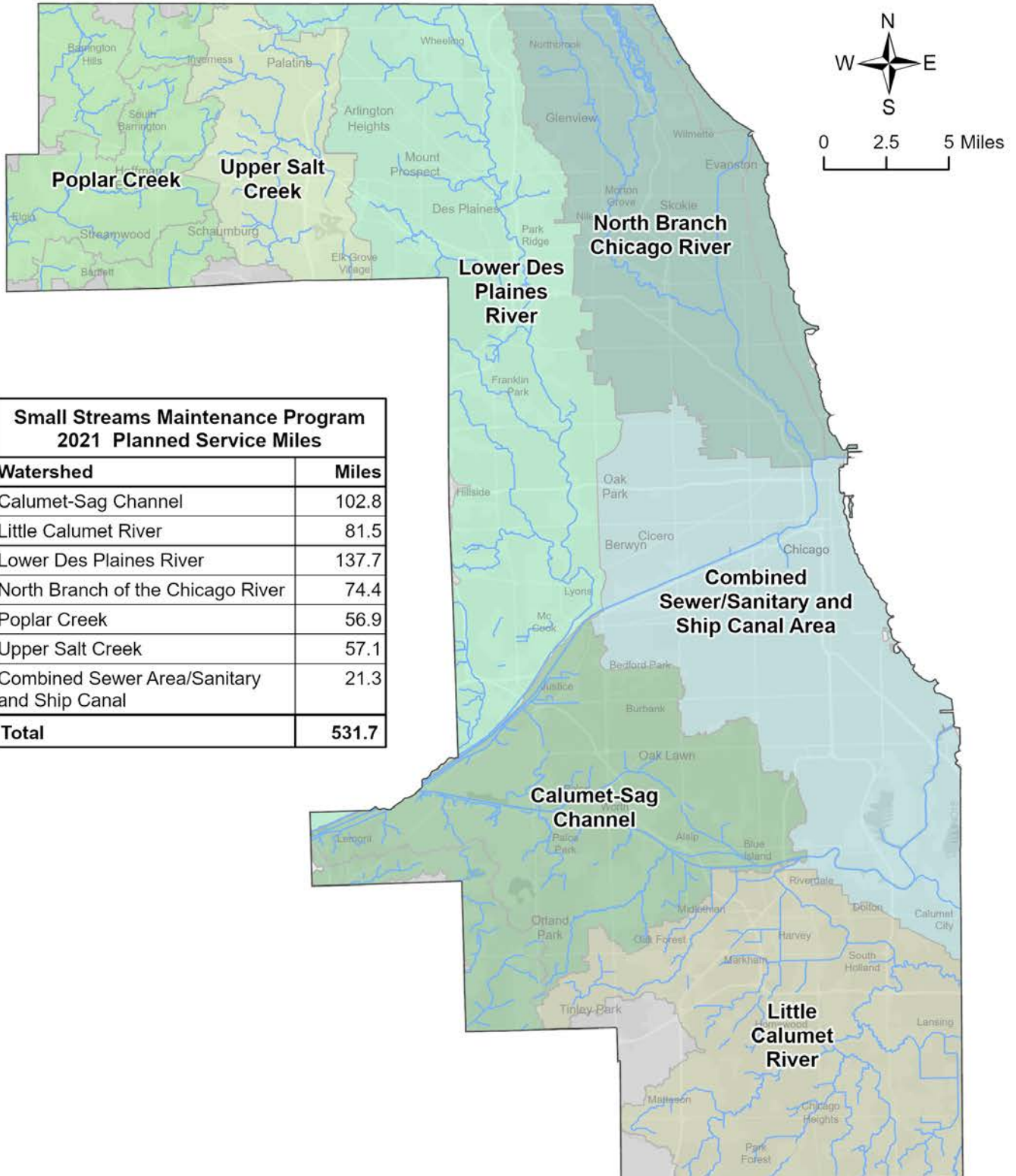
Project Description This is a cost sharing agreement with the City of Des Plaines where 13 flood-prone homes will be purchased along the Des Plaines River.

Project Justification This project is part of an ongoing effort by the District to remove properties from flood-prone regions in Cook County.

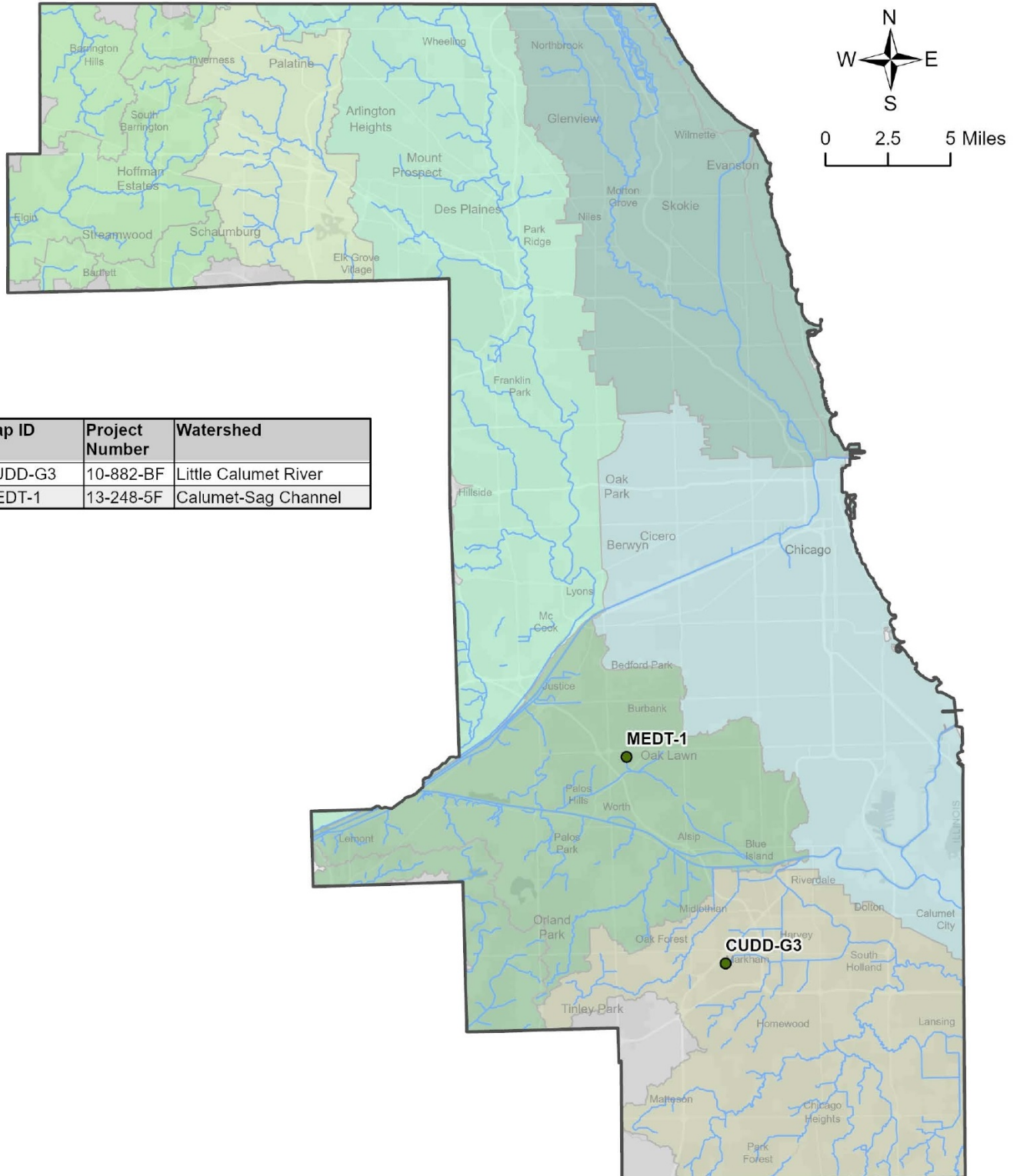
Project Status Negotiation / Evaluation



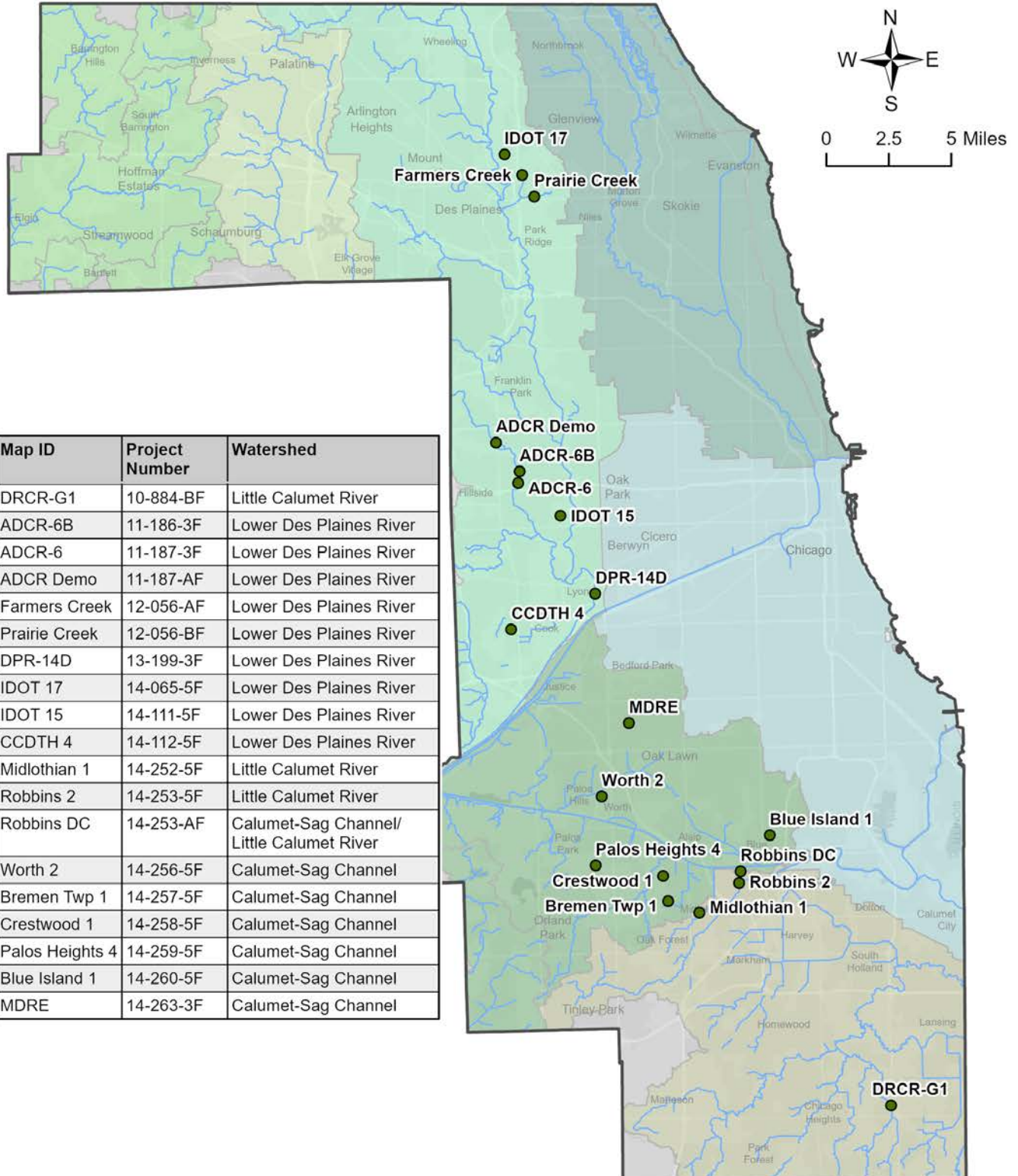
STORMWATER MANAGEMENT WATERSHEDS



STORMWATER MANAGEMENT PROJECTS STREAMBANK STABILIZATION

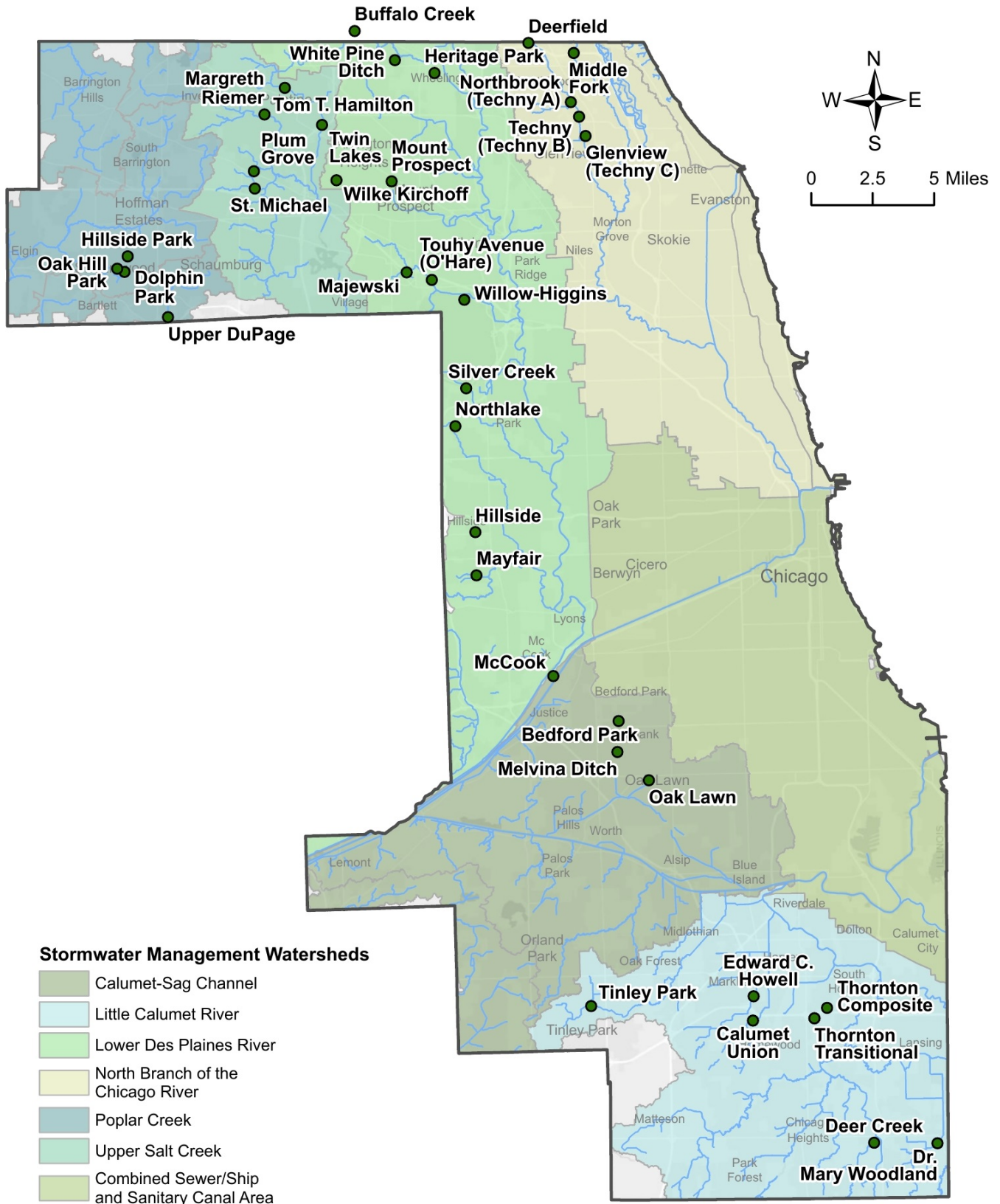


STORMWATER MANAGEMENT PROJECTS FLOOD CONTROL

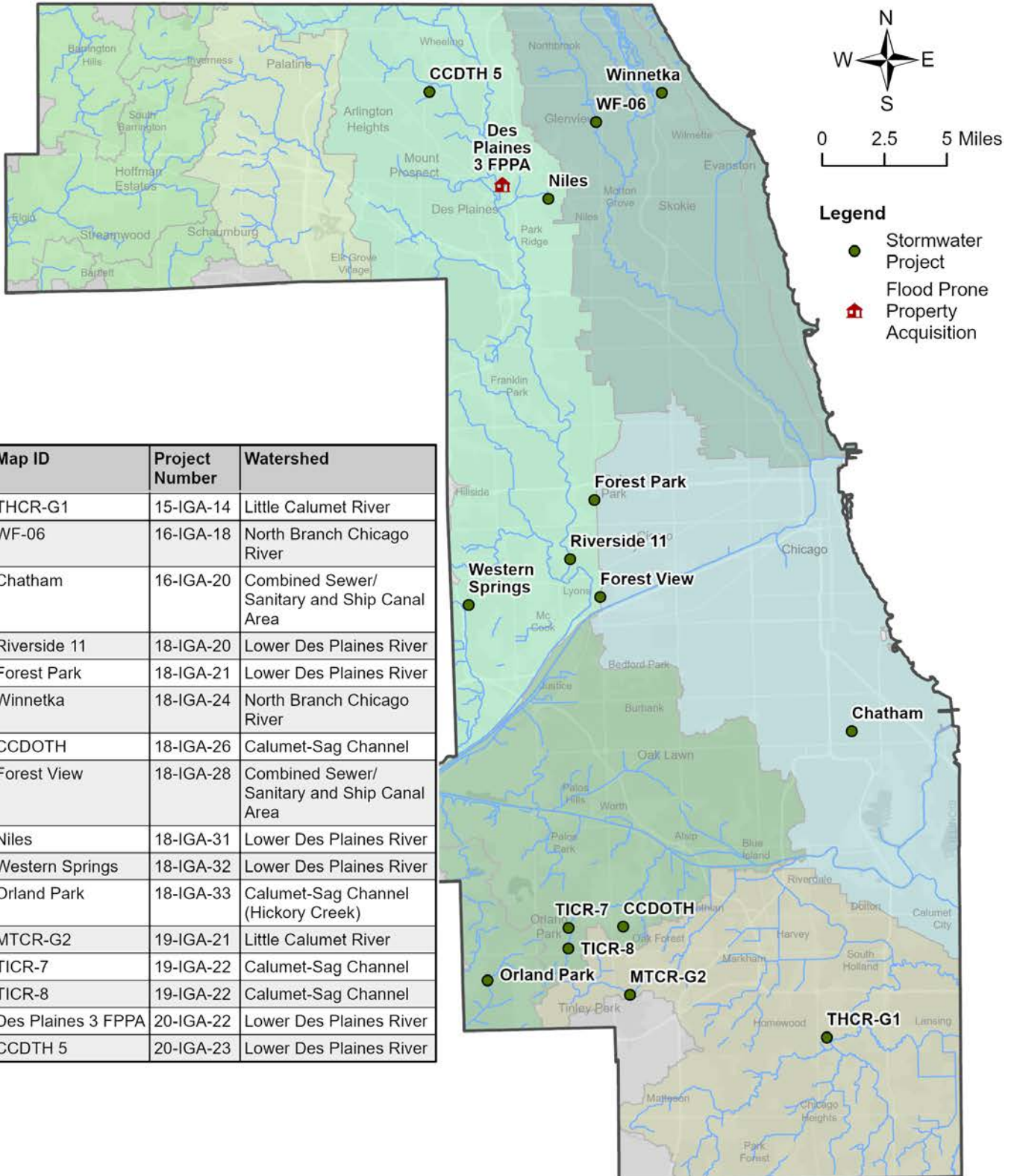


Map ID	Project Number	Watershed
DRCR-G1	10-884-BF	Little Calumet River
ADCR-6B	11-186-3F	Lower Des Plaines River
ADCR-6	11-187-3F	Lower Des Plaines River
ADCR Demo	11-187-AF	Lower Des Plaines River
Farmers Creek	12-056-AF	Lower Des Plaines River
Prairie Creek	12-056-BF	Lower Des Plaines River
DPR-14D	13-199-3F	Lower Des Plaines River
IDOT 17	14-065-5F	Lower Des Plaines River
IDOT 15	14-111-5F	Lower Des Plaines River
CCDTH 4	14-112-5F	Lower Des Plaines River
Midlothian 1	14-252-5F	Little Calumet River
Robbins 2	14-253-5F	Little Calumet River
Robbins DC	14-253-AF	Calumet-Sag Channel/ Little Calumet River
Worth 2	14-256-5F	Calumet-Sag Channel
Bremen Twp 1	14-257-5F	Calumet-Sag Channel
Crestwood 1	14-258-5F	Calumet-Sag Channel
Palos Heights 4	14-259-5F	Calumet-Sag Channel
Blue Island 1	14-260-5F	Calumet-Sag Channel
MDRE	14-263-3F	Calumet-Sag Channel

EXISTING MWRD SUPPORTED FLOOD CONTROL RESERVOIRS

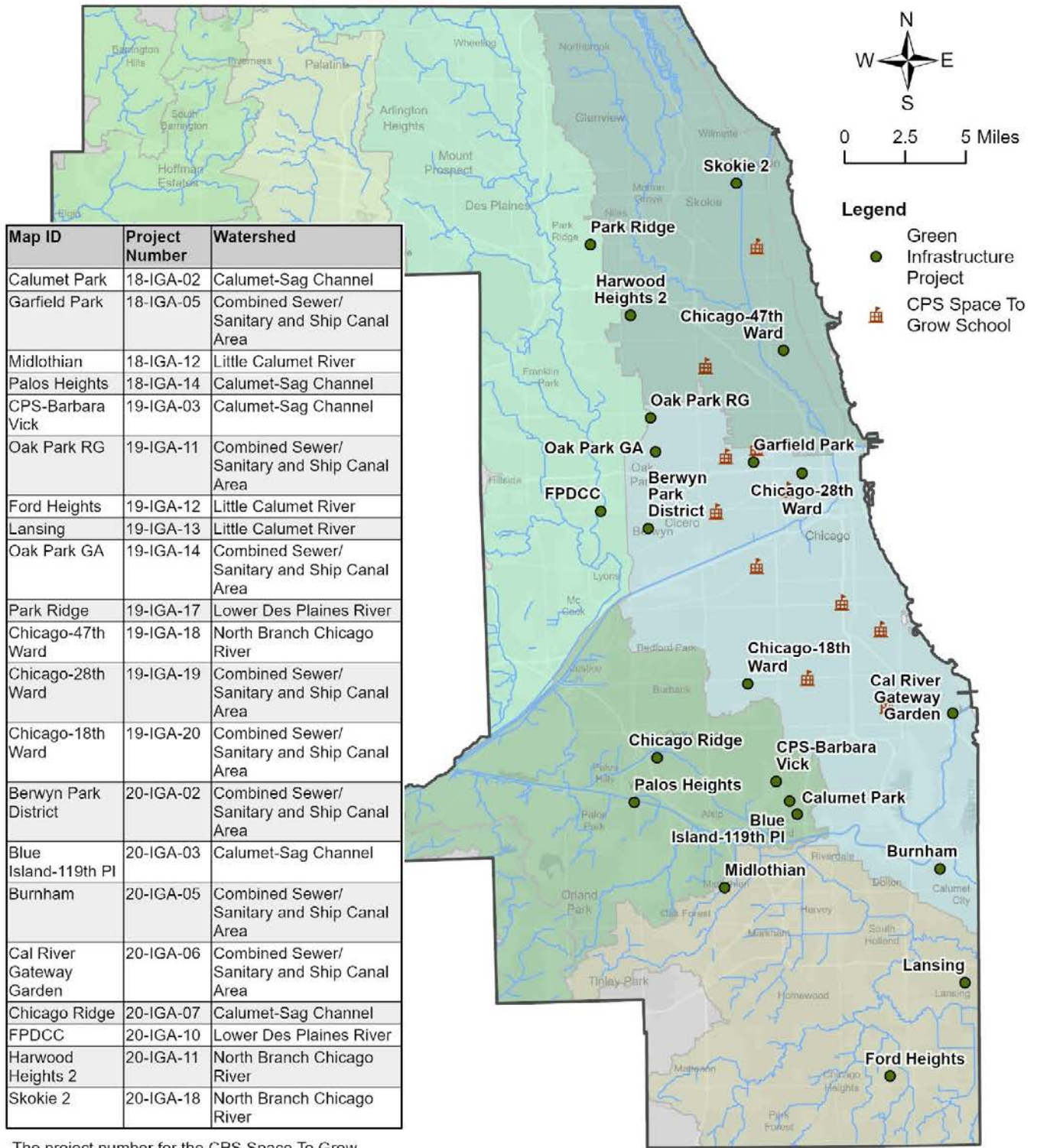


STORMWATER MANAGEMENT PROJECTS INTERGOVERNMENTAL AGREEMENTS



Map ID	Project Number	Watershed
THCR-G1	15-IGA-14	Little Calumet River
WF-06	16-IGA-18	North Branch Chicago River
Chatham	16-IGA-20	Combined Sewer/ Sanitary and Ship Canal Area
Riverside 11	18-IGA-20	Lower Des Plaines River
Forest Park	18-IGA-21	Lower Des Plaines River
Winnetka	18-IGA-24	North Branch Chicago River
CCDOTH	18-IGA-26	Calumet-Sag Channel
Forest View	18-IGA-28	Combined Sewer/ Sanitary and Ship Canal Area
Niles	18-IGA-31	Lower Des Plaines River
Western Springs	18-IGA-32	Lower Des Plaines River
Orland Park	18-IGA-33	Calumet-Sag Channel (Hickory Creek)
MTCR-G2	19-IGA-21	Little Calumet River
TICR-7	19-IGA-22	Calumet-Sag Channel
TICR-8	19-IGA-22	Calumet-Sag Channel
Des Plaines 3 FPPA	20-IGA-22	Lower Des Plaines River
CCDTH 5	20-IGA-23	Lower Des Plaines River

STORMWATER MANAGEMENT PROJECTS GREEN INFRASTRUCTURE



The project number for the CPS Space To Grow Project is 15-IGA-20. Space To Grow schools are located within multiple watersheds.

50000 STORMWATER MANAGEMENT FUND

OBJECTIVES AND PROGRAM SUMMARY

OBJECTIVES BY PRIORITY:	Cost	Percent
1. Implementation of the Watershed Management Ordinance. Initiation of the program to improve flood control, manage runoff, improve water quality throughout Cook County, and clearly define uniform rules and regulations.	\$ 11,936,500	10.9%
2. Planning, design, and construction of stormwater management projects by the District or outside agencies under agreement.	\$ 91,418,100	83.1%
3. Operation and maintenance of natural and manmade drainageways for the purpose of stormwater management.	\$ 6,611,300	6.0%
Totals	\$ 109,965,900	100.0%

MEASURABLE GOALS:		2019	2020	2021
	Unit of Measure	Actual	Estimated	Proposed
1. Award contracts for the continued implementation of the Stormwater Management Capital Improvement Program in the Stormwater Management and Capital Improvements Bond Funds.	No. of Contracts	22	30	29
2. Expenditures for the acquisition of flood-prone properties in the Capital Improvements Bond Fund.	Dollars	\$2,066,827	\$1,000,000	\$5,000,000
3. Expenditures for intergovernmental cost sharing agreements relating to Green Infrastructure and Stormwater Management Phase II projects in the Stormwater Management and Capital Improvements Bond Funds.	Dollars	\$20,552,601	\$16,056,700	\$31,297,000
4. Remove 28,000 cubic yards of debris from 532 miles of small streams and rivers.	Debris Cubic Yards Removed	22,123	28,000	28,000
Further details of Stormwater Management projects, intergovernmental cost sharing agreements, and land acquisitions are in the Stormwater Management Fund narrative.				

50000 STORMWATER MANAGEMENT FUND

OBJECTIVES AND PROGRAM SUMMARY

PROGRAMS BY PRIORITY:		2019	Budgeted		Change			
Number	Name	Actual	FTEs	Dollars	Dollars	Percent		
4310	Stormwater Management Planning	\$ 1,282,101	2021	1	\$ 5,108,400	\$ (3,666,000)	(41.8)	a)
			2020	1	\$ 8,774,400			
4320	Stormwater Management Regulation	\$ 3,669,340	2021	43	\$ 4,889,900	\$ 526,300	12.1	b)
			2020	42	\$ 4,363,600			
4330	Operations and Maintenance	\$ 5,000,133	2021	25	\$ 6,470,000	\$ 1,212,800	23.1	c)
			2020	25	\$ 5,257,200			
4340	Flood Mitigation Projects	\$ 33,087,739	2021	23	\$ 91,395,000	\$ (4,388,200)	(4.6)	d)
			2020	19	\$ 95,783,200			
4350	Administrative Overhead	\$ 1,290,797	2021	4	\$ 1,961,300	\$ 12,900	0.7	
			2020	4	\$ 1,948,400			
7604	Social Security and Medicare Contributions	\$ 123,350	2021	—	\$ 141,300	\$ 10,100	7.7	
			2020	—	\$ 131,200			
Totals		\$ 44,453,460	2021	96	\$ 109,965,900	\$ (6,292,100)	(5.4)%	
			2020	91	\$ 116,258,000			

a) Decrease is due to a reduced demand for Stormwater Master Planning (\$2,254,900), the revised estimate for Program Management of Stormwater Master Planning in Separate Sewer Area (\$632,700), the reallocation of Watershed Specific Stormwater Release Rates Study, Phase III between Program Numbers (\$380,000), the revised estimate for Program Management of Stormwater Master Planning in Combined Sewer Area (\$220,500), and the completion of Watershed Specific Stormwater Release Rates Study, Phase II (\$179,400).

b) Increase is due to the reallocation of Watershed Specific Stormwater Release Rates Study, Phase III between Program Numbers (\$350,000) and the transfer in of one Principal Civil Engineer position (\$133,400) and one Senior Civil Engineer position from the Engineering Corporate Fund (\$121,700), offset by the drop of one Administrative Clerk position (\$62,800).

c) Increase is due to the planned purchase of three trucks for the Small Stream Maintenance Program (\$510,000), the planned hardware and software upgrade for the distributed control system in the Waterways Control Room (\$370,000), the addition of services for waterways maintenance (\$80,500), the purchase of a turbine shaft seal (\$75,000), the addition of services to perform pontoon boats maintenance (\$66,500), services to furnish, deliver, and install a diesel generator (\$60,000), and grazing vegetation control (\$50,000).

d) The projects proposed for each year are based on detailed watershed plans identifying flooding problems within each of the six major watersheds. The number of actual projects awarded may not, on face value, quantify performance. There are several factors that could either increase or decrease the number of projects awarded. Some of the factors are project size and complexity, project schedules, Intergovernmental Agreement lead times, and unforeseen obstacles. The numbers are provided only as a general indicator of performance.

50000 STORMWATER MANAGEMENT FUND

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
4310	Stormwater Management Planning					
4311	Watershed Councils	Cost	\$ 40,288	\$ 41,300	\$ 42,300	
4312	Mapping, Surveys, and Soil Testing	Cost	\$ 64,061	\$ 559,400	\$ —	a)
4313	Watershed Plan Development	Cost	\$ 1,133,670	\$ 8,127,100	\$ 5,019,000	b)
4314	Publications and Public Information	Cost	\$ 22,862	\$ 23,100	\$ 23,100	
4315	Geographic Information System	Cost	\$ 21,220	\$ 23,500	\$ 24,000	
4320	Stormwater Management Regulation					
4321	Permits	Cost	\$ 1,937,657	\$ 2,432,000	\$ 2,799,000	c)
4322	Watershed Management Ordinance Development	Cost	\$ 100,747	\$ 107,500	\$ 155,300	d)
4323	Inspections	Cost	\$ 828,331	\$ 954,700	\$ 965,800	
4324	Watershed Management Ordinance Administration	Cost	\$ 643,308	\$ 710,100	\$ 784,800	
4326	Watershed Management Ordinance Infiltration/Inflow Control Program	Cost	\$ 159,297	\$ 159,300	\$ 185,000	e)
4330	Operations & Maintenance					
4331	Stormwater Detention Reservoir Activity	Cost	\$ 1,232,812	\$ 1,279,300	\$ 1,681,700	f)
4332	Small Streams Maintenance	Cost	\$ 2,959,560	\$ 3,193,800	\$ 3,929,500	g)
		Debris Cubic Yards Removed	22,123	28,000	28,000	
		Cost per Cubic Yard	\$ 133.78	\$ 114.06	\$ 140.34	g)
4334	Operations & Maintenance Contracted with Other Governments	Cost	\$ 176,251	\$ 170,200	\$ 170,500	
4335	Waterways Debris Removal	Cost	\$ 631,510	\$ 613,900	\$ 688,300	

a) Decrease is due to the reallocation of Watershed Specific Stormwater Release Rates Study, Phase III between Program Numbers (\$380,000) and the completion of Watershed Specific Stormwater Release Rates Study, Phase II (\$179,400).

b) Decrease is due to a reduced demand for Stormwater Master Planning (\$2,254,900) and revised estimates for Program Management of Stormwater Master Planning in Separate Sewer Area (\$632,700) and in Combined Sewer Area (\$220,500).

c) Increase is due to the reallocation of Watershed Specific Stormwater Release Rates Study, Phase III between Program Numbers (\$350,000).

d) Increase is due to the transfer in of one FTE position from the Engineering Corporate Fund (\$47,800).

e) Increase is due to the transfer in of one FTE position from the Engineering Corporate Fund (\$29,600).

f) Increase is due to the planned hardware and software upgrade for the distributed control system in the Waterways Control Room (\$370,000).

g) Increase is due to the planned purchase of three trucks for the Small Stream Maintenance Program (\$510,000), the addition of services for waterways maintenance (\$80,500), the purchase of a turbine shaft seal (\$75,000), and the addition of services to furnish, deliver, and install a diesel generator (\$60,000).

50000 STORMWATER MANAGEMENT FUND

PERFORMANCE DATA

Program Number	Measurable Activity		2019 Actual	2020 Budgeted	2021 Estimated	
4340	Flood Mitigation Projects					
4341	Planning/Design	Cost	\$ 3,382,463	\$ 23,211,600	\$ 26,143,800	h)
4342	Contract Administration	Cost	\$ 626,486	\$ 638,600	\$ 636,000	
4343	Construction	Cost	\$ 10,693,922	\$ 22,949,300	\$ 28,519,800	h)
4344	Flood Mitigation Projects Contracted with Other Governments	Cost	\$ 17,021,256	\$ 42,691,400	\$ 31,070,500	h)
4345	Land & Easements	Cost	\$ 1,363,612	\$ 6,292,300	\$ 5,024,900	h)
4350	Administrative Overhead	Cost	\$ 1,290,797	\$ 1,948,400	\$ 1,961,300	
7604	Social Security and Medicare Contributions	Cost	\$ 123,350	\$ 131,200	\$ 141,300	
		Totals	\$ 44,453,460	\$ 116,258,000	\$ 109,965,900	

h) The projects proposed for each year are based on detailed watershed plans identifying flooding problems within each of the six major watersheds. The number of actual projects awarded may not, on face value, quantify performance. There are several factors that could either increase or decrease the number of projects awarded. Some of these factors are project size and complexity, project schedules, Intergovernmental Agreements lead times, and unforeseen obstacles. The numbers are provided only as a general indicator of performance.

501 50000	Fund: Stormwater Management	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 8,430,531	\$ 9,408,400	\$ 9,408,400	\$ 6,454,697	\$ 8,760,900	\$ 10,049,400	\$ —
601060	Compensation Plan Adjustments	368,729	420,700	420,700	185,345	260,500	436,300	—
601070	Social Security and Medicare Contributions	123,350	131,200	131,200	96,304	126,000	141,300	—
601080	Salaries of Nonbudgeted Employees	—	20,000	20,000	—	—	—	—
601100	Tuition and Training Payments	10,005	42,600	42,600	11,384	13,100	67,500	—
601250	Health and Life Insurance Premiums	770,025	878,900	878,900	468,923	700,000	914,000	—
601270	General Salary Adjustments	—	—	—	—	—	84,000	—
100	TOTAL PERSONAL SERVICES	9,702,640	10,901,800	10,901,800	7,216,653	9,860,500	11,692,500	—
612010	Travel	2,789	4,400	4,400	10	100	4,400	—
612030	Meals and Lodging	10,359	11,900	11,900	910	1,000	13,600	—
612040	Postage, Freight, and Delivery Charges	2,410	2,500	2,500	2,000	1,600	2,500	—
612050	Compensation for Personally-Owned Automobiles	12,903	24,800	24,800	3,437	7,800	19,800	—
612080	Motor Vehicle Operating Services	137	3,100	3,100	118	800	3,100	—
612250	Court Reporting Services	16,126	49,000	49,000	12,000	12,000	22,000	—
612280	Subscriptions and Membership Dues	—	—	15,000	2,200	15,000	20,700	—
612330	Rental Charges	1,448	2,500	2,500	2,500	2,500	53,000	—
612400	Intergovernmental Agreements	16,758,238	43,054,100	42,554,100	27,046,524	9,879,800	31,097,000	—
612430	Payments for Professional Services	515,761	635,000	1,035,000	976,653	800,000	591,000	—
612440	Preliminary Engineering Reports and Studies	1,415,905	14,348,200	14,348,200	4,495,302	1,000,000	6,724,000	—
612450	Professional Engineering Services for Construction Projects	1,839,484	14,209,600	14,209,600	3,795,367	1,500,000	6,554,600	—
612490	Contractual Services, N.O.C.	372,749	631,000	716,000	539,099	450,000	414,500	—
612520	Waste Material Disposal Charges	33,802	60,000	60,000	42,966	38,900	60,000	—
612620	Repairs to Waterway Facilities	2,472,936	2,519,500	2,519,500	2,519,425	2,519,400	2,970,000	—
612790	Repairs to Marine Equipment	—	—	—	—	—	66,500	—
612800	Repairs to Office Furniture and Equipment	—	—	—	—	—	4,700	—
612820	Computer Software Maintenance	140,000	—	—	—	—	—	—
612860	Repairs to Vehicle Equipment	—	2,000	2,000	—	—	4,500	—
612990	Repairs, N.O.C.	522	3,500	3,500	2,500	1,000	6,700	—
200	TOTAL CONTRACTUAL SERVICES	23,595,569	75,561,100	75,561,100	39,441,011	16,229,900	48,632,600	—

501 50000	Fund: Stormwater Management	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623130	Buildings, Grounds, Paving Materials, and Supplies	4,964	5,000	5,000	5,000	5,000	5,000	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	6,936	13,500	13,500	6,366	6,700	15,500	—
623560	Processing Chemicals	1,526	5,000	5,000	5,000	1,500	5,000	—
623680	Tools and Supplies	7,364	11,500	11,500	6,216	7,400	11,500	—
623700	Wearing Apparel	6,567	8,500	8,500	6,500	6,600	8,500	—
623820	Fuel	—	—	—	—	—	7,200	—
623990	Materials and Supplies, N.O.C.	47,441	60,400	60,400	56,692	4,500	60,400	—
300	TOTAL MATERIALS AND SUPPLIES	74,798	103,900	103,900	85,774	31,700	113,100	—
634620	Equipment for Waterway Facilities	—	—	—	—	—	135,000	—
634860	Vehicle Equipment	—	95,000	95,000	91,051	91,100	510,000	—
634990	Machinery and Equipment, N.O.C.	—	60,000	60,000	41,110	10,000	60,000	—
400	TOTAL MACHINERY AND EQUIPMENT	—	155,000	155,000	132,161	101,100	705,000	—
645620	Waterway Facilities Structures	7,028,103	16,410,700	17,072,700	16,702,383	15,607,800	32,278,500	—
645630	Army Corps of Engineers Services	1,659,772	—	50,000	49,999	50,000	—	—
645690	Capital Projects, N.O.C.	—	100,000	100,000	80,750	80,800	100,000	—
645720	Preservation of Waterway Facility Structures	1,590,808	7,225,500	6,513,500	5,790,140	4,000,000	12,004,200	—
500	TOTAL CAPITAL PROJECTS	10,278,683	23,736,200	23,736,200	22,623,272	19,738,600	44,382,700	—
656010	Land	637,402	2,650,000	2,650,000	1,365,666	3,000,000	2,640,000	—
600	TOTAL LAND	637,402	2,650,000	2,650,000	1,365,666	3,000,000	2,640,000	—
667340	Payments for Easements	164,369	3,150,000	3,150,000	149,308	174,500	1,800,000	—
700	TOTAL FIXED AND OTHER CHARGES	164,369	3,150,000	3,150,000	149,308	174,500	1,800,000	—
TOTAL STORMWATER MANAGEMENT FUND		\$ 44,453,461	\$ 116,258,000	\$ 116,258,000	\$ 71,013,845	\$ 49,136,300	\$109,965,900	\$ —

NOTES: 1. Amounts may not add up due to rounding.

2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.

Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.

Fund: Stormwater Management		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
50000	Engineering Department					
516	Local Sewer Systems Section					
HP18	Principal Civil Engineer	2	2		3	
HP17	Senior Civil Engineer	8	9		10	
HP15	Associate Civil Engineer	8	9		9	
HP14	Assistant Civil Engineer	6	8		8	
HP14	Engineering Technician V	3	3		3	
HP12	Engineering Technician IV	4	6		6	
HP12	Engineering Technician IV #4	1	1		1	
HP11	Administrative Specialist	1	1		1	
HP11	Engineering Technician III	1	1		1	
HP09	Administrative Clerk	2	2		1	
TOTAL 516	Local Sewer Systems Section	36	42	4,206,120	43	4,459,526
522	Stormwater Management Section					
HP20	Managing Civil Engineer	1	1		1	
HP18	Principal Civil Engineer	3	3		3	
HP17	Senior Civil Engineer	7	7		7	
HP15	Associate Civil Engineer	6	6		6	
HP14	Assistant Civil Engineer	3	3		3	
HP14	Public Affairs Specialist	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 522	Stormwater Management Section	22	22	2,636,496	22	2,642,897
556	Construction Field Services Section					
HP17	Senior Civil Engineer	—	—		1	
HP15	Associate Civil Engineer	—	—		1	
HP14	Engineering Technician V	—	—		1	
HP12	Engineering Technician IV	—	—		1	
TOTAL 556	Construction Field Services Section	—	—	—	4	406,299
TOTAL	Engineering Department	58	64	6,842,616	69	7,508,722

Fund: Stormwater Management		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
60000	Maintenance & Operations Department					
630	General Division					
634	Channel Maintenance Unit					
HP18	Principal Engineer	1	1		1	
HP15	Associate Civil Engineer	1	1		1	
TOTAL 634	Channel Maintenance Unit	2	2	272,274	2	277,526
636	Boat Operations Unit					
HP14	Engineering Technician V	2	2		2	
HP12	Engineering Technician IV	2	2		2	
NR8650	Maintenance Laborer Class A Shift	2	2		2	
TOTAL 636	Boat Operations Unit	6	6	548,159	6	556,311
639	Channel Maintenance Unit					
HP15	Associate Civil Engineer	—	1		1	
HP14	Engineering Technician V	1	1		1	
HP14	Engineering Technician V #4	1	—		—	
NR8650	Maintenance Laborer Class A Shift	2	2		2	
TOTAL 639	Channel Maintenance Unit	4	4	376,767	4	362,556
679	Collection System Unit					
NR8331	Laborer Foreman	1	1		1	
NR8650	Maintenance Laborer Class A Shift	4	4		4	
PR6473	Truck Driver	1	1		1	
TOTAL 679	Collection System Unit	6	6	518,419	6	520,291
TOTAL 630	General Division	18	18	1,715,619	18	1,716,684
940	Stickney Service Area General Plant Services Section					
924	Stickney Maintenance Unit					
PR7773	Pipefitter	1	1		1	
TOTAL 924	Stickney Maintenance Unit	1	1	103,168	1	105,560
934	Stickney Mechanical Operations Unit					
NR8650	Maintenance Laborer Class A Shift	4	4		4	

Fund: Stormwater Management		POSITION ANALYSIS				
		2019	2020		2021	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Proposed by the Executive Director	
					Budgeted FTEs	Appropriation in Dollars
NR6831	Operating Engineer I	4	4		4	
TOTAL 934	Stickney Mechanical Operations Unit	8	8	768,602	8	768,602
TOTAL 940	Stickney Service Area General Plant Services Section	9	9	871,770	9	874,162
TOTAL	Maintenance & Operations Department	27	27	2,587,389	27	2,590,846
TOTAL	Stormwater Management	85	91	9,430,005	96	10,099,568

NOTES: 1. The positions budgeted are funded by the Stormwater Management Fund while the operations remain in the Engineering and Maintenance & Operations Departments.
 2. Departmental appropriation totals for salaries in the Position Analysis differ from those contained in the Line Item Analysis by a factor identified to adjust for vacancies. Salary ranges corresponding to the pay plan and grade for each class title can be found in the table of Salary Schedules in the Appendix. Dollar amounts may not add up due to rounding.

NOTE PAGE

SECTION VII OTHER FUNDS

Other funds included in the annual District Budget are: the Reserve Claim Fund, Bond Redemption & Interest Fund, Retirement Fund, Corporate Working Cash Fund, Construction Working Cash Fund, and Stormwater Working Cash Fund.

The Reserve Claim Fund is used to accumulate resources for the payment of claims and judgments against the District, as well as for emergency repair or replacement of District facilities. A narrative description of the purpose and operation of this fund is contained in this section along with an appropriation schedule. A tax levy ordinance for this fund is presented in Section VIII of this Budget.

The Bond Redemption & Interest Fund is used to accumulate the proceeds from property taxes and investment income, which are set aside to pay the principal and interest on the outstanding bond issues of the District. These funds are segregated and accounted for by each bond issue. A narrative description of this fund and an appropriation schedule, detailing payment of principal and interest during 2021, are included in this section. A tax levy ordinance for the principal and interest due in 2021 and 2022 from the Bond Redemption & Interest Fund is included in Section VIII of this Budget. Statements of Outstanding Bonds and Estimated Statutory Debt Margin, with a graphic illustration of past, current, and estimated future debt service, are included in the Budgetary and Financial Summaries section, starting on page 50.

The Retirement Fund is the pension plan for District employees, accounted for in a trust fund the Illinois Compiled Statutes established as a legal entity separate and distinct from the District. This section contains an appropriation of taxes the District received on behalf of the Retirement Fund. A tax levy ordinance for this fund is presented in Section VIII of this Budget.

The District utilizes Corporate, Construction, and Stormwater Working Cash Funds, as authorized by Illinois Compiled Statutes, to make temporary loans to the Corporate, Construction, and Stormwater Management Funds. Loans are repaid to the Working Cash Funds from the tax levies of the funds. The use of Working Cash Funds eliminates the need to issue short-term financing. There will be no tax levies for the Corporate, Construction, or Stormwater Working Cash Funds in 2021.

Reserve Claim Fund:

Description of Fund, Purpose, and Operation	519
Line Item Analysis	521

Bond Redemption & Interest Fund:

Description of Fund, Purpose, and Operation	522
Appropriation for Payment of Outstanding Bonds, 2021	525

Retirement Fund:

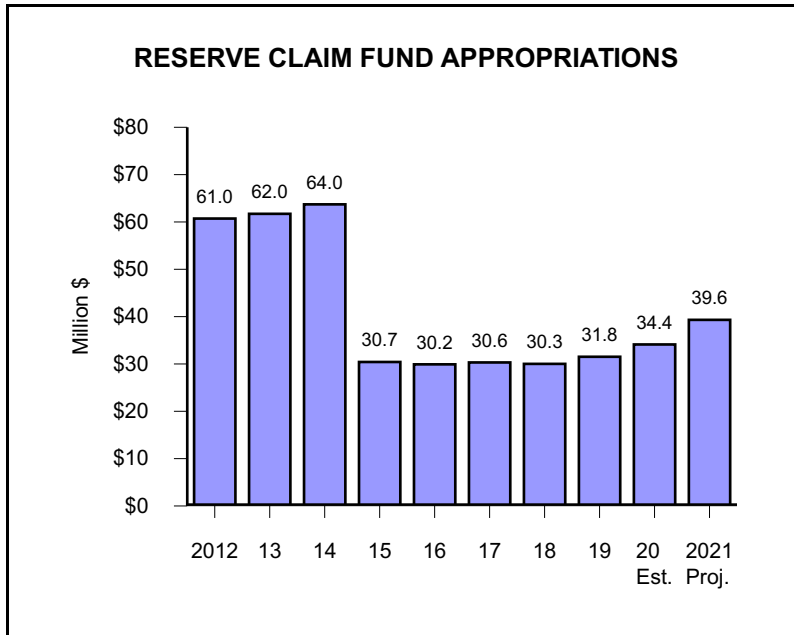
Description of Fund, Purpose, and Operation	527
Appropriation Ordinance (continued)	530

RESERVE CLAIM FUND

Description of Fund, Purpose, and Operation

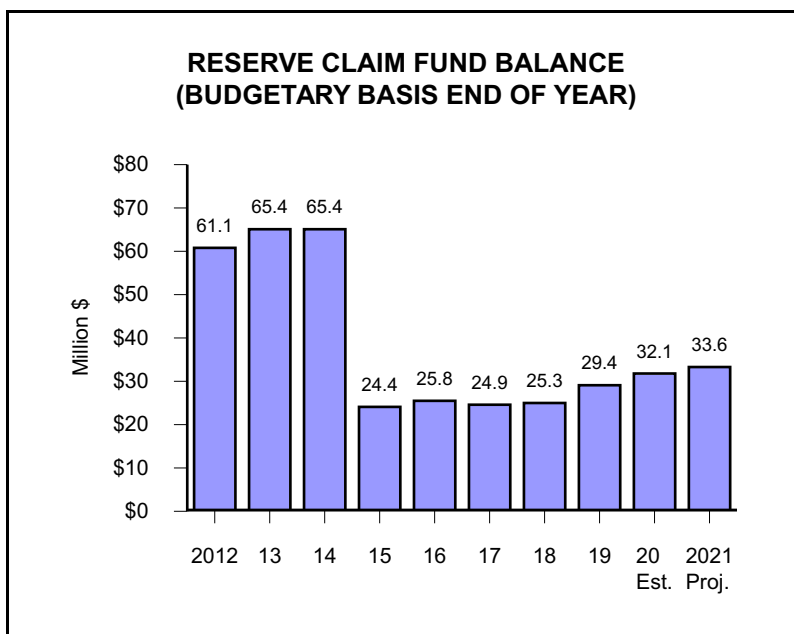
The Reserve Claim Fund is the District’s self-insurance fund. It is maintained at an appropriation level adequate to meet potential liabilities. The fund is capable of providing coverage for those risks that can be expected to be encountered and is able to pay such claims without exposing the agency to financial risk that could curtail normal operations of protecting the public health, safety, and welfare.

A property tax levy limited by law at 0.5 cents per \$100 of equalized assessed valuation (EAV) provides funds for this purpose. The accumulation of funds, per Illinois State Statute, is not to exceed 0.05 percent of the EAV, or approximately \$82.0 million. Resources are accumulated in this fund to the extent that revenue from the annual tax levy and investment income on the fund balance is reduced by the payment of claims.



In 2015, the reduction is due to a settlement in 2014.

The policy, set by the Board of Commissioners, is to accumulate a reserve fund balance towards the statutory limit and to levy at the statutory tax rate limit. This policy is similar in function to insurance company reserves. The estimated 2020 year-end fund balance is \$32.1 million and the projection for 2021 is \$33.6 million.

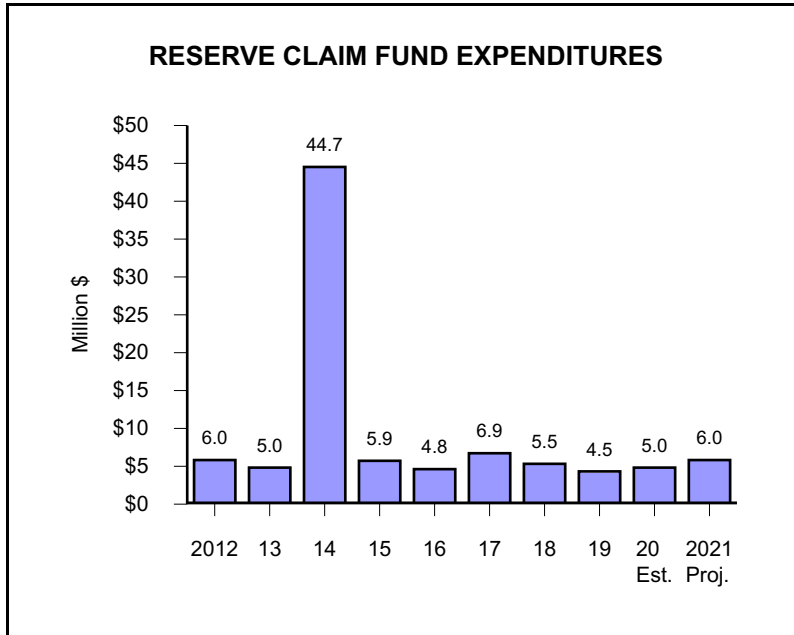


The Statutory Limit for Budget Year 2021 Proj. is \$82.0 million.

In 2015, the reduction is due to a settlement in 2014.

The appropriation for the Reserve Claim Fund is not designed to be spent during any one budget year. The available fund balance plus new revenue to be received must be appropriated each year to authorize the District to fund emergencies and to settle large claims or lawsuits. Designation is also provided for accounts payable and other contingent liabilities. For 2021, accounts payable and other liabilities are estimated at \$0.3 million. The designation for liabilities is reviewed and adjusted on an annual basis.

The fund is appropriated in two line items, Account 601090 (Employee Claims) and Account 667220 (General Claims and Emergency Repair and Replacement Costs). Account 601090 is for the payment of workers' compensation and other District employee claims, while Account 667220 is used to pay general claims or judgments against the District, as well as emergency repairs or replacements of District facilities. District staff makes considerable efforts to control claim expenditures by implementing aggressive safety training programs and returning employees to work as soon as possible.



In 2014, the increase is due to the payment of a settlement.

901	Fund: Reserve Claim	LINE ITEM ANALYSIS						
		2019	2020			2021		
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/20	Expenditure (Committed Budget plus Disbursement) 09/30/20	Estimated Expenditure 12/31/20	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601090	Employee Claims	\$ 3,316,430	\$ 10,000,000	\$ 10,000,000	\$ 1,967,759	\$ 4,500,000	\$ 10,000,000	\$ —
100	TOTAL PERSONAL SERVICES	3,316,430	10,000,000	10,000,000	1,967,759	4,500,000	10,000,000	—
667220	General Claims and Emergency Repair and Replacement Costs	1,230,298	24,395,000	24,395,000	103,021	500,000	29,624,900	—
700	TOTAL FIXED AND OTHER CHARGES	1,230,298	24,395,000	24,395,000	103,021	500,000	29,624,900	—
TOTAL RESERVE CLAIM FUND		\$ 4,546,728	\$ 34,395,000	\$ 34,395,000	\$ 2,070,780	\$ 5,000,000	\$ 39,624,900	\$ —
NOTE: Amounts may not add up due to rounding.								

BOND REDEMPTION & INTEREST FUND

Description of Fund, Purpose, and Operation

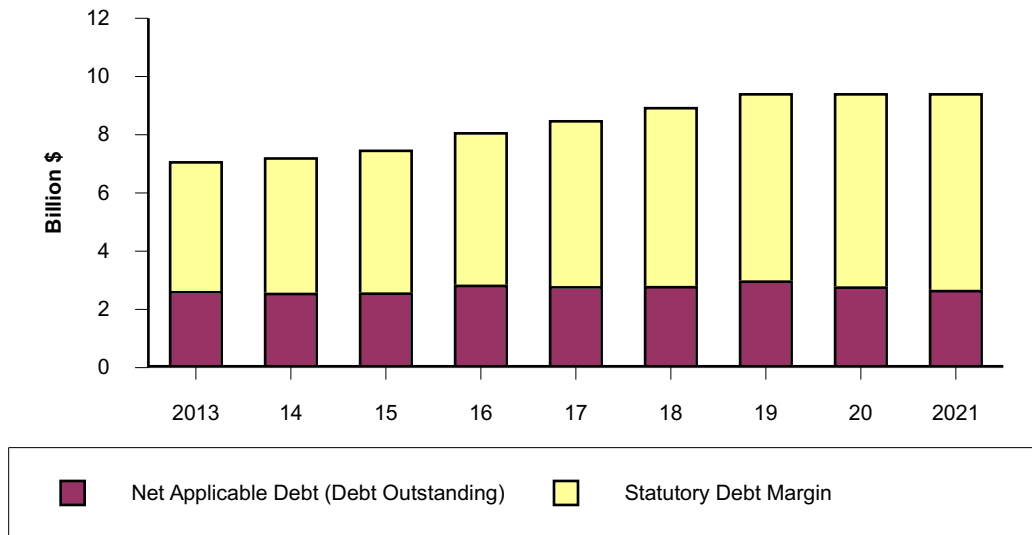
The District's Bond Redemption & Interest Fund is a debt service fund established to account for annual property tax levies and certain other revenues, principally interest on investments, which are used for the payment of interest and redemption of general obligation bond issues. Sub-funds are established for each debt issue.

Debt Limits, Margins, and Borrowing Authority

Applicable Illinois State Statutes establish the following limitations relative to the District:

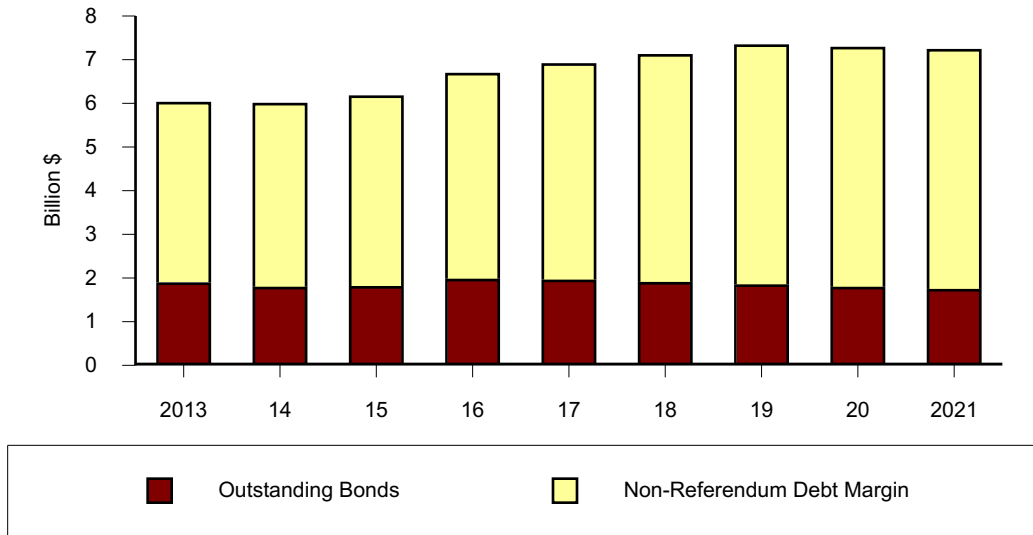
- General Obligation Notes may be issued at an amount not to exceed 85 percent of the current General Corporate Fund tax levy.
- The District may fund up to 100 percent of the aggregate total of the estimated amount of taxes levied or to be levied for corporate purposes plus the General Corporate Fund portion of the personal property replacement tax allocation certified for distribution during the budget year, through borrowing from the Corporate Working Cash Fund and the issuance of tax anticipation notes or warrants.
- The District's debt may not exceed 5.75 percent of the last published equalized assessed valuation (EAV) of taxable real property (\$164.1 billion for 2019) within the District boundary. On December 31, 2020, the District's statutory debt limit is estimated at \$9.4 billion, with a net applicable debt of \$2.7 billion and an estimated statutory debt margin of \$6.8 billion.

Net Debt and Statutory Debt Margin



- The amount of non-referendum Capital Improvements Bonds which may be outstanding may not exceed 3.35 percent of the last-known EAV of taxable real property within the District boundary. On December 31, 2020, it is estimated that the District's outstanding capital improvement and refunding bonds will total \$1.8 billion with a non-referendum statutory debt limit of \$5.5 billion and a non-referendum bonded debt margin of \$3.7 billion.
- The Illinois Compiled Statutes provide authorization for the funding of the District's Capital Improvement Program by the issuance of non-referendum Capital Improvements Bonds through the year 2034, as extended, effective January 1, 2020. Bonds may be issued during any one budget year in an amount not to exceed \$150 million plus the amounts of any bonds authorized and unissued during the three preceding budget years. This amount was increased from \$100 million during 2003 as the result of Public Act 93-279. The extension of non-referendum bonding authority is a significant change that accommodates funding of the capital program as planned. Build America Bonds were issued in the amount of \$600 million in August 2009, and were exempted from the non-referendum authority by statute.
- Under the Tax Cap laws, "limited bonds" can be issued to the extent that the total debt service requirements of any new debt, when combined with existing debt service, does not exceed the debt service extension base established by the Act. The debt service extension limitation for the District, related to the 2020 tax year, is \$173.1 million.

Non-Referendum Debt Limit and Margin



- 1997 legislation expanded the “limited bond” authority for the District. Public Act 90-485 excludes debt associated with the Tunnel and Reservoir Plan program from the limitations imposed by prior Tax Cap legislation. Public Act 96-0501 allows for an annual increase in this debt service extension limitation base by the lesser of five percent or the percentage increase in the Consumer Price Index beginning with the 2009 levy.
- The amount of non-referendum Corporate Working Cash Bonds which, when added to a) proceeds from the sale of working cash bonds previously issued, b) any amounts collected from the Corporate Working Cash Fund levy, and c) amounts transferred from the Construction Working Cash Funds, may not exceed 90 percent of the amount produced by multiplying the maximum general corporate tax rate (41 cents per \$100 of EAV) permitted by the last known EAV of all property within the District boundary (\$164.1 billion for 2019) at the time the bonds are issued, plus 90 percent of the last known entitlement of the Personal Property Replacement Tax.

BOND REDEMPTION & INTEREST FUND

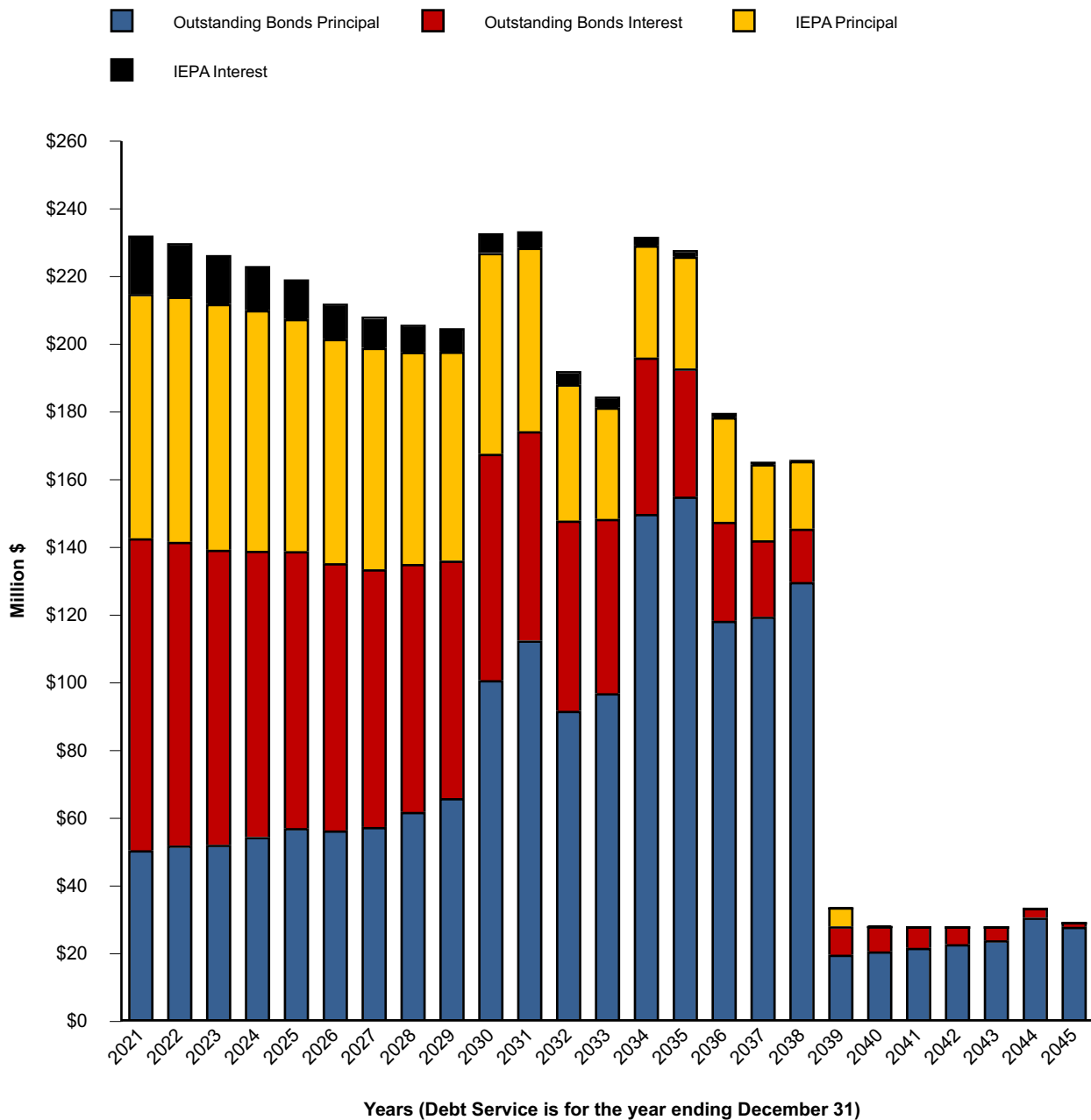
Description of Fund, Purpose, and Operation (continued)

Current and Future Bond Debt Service

The exhibit below reflects the current debt service obligation of the District. Bond sale proceeds provide partial financing for the ongoing new construction and rehabilitation program of the District. As current State Revolving Fund loans are converted to bonds, additional annual debt service will be added. These amounts will be in the range of \$6 to \$10 million per year.

The debt for future bond sales is not included in this exhibit. Future bond sales are based on estimated cash flow requirements of the Capital Improvements Bond Fund new construction and rehabilitation program. The estimates for total debt service assuming future bond sales are included in the Five-Year Financial Forecast in Section II, Budget and Financial Summaries, Schedules, and Exhibits, of this budget document.

**District General Obligation Bonded Debt Service
(Includes IEPA Debt)**



BOND REDEMPTION & INTEREST FUND**Appropriation for Payment of Outstanding Bonds During the Year 2021**

BOND ISSUE	RATES OF INTEREST	JANUARY 1, 2021		JULY 1, 2021		TOTAL PAYABLE
		INTEREST PAYABLE	PRINCIPAL PAYABLE	INTEREST PAYABLE	PRINCIPAL PAYABLE	
Capital Improvements Bonds - Series:						
2016 Qualified Energy Conservation Limited Tax Series F	5.0	\$ 80,000 (1)	\$ —	\$ 80,000 (2)	\$ — (2)	\$ 160,000
2009 Limited Tax Series	5.72	17,160,000 (1)	—	17,160,000 (2)	— (2)	34,320,000
2011 Limited Tax Series B	5.0	5,292,797 (1)	—	5,292,797 (2)	9,550,000 (2)	20,135,594
2011 Unlimited Tax Series C	3.0 to 5.0	1,033,716 (1)	—	1,033,716 (2)	— (2)	2,067,432
2014 Limited Tax Series C	2.0 to 5.0	1,352,375 (1)	—	1,352,375 (2)	4,470,000 (2)	7,174,750
2014 Unlimited Tax Series A	5.0	2,500,000 (1)	—	2,500,000 (2)	— (2)	5,000,000
2014 Alternate Revenue Unlimited Tax Series B	2.0 to 5.0	1,113,450 (1)	—	1,113,450 (2)	1,045,000 (2)	3,271,900
2016 Alternate Revenue Unlimited Tax Series E	5.0	1,250,000 (1)	—	1,250,000 (2)	— (2)	2,500,000
2016 Unlimited Tax Series C	5.0	750,000 (1)	—	750,000 (2)	— (2)	1,500,000
2016 Limited Tax Series D	5.0	500,000 (1)	—	500,000 (2)	— (2)	1,000,000
State Revolving Fund Bonds - Series:						
14M SRF L175372	2.221	\$ 11,672	\$ 32,739	\$ 11,387	\$ 33,026	\$ 88,824
14N SRF L175371	1.750	11,117	31,182	10,845	31,456	84,600
14O SRF L175305	1.750	25,474	69,150	24,869	69,755	189,248
16A SRF L174555	1.750	1,038,055	2,817,866	1,013,398	2,842,524	7,711,843
14P SRF L175369	1.560	28,448	88,143	27,761	88,832	233,184
16C SRF L175367	1.760	99,499	251,858	97,283	254,075	702,715
14Q SRF L175539	1.760	15,887	39,003	15,545	39,346	109,781
16K SRF L172741	2.000	2,845	5,821	2,788	5,879	17,333
14B SRF L175171	2.210	25,571	62,999	24,875	63,697	177,142
14C SRF L174559	2.295	195,260	460,163	189,980	465,444	1,310,847
14D SRF L175263	1.860	110,378	288,464	107,696	291,147	797,685
14E SRF L173062	1.860	374,591	947,131	365,782	955,940	2,643,444
14F SRF L175342	1.750	668,294	1,702,944	653,394	1,717,845	4,742,477
14G SRF L175152	1.860	174,813	442,004	170,702	446,116	1,233,635
14H SRF L175355	1.860	9,786	28,383	9,522	28,647	76,338
14K SRF L175366	1.860	44,357	115,922	43,278	117,000	320,557
14L SRF L175368	1.750	43,656	122,454	42,586	123,525	332,221
09D SRF L174558	2.295	290,274	1,021,988	278,546	1,033,715	2,624,523
12A SRF L174710	2.295	63,405	175,743	61,389	177,759	478,296
12B SRF L174712	2.295	54,302	150,510	52,574	152,237	409,623
12C SRF L174621	1.995	115,468	320,492	112,272	323,690	871,922
12D SRF L174988	1.930	199,311	835,542	191,249	843,605	2,069,707
12E SRF L174709	1.930	42,795	133,252	41,509	134,539	352,095
12F SRF L174989	1.930	405,326	1,563,659	390,238	1,578,749	3,937,972
12G SRF L174923	1.930	301,994	755,889	294,701	763,184	2,115,768
12H SRF L174924	1.930	180,450	738,607	173,322	745,736	1,838,115
12L SRF L175161	2.210	310,261	736,217	302,127	744,352	2,092,957
12J SRF L175172	1.995	20,998	62,955	20,371	63,583	167,907
12K SRF L174925	1.995	108,920	314,029	105,789	317,161	845,899
09A SRF L173074	1.250	177,454	1,161,999	170,192	1,169,263	2,678,908
09B SRF L173064	—	—	191,445	—	191,445	382,890
09C SRF L173063	—	—	55,979	—	55,979	111,958

BOND REDEMPTION & INTEREST FUND

Appropriation for Payment of Outstanding Bonds During the Year 2021

BOND ISSUE	RATES OF INTEREST	JANUARY 1, 2021		JULY 1, 2021		TOTAL PAYABLE
		INTEREST PAYABLE	PRINCIPAL PAYABLE	INTEREST PAYABLE	PRINCIPAL PAYABLE	
(1) Interest Payable June 1, 2021 (2) Interest and Principal Payable December 1, 2021						
State Revolving Fund Bonds - Series (continued):						
09I SRF L174675	1.250	\$ 38,704	\$ 276,877	\$ 36,974	\$ 278,608	\$ 631,163
07A SRF L172625	2.500	291,232	1,093,996	277,558	1,107,672	2,770,458
07B SRF L172850	2.500	203,522	721,614	194,502	730,635	1,850,273
07C SRF L172770	—	—	1,666,667	—	1,666,667	3,333,334
09G SRF L173075	1.250	113,128	747,404	108,457	752,076	1,721,065
09H SRF L173800	—	—	18,397	—	18,396	36,793
09E SRF L173005	1.250	145,440	994,058	139,227	1,000,271	2,278,996
07D SRF L172763	2.500	66,427	249,528	63,308	252,649	631,912
09F SRF L174557	1.250	241,467	1,580,678	231,588	1,590,557	3,644,290
04G SRF L172611	2.500	20,055	114,429	18,626	115,860	268,970
04H SRF L172849	2.500	336,719	1,432,003	318,820	1,449,903	3,537,445
01A SRF L172126	2.570	162,306	1,736,029	139,999	1,758,338	3,796,672
97DD SRF L171152	2.905	43,061	476,463	36,141	483,384	1,039,049
01B SRF L172127	2.500	203,897	1,723,677	182,352	1,745,223	3,855,149
01C SRF L172128	2.500	216,764	1,480,380	198,259	1,498,886	3,394,289
04A SRF L172485	2.500	126,022	663,432	117,730	671,725	1,578,909
04B SRF L172488	2.500	147,218	775,018	137,531	784,705	1,844,472
04C SRF L172493	2.500	12,873	73,451	11,956	74,370	172,650
04D SRF L172494	2.500	12,345	70,438	11,466	71,319	165,568
04E SRF L172495	2.500	43,971	214,670	41,287	217,353	517,281
04F SRF L172496	—	—	99,368	—	99,367	198,735
12O SRF L175166	1.995	37,664	108,588	36,581	109,672	292,505
16B SRF L172129	1.840	17,699	40,006	17,332	40,375	115,412
12I SRF L175222	2.210	46,565	110,495	45,345	111,716	314,121
12M SRF L175168	2.210	121,178	267,494	118,223	270,450	777,345
12N SRF L175164	1.995	23,480	65,171	22,830	65,821	177,302
14I SRF L175223	1.860	75,910	191,934	74,125	193,720	535,689
14J SRF L175219	2.210	41,083	101,216	39,965	102,336	284,600
14A SRF L173076	2.210	749,256	1,777,905	729,610	1,797,552	5,054,323
97CC SRF L172031	2.535	44,158	1,146,692	29,624	1,161,226	2,381,700
16D SRF L175460	1.750	61,798	173,340	60,282	174,857	470,277
Refunding Bonds - Series:						
2014 Limited Tax Series D	2.0 to 5.0	\$ 697,500 (1)	\$ —	\$ 697,500 (2)	\$ 12,105,000 (2)	\$ 13,500,000
2007 Unlimited Tax Series A	4.0 to 5.0	1,198,750 (1)	—	1,198,750 (2)	23,395,000 (2)	25,792,500
2007 Unlimited Tax Series B	4.0 to 5.0	2,410,931 (1)	—	2,410,932 (2)	— (2)	4,821,863
2007 Limited Tax Series C	4.0 to 5.0	2,673,825 (1)	—	2,673,825 (2)	— (2)	5,347,650
2016 Unlimited Tax Series A	5.0	7,023,250 (1)	—	7,023,250 (2)	— (2)	14,046,500
2016 Limited Tax Series B	5.0	1,033,250 (1)	—	1,033,250 (2)	— (2)	2,066,500
TOTAL		\$ 54,864,447	\$ 35,915,950	\$ 54,515,513	\$ 86,829,940	\$ 232,125,850

(1) Interest Payable June 1, 2021 (2) Interest and Principal Payable December 1, 2021

RETIREMENT FUND

Description of Fund, Purpose, and Operation

The Metropolitan Water Reclamation District Retirement Fund (Fund) is a defined benefit public employee retirement system that provides retirement, survivor, and disability benefits to the employees of the Metropolitan Water Reclamation District of Greater Chicago in accordance with Chapter 40, Act 5, Articles 1, 13, and 20 of the Illinois Compiled Statutes. The primary goal of the Fund is to provide required benefits to the members while preserving the fiscal integrity and financial stability of the Fund.

On August 3, 2012, the Governor signed Public Act 97-0894, which increased the nine percent required employee contributions one percent per year for three years beginning in 2013 to the current contribution of 12 percent for employees who first became a member of the Fund or certain reciprocal systems before January 1, 2011 (Tier I).

In 2014, the District's Board of Commissioners adopted a Funding Policy that incorporated a funding goal that will achieve a 100 percent funding ratio by the year 2050. Currently, the required employer contribution is based on the actuarially determined contribution required to achieve the District's funding goal but not to exceed an amount equal to employee contributions two years prior multiplied by 4.19.

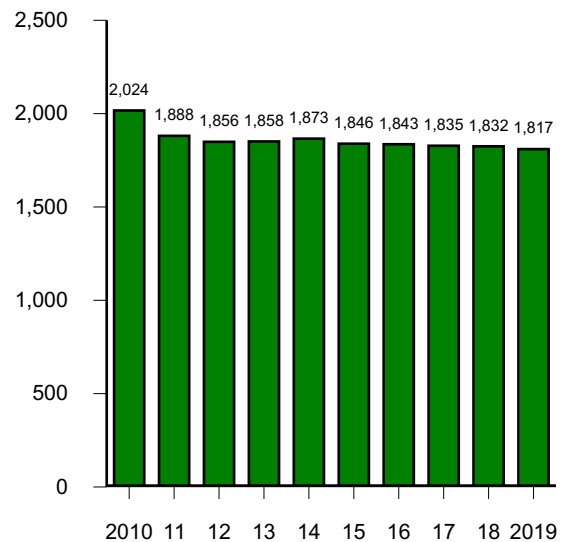
The 2020 appropriation includes a planned equity transfer of \$20.0 million to provide advance funding to maintain growth in the Retirement Fund's funded ratio. The transfer of accumulated investment income is authorized under District statute and demonstrates the District's commitment to reaching our goal of a 100 percent funded ratio by 2050.

As of December 31, 2019, the Fund had 1,817 active (contributing) participants, 1,883 employee annuitants, 561 spouse annuitants, and 21 child annuitants. In addition, the Fund had 20 District employees receiving disability benefits at the end of the year.

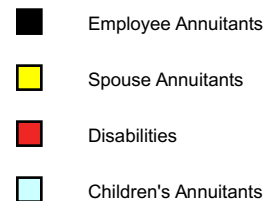
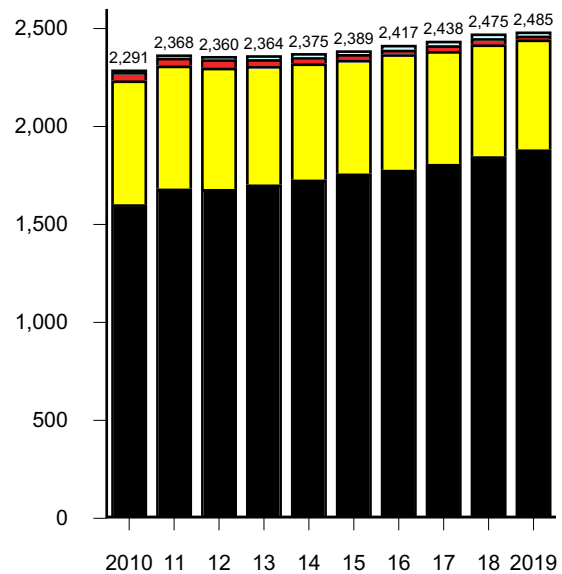
Additions to the Fund are from the following sources:

- Employee contributions - Beginning in 2015, (Tier I) employees contribute 12 percent of salary to the Fund. Employees hired on or after January 1, 2011 (Tier II) contribute nine percent of salary.
- Employer contributions - Includes real estate property tax levies and the Personal Property Replacement Tax. In 2021, the District will levy a tax which will produce a sum that will be sufficient to meet the funding goals of the District's Funding Policy.
- Net investment income - Includes dividends and interest, as well as realized and unrealized appreciation (depreciation) in the fair value of the investments, less investment expense.

Active Participants



Beneficiaries

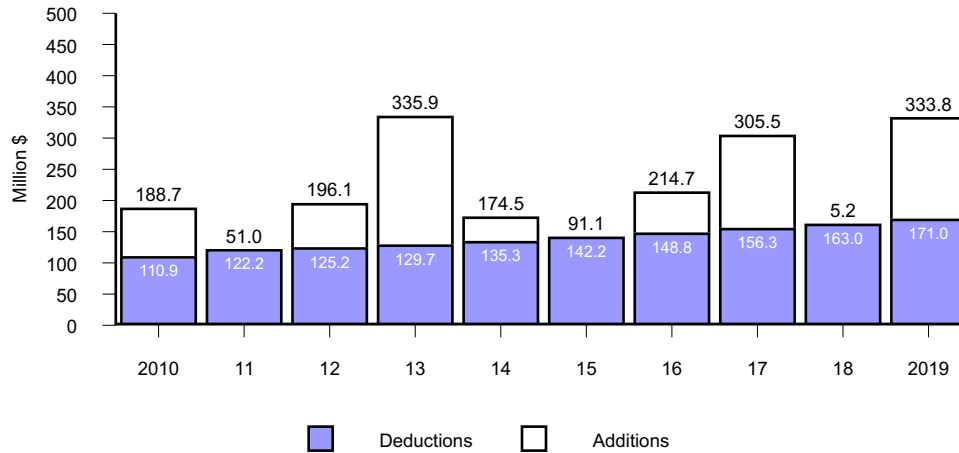


RETIREMENT FUND

Description of Fund, Purpose, and Operation (continued)

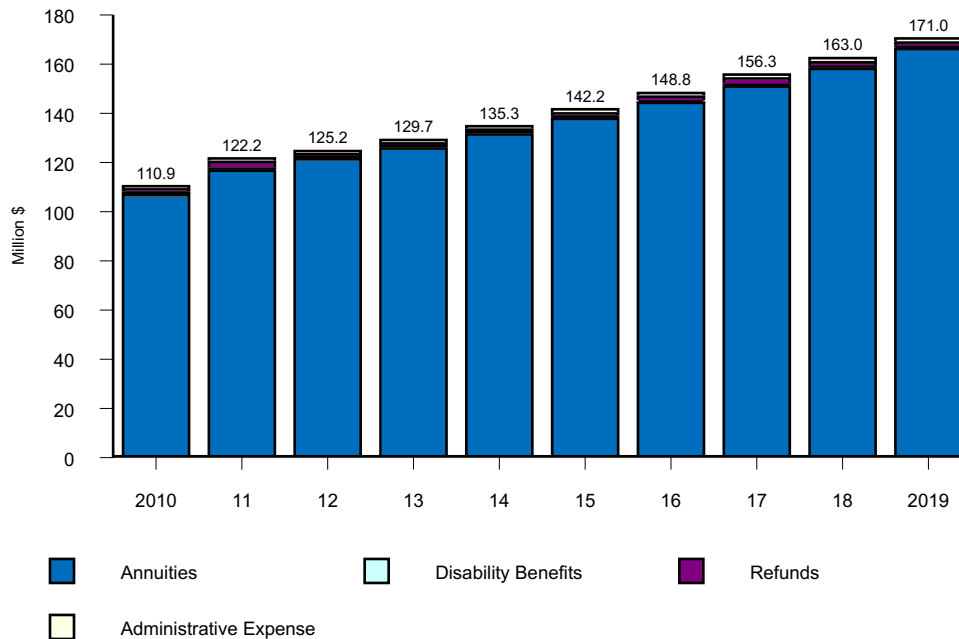
Total additions for 2019 were \$333.8 million, or \$328.6 million greater than in 2018, due to the overall increase in investment markets during the year. Additions in 2019 were the combined effect of employee and employer contributions of \$108.6 million, net investment income of \$224.9 million, securities lending income of \$254,300, and other income of \$3,100.

Additions vs. Deductions



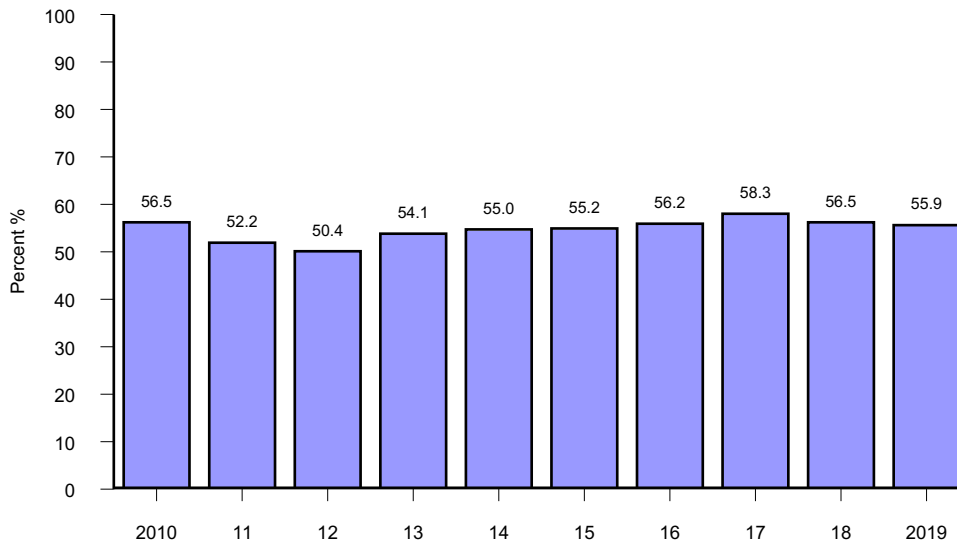
Deductions for 2019 were \$171.0 million, which included annuity payments of \$166.7 million, refunds of \$1.8 million, administrative expenses of \$1.7 million, and disability benefits of \$0.8 million.

Deductions

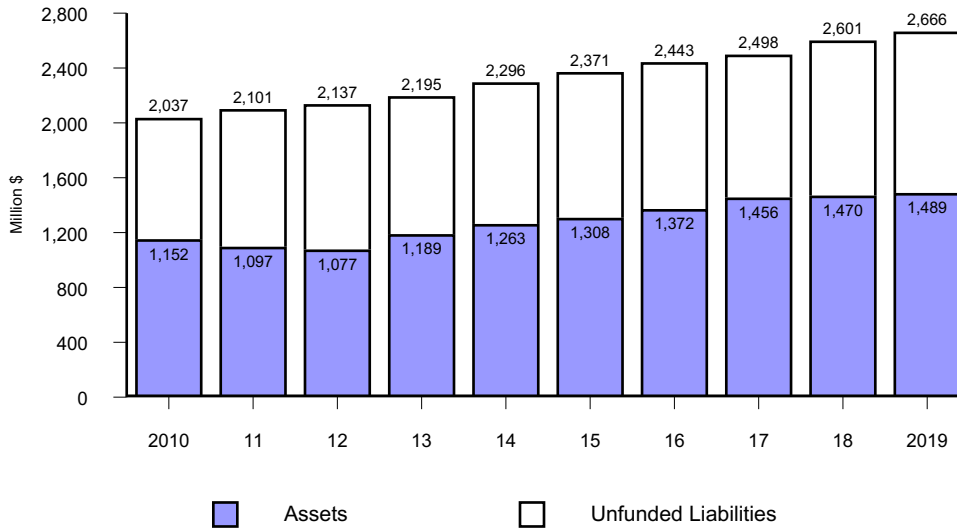


As of December 31, 2019, the funded ratio of the Fund was 55.9 percent utilizing the Actuarial Asset Value required by the Governmental Accounting Standards Board. The funded ratio has been in the range of 50.4 percent to 58.3 percent over the last ten years.

Funded Ratio at Actuarial Value



Actuarial Value of Assets and Liabilities



For the 2021 Budget, the gross property tax levy totals \$72.7 million, an increase of \$0.5 million, or 0.7 percent, above the 2020 adjusted levy. The 2021 Personal Property Replacement Tax allocation to the Retirement Fund is \$18.6 million. The 2021 appropriation is \$88.1 million, a decrease of \$19.2 million, or 17.9 percent, below the 2020 Adjusted Budget, the result of the advance funding provided by the District in 2020.

APPROPRIATION ORDINANCE NUMBER O20-008

**ANNUAL APPROPRIATION ORDINANCE OF THE
METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO
FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2021
AND ENDING DECEMBER 31, 2021
(CONTINUED)**

And an amount of Estimated Expenditures for the Purpose of the Metropolitan Water Reclamation District Retirement Fund of \$88,127,000.

Section 9. That the appropriation herein of the amounts for the payment of “unpaid bills” or “contractual liabilities,” or to defray the expense of any project or purpose, shall not be construed as an approval or an admission of liability by the Board of Commissioners of any said bills or contractual liabilities, or of any project or purpose mentioned herein but shall be regarded only as the provision of a fund or funds, for

the payment thereof when said bills or contractual liabilities have been found to be valid and legal obligations against the Metropolitan Water Reclamation District of Greater Chicago and when properly vouchered and audited by the Department of Finance, or when any project or purpose is approved and authorized by the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago, as the case may be.

Section 10. This ordinance shall take effect January 1, 2021.

Approved as to Form and Legality:

Deputy General Counsel

General Counsel

Approved:

*President,
Board of Commissioners of the
Metropolitan Water Reclamation District
of Greater Chicago*

SECTION VIII

TAX LEVY ORDINANCES

The Tax Levy Ordinances are the means by which tax levies, enacted by the Board of Commissioners under authority of the Illinois Compiled Statutes, are given legal effect.

Each tax levy states the revenue which is to be raised, through the collection of property taxes, to finance the operations of a specific fund. The gross tax levy, which allows for loss in collection, is presented with the amount of estimated loss, where applicable. A factor of 3.5 percent for loss in collection is used for 2021 levies.

This section includes 2021 Tax Levy Ordinances for the Retirement Fund, Corporate Fund, Construction Fund, Reserve Claim Fund, and Stormwater Management Fund. A Tax Levy Ordinance, to pay the interest on outstanding bonds and to discharge the principal thereof, along with a detailed schedule of the 2021 Tax Levy for Payment of Outstanding Bonds, can also be found in this section.

<u>Retirement Fund and Corporate Fund</u>	<u>531</u>
<u>Construction Fund</u>	<u>532</u>
Bond Redemption & Interest Fund:	
<u>Tax Levy Ordinance for Outstanding Bonds</u>	<u>533</u>
<u>Tax Levy for Payment of Outstanding Bonds, 2021</u>	<u>536</u>
<u>Reserve Claim Fund</u>	<u>538</u>
<u>Stormwater Management Fund</u>	<u>539</u>

ORDINANCE NUMBER O20-009

**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR
BEGINNING JANUARY 1, 2021 AND ENDING DECEMBER 31, 2021
UPON ALL TAXABLE PROPERTY WITHIN THE TERRITORIAL LIMITS OF THE
METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO
AS SAID TERRITORIAL LIMITS EXIST ON JANUARY 1, 2021
FOR THE PURPOSE OF PROVIDING REVENUES FOR
THE METROPOLITAN WATER RECLAMATION DISTRICT
RETIREMENT FUND AND CORPORATE FUND**

BE IT ORDAINED by the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago:

Section 1. That there be and is hereby levied upon all taxable property within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago, as said territorial limits exist on January 1, 2021, for the fiscal year ending December 31, 2021, the amounts of money hereinafter stated as follows:

For the amount certified to the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago by the Retirement Board of the Metropolitan Water Reclamation District Retirement Fund for the purpose of providing the revenue for the Retirement Fund of the Metropolitan Water Reclamation District pursuant to Article 13 of the Illinois Pension Code, the sum of \$72,741,500 which includes the sum of \$2,545,953 as a reserve for loss in collection of taxes, distributed as

Contributions for Service Retirement Allowances and Spouses’ Allowances	\$ 13,791,412
Contributions for Ordinary Disability Benefits	834,830
Contributions for Duty Disability Benefits	196,045
Contributions for Expense of Administration.....	1,483,860
Contributions for Children’s Annuities	112,283
Contributions for Current and Past Service Requirements.....	56,323,070
	<u>\$ 72,741,500</u>

For Corporate Purposes of the said Metropolitan Water Reclamation District of Greater Chicago, “the sum of \$270,880,900 which includes the sum of \$9,480,832 as a reserve for loss in the collection of taxes.”

Section 2. That the Clerk of the Metropolitan Water Reclamation District of Greater Chicago be, and is hereby directed to certify to the County Clerk of Cook County, the several amounts above set forth to be raised by taxation in the year 2021 and to file a certified copy of the Ordinance with the said County Clerk of Cook County and said County Clerk of Cook County aforesaid, is hereby directed to cause the aforesaid amounts of money to be extended upon and against the taxable property within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago, as said territorial limits exist on January 1, 2021, all in accordance with the laws and statutes of the State of Illinois in such case made and provided, and the Clerk of the Metropolitan Water Reclamation District of Greater Chicago is hereby directed to cause this Ordinance to be published at least once in a newspaper published within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago and to incur the necessary expenses therefor.

Section 3. This Ordinance shall take effect January 1, 2021.

Approved as to Form and Legality:

Approved:

Deputy General Counsel

*President,
Board of Commissioners of the
Metropolitan Water Reclamation District
of Greater Chicago*

General Counsel

ORDINANCE NUMBER O20-010

**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR BEGINNING
 JANUARY 1, 2021 AND ENDING DECEMBER 31, 2021
 UPON ALL TAXABLE PROPERTY WITHIN THE TERRITORIAL LIMITS OF THE
 METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO
 AS SAID TERRITORIAL LIMITS EXIST ON JANUARY 1, 2021
 FOR THE PURPOSE OF PROVIDING REVENUES
 FOR THE CONSTRUCTION FUND**

BE IT ORDAINED by the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago:

Section 1. That there be and is hereby levied upon all taxable property within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago, as said territorial limits exist on January 1, 2021 for the fiscal year ending December 31, 2021, to provide revenue for the replacement, remodeling, completion, alteration, construction, and enlargement, including alterations, enlargements and replacements which will add appreciably to the value, utility, or the useful life of sewage treatment works, administrative buildings, flood control facilities, or water quality improvement projects, and additions therefor, pumping stations, tunnels, conduits and intercepting sewers connecting therewith, and outlet sewers together with the equipment and appurtenances necessary thereto, and for the acquisition of the sites and rights of way necessary thereto, and for engineering expenses for designing and supervising the construction of the works above described, “the sum of \$7,000,000 which includes the sum of \$245,000 as a reserve for loss in collection of taxes.”

Section 2. That the Clerk of the Metropolitan Water Reclamation District of Greater Chicago be, and is hereby directed to certify to the County Clerk of Cook County, the amount above set forth to be raised by taxation in the year

2021 and to file a certified copy of the Ordinance with the said County Clerk of Cook County, and said County Clerk of Cook County aforesaid, is hereby directed to cause the aforesaid amount of money to be extended upon and against the taxable property within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago, as said territorial limits exist on January 1, 2021, all in accordance with the laws and statutes of the State of Illinois in such case made and provided, and subject to reduction as provided in the text below, and the Clerk of the Metropolitan Water Reclamation District of Greater Chicago is hereby directed to cause this Ordinance to be published at least once in a newspaper published within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago and to incur the necessary expenses therefor.

Section 3. That said County Clerk of Cook County, as tax extension officer for said District, is hereby directed to *reduce this levy of taxes* by the District for the year 2021 by the amount necessary to enable said District’s aggregate tax levies to comply with the Property Tax Extension Limitation Law; that is, the entire reduction in the aggregate of all tax levies for said District for the year 2021 required by said Law shall be taken against the Construction Fund levy as set forth in this Ordinance.

Section 4. This Ordinance shall take effect January 1, 2021.

Approved as to Form and Legality:

Deputy General Counsel

General Counsel

Approved:

*President,
 Board of Commissioners of the
 Metropolitan Water Reclamation District
 of Greater Chicago*

ORDINANCE NUMBER O20-011

**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR BEGINNING
JANUARY 1, 2021 AND ENDING DECEMBER 31, 2021
TO PAY THE INTEREST ON OUTSTANDING BONDS AND TO
DISCHARGE THE PRINCIPAL THEREOF**

BE IT ORDAINED by the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago:

Chicago, as said territorial limits exist on January 1, 2021, and all taxable property in townships or parts of townships disconnected from the Metropolitan Water Reclamation District of Greater Chicago prior to January 1, 2021, but after the issuance of any bonds, the amounts of money hereinafter stated:

Section 1. For the purpose of creating a sinking fund to pay the principal and interest on outstanding bonds, there is hereby levied upon all taxable property within the territorial limits of the Metropolitan Water Reclamation District of Greater

Capital Improvements Bonds - Series:

2016 Qualified Energy Conservation Limited Tax Series F	07/07/16	\$ 165,804
2009 Limited Tax Series	08/26/09	35,564,767
2011 Limited Tax Series B	07/27/11	18,413,569
2011 Unlimited Tax Series C	07/27/11	2,142,416
2014 Limited Tax Series C	01/06/15	2,571,244
2014 Unlimited Tax Series A	01/06/15	5,181,348
2014 Alternate Revenue Unlimited Tax Series B	01/06/15	3,388,705
2016 Alternate Revenue Unlimited Tax Series E	07/07/16	3,756,477
2016 Unlimited Tax Series C	07/07/16	1,554,405
2016 Limited Tax Series D	07/07/16	2,917,099

State Revolving Funds Bonds - Series:

09D SRF L174558	\$ 2,719,713
12A SRF L174710	495,644
12B SRF L174712	424,480
12C SRF L174621	913,248
12D SRF L174988	2,144,773
12E SRF L174709	364,865
12F SRF L174989	4,182,054
12G SRF L174923	2,237,666
12H SRF L174924	1,904,782
12I SRF L175222	336,470
12J SRF L175172	173,996
12K SRF L174925	889,061
12L SRF L175161	2,557,534
12M SRF L175168	873,990
12N SRF L175164	186,528
12O SRF L175166	303,113
14A SRF L173076	5,237,640
14B SRF L175171	183,566
14C SRF L174559	1,358,390
14D SRF L175263	828,388
14E SRF L173062	2,914,926
14F SRF L175342	4,930,622
14G SRF L175152	1,364,037

ORDINANCE NUMBER O20-011**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR BEGINNING
JANUARY 1, 2021 AND ENDING DECEMBER 31, 2021
TO PAY THE INTEREST ON OUTSTANDING BONDS AND TO
DISCHARGE THE PRINCIPAL THEREOF (CONTINUED)**

State Revolving Funds Bonds - Series:

14H SRF L175355	\$ 79,322
14I SRF L175223	809,704
14J SRF L175219	315,494
14K SRF L175366	348,796
14L SRF L175368	345,144
14M SRF L175372	92,450
14N SRF L175371	98,613
14O SRF L175305	203,389
14P SRF L175369	256,093
14Q SRF L175539	302,291
14R SRF L175517	3,872,936
16A SRF L174555	8,497,409
16B SRF L172129	273,531
16C SRF L175367	2,134,539
16D SRF L175460	503,633
16G SRF L174708	1,117,234
16H SRF L172130	927,872
16I SRF L173798	827,971
16K SRF L172741	208,297
09A SRF L173074	2,776,070
09B SRF L173064	396,777
09C SRF L173063	116,019
09I SRF L174675	654,054
07A SRF L172625	2,870,941
07B SRF L172850	1,917,382
07C SRF L172770	3,454,232
09G SRF L173075	1,783,487
09H SRF L173800	38,127
09E SRF L173005	2,361,654
07D SRF L172763	654,831
09F SRF L174557	3,776,466
04G SRF L172611	278,725
04H SRF L172849	3,665,744
01A SRF L172126	3,934,375
97DD SRF L171152	1,076,734
01B SRF L172127	3,994,974
01C SRF L172128	3,517,399
04A SRF L172485	1,636,174
04B SRF L172488	1,911,370
04C SRF L172493	178,912
04D SRF L172494	171,573
04E SRF L172495	536,044
04F SRF L172496	205,944

ORDINANCE NUMBER O20-011

**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR BEGINNING
JANUARY 1, 2021 AND ENDING DECEMBER 31, 2021
TO PAY THE INTEREST ON OUTSTANDING BONDS AND TO
DISCHARGE THE PRINCIPAL THEREOF (CONTINUED)**

Refunding Bonds - Series:

2007 Unlimited Tax Series A	03/21/07	\$ 26,717,876
2007 Unlimited Tax Series B	03/21/07	4,996,749
2007 Limited Tax Series C	03/21/07	5,541,607
2014 Limited Tax Series D	01/06/15	17,186,270
2016 Unlimited Tax Series A	07/07/16	14,555,959
2016 Limited Tax Series B	07/07/16	2,141,451
		\$ 247,443,958

Section 2. That the Clerk of the Metropolitan Water Reclamation District of Greater Chicago be, and is hereby directed to certify to the County Clerk of Cook County, the several amounts above set forth to be raised by taxation in the year 2021 for the purpose of providing the funds to pay the interest on bonds and discharge the principal thereof, and to file a certified copy of this Ordinance with said County Clerk of Cook County, and said County Clerk of Cook County is hereby directed to cause aforesaid amounts of money to be extended upon and against taxable property within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago as said territorial limits exist on January 1, 2021, and the County Clerk of Cook County is further directed to extend upon all taxable property in all

townships or parts of townships disconnected from the Metropolitan Water Reclamation District of Greater Chicago prior to January 1, 2021 those amounts aforesaid necessary to pay the principal and interest for any bonds issued prior to the date of disconnection, all in accordance with the laws and statutes of the State of Illinois in such case made and provided, and the Clerk of the Metropolitan Water Reclamation District of Greater Chicago is hereby directed to cause this Ordinance to be published at least once in a newspaper published within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago and to incur the necessary expenses therefor.

Section 3. This Ordinance shall take effect January 1, 2021.

Approved as to Form and Legality:

Approved:

Deputy General Counsel

*President, Board of Commissioners of the
Metropolitan Water Reclamation District
of Greater Chicago*

General Counsel

BOND REDEMPTION AND INTEREST FUND
2021 Tax Levy for Payment of Outstanding Bonds

BOND ISSUE	ISSUE DATED	INTEREST PAYMENT DATES	INTEREST	PRINCIPAL	RESERVE FOR UNCOLLECTED TAX (A)	GROSS LEVY
Capital Improvements Bonds - Series:						
2016 Qualified Energy Conservation Limited Tax Series F	07/07/16	6/1/21 - 12/1/21	\$ 160,000	\$ —	\$ 5,804	\$ 165,804
2009 Limited Tax Series	08/26/09	6/1/21 - 12/1/21	34,320,000	—	1,244,767	35,564,767
2011 Limited Tax Series B	07/27/11	6/1/21 - 12/1/21	10,189,094	7,580,000	644,475	18,413,569
2011 Unlimited Tax Series C	07/27/11	6/1/21 - 12/1/21	2,067,431	—	74,985	2,142,416
2014 Limited Tax Series C	01/06/15	6/1/21 - 12/1/21	2,481,250	—	89,994	2,571,244
2014 Unlimited Tax Series A	01/06/15	6/1/21 - 12/1/21	5,000,001	—	181,347	5,181,348
2014 Alternate Revenue Unlimited Tax Series B	01/06/15	6/1/21 - 12/1/21	2,185,100	1,085,000	118,605	3,388,705
2016 Alternate Revenue Unlimited Tax Series E	07/07/16	6/1/21 - 12/1/21	2,500,000	1,125,000	131,477	3,756,477
2016 Unlimited Tax Series C	07/07/16	6/1/21 - 12/1/21	1,500,001	—	54,404	1,554,405
2016 Limited Tax Series D	07/07/16	6/1/21 - 12/1/21	1,000,001	1,815,000	102,098	2,917,099
State Revolving Funds Bonds - Series:						
09D SRF L174558	07/01/13	7/1/21 - 1/1/22	\$ 497,237	\$ 2,127,286	\$ 95,190	\$ 2,719,713
12A SRF L174710	07/01/14	7/1/21 - 1/1/22	112,484	365,812	17,348	495,644
12B SRF L174712	07/01/14	7/1/21 - 1/1/22	96,334	313,289	14,857	424,480
12C SRF L174621	07/01/16	7/1/21 - 1/1/22	210,506	670,778	31,964	913,248
12D SRF L174988	07/01/15	7/1/21 - 1/1/22	341,478	1,728,228	75,067	2,144,773
12E SRF L174709	07/01/15	7/1/21 - 1/1/22	76,477	275,618	12,770	364,865
12F SRF L174989	07/01/15	7/1/21 - 1/1/22	662,486	3,373,196	146,372	4,182,054
12G SRF L174923	07/01/18	7/1/21 - 1/1/22	578,919	1,580,429	78,318	2,237,666
12H SRF L174924	07/01/15	7/1/21 - 1/1/22	310,384	1,527,731	66,667	1,904,782
12I SRF L175222	07/01/16	7/1/21 - 1/1/22	87,305	237,389	11,776	336,470
12J SRF L175172	07/01/15	7/1/21 - 1/1/22	37,544	130,362	6,090	173,996
12K SRF L174925	07/01/15	7/1/21 - 1/1/22	198,417	659,527	31,117	889,061
12L SRF L175161	07/01/16	7/1/21 - 1/1/22	663,610	1,804,410	89,514	2,557,534
12M SRF L175168	07/01/18	7/1/21 - 1/1/22	240,181	603,219	30,590	873,990
12N SRF L175164	07/01/16	7/1/21 - 1/1/22	42,995	137,005	6,528	186,528
12O SRF L175166	07/01/15	7/1/21 - 1/1/22	67,647	224,857	10,609	303,113
14A SRF L173076	07/01/16	7/1/21 - 1/1/22	1,359,025	3,695,298	183,317	5,237,640
14B SRF L175171	07/01/16	7/1/21 - 1/1/22	46,199	130,942	6,425	183,566
14C SRF L174559	07/01/16	7/1/21 - 1/1/22	353,008	957,838	47,544	1,358,390
14D SRF L175263	07/01/18	7/1/21 - 1/1/22	207,687	591,707	28,994	828,388
14E SRF L173062	07/01/18	7/1/21 - 1/1/22	730,808	2,082,096	102,022	2,914,926
14F SRF L175342	07/01/19	7/1/21 - 1/1/22	1,235,147	3,522,903	172,572	4,930,622
14G SRF L175152	07/01/18	7/1/21 - 1/1/22	341,981	974,315	47,741	1,364,037
14H SRF L175355	07/01/17	7/1/21 - 1/1/22	17,750	58,796	2,776	79,322
14I SRF L175223	07/01/18	7/1/21 - 1/1/22	203,003	578,361	28,340	809,704
14J SRF L175219	07/01/16	7/1/21 - 1/1/22	79,403	225,049	11,042	315,494
14K SRF L175366	07/01/18	7/1/21 - 1/1/22	87,447	249,141	12,208	348,796
14L SRF L175368	07/01/18	7/1/21 - 1/1/22	82,126	250,938	12,080	345,144
14M SRF L175372	07/01/18	7/1/21 - 1/1/22	21,998	67,216	3,236	92,450
14N SRF L175371	07/01/18	7/1/21 - 1/1/22	23,465	71,697	3,451	98,613
14O SRF L175305	07/01/18	7/1/21 - 1/1/22	48,396	147,874	7,119	203,389
14P SRF L175369	07/01/18	7/1/21 - 1/1/22	58,064	189,066	8,963	256,093
14Q SRF L175539	07/01/20	7/1/21 - 1/1/22	76,094	215,617	10,580	302,291
14R SRF L175517	07/01/21	7/1/21 - 1/1/22	1,110,454	2,626,929	135,553	3,872,936

BOND REDEMPTION AND INTEREST FUND
2021 Tax Levy for Payment of Outstanding Bonds

BOND ISSUE	ISSUE DATED	INTEREST PAYMENT DATES	INTEREST	PRINCIPAL	RESERVE FOR UNCOLLECTED TAX (A)	GROSS LEVY
State Revolving Funds Bonds - Series:						
16A SRF L174555	07/01/18	7/1/21 - 1/1/22	\$ 2,021,932	\$ 6,178,068	\$ 297,409	\$ 8,497,409
16B SRF L172129	07/01/20	7/1/21 - 1/1/22	74,998	188,959	9,574	273,531
16C SRF L175367	07/01/19	7/1/21 - 1/1/22	537,319	1,522,511	74,709	2,134,539
16D SRF L175460	07/01/18	7/1/21 - 1/1/22	116,634	369,372	17,627	503,633
16G SRF L174708	07/01/21	7/1/21 - 1/1/22	343,103	735,028	39,103	1,117,234
16H SRF L172130	07/01/21	7/1/21 - 1/1/22	284,949	610,447	32,476	927,872
16I SRF L173798	07/01/22	7/1/21 - 1/1/22	262,346	536,646	28,979	827,971
16K SRF L172741	07/01/20	7/1/21 - 1/1/22	61,214	139,793	7,290	208,297
09A SRF L173074	07/01/12	7/1/21 - 1/1/22	303,661	2,375,246	97,163	2,776,070
09B SRF L173064	06/21/11	7/1/21 - 1/1/22	—	382,890	13,887	396,777
09C SRF L173063	01/15/11	7/1/21 - 1/1/22	—	111,957	4,062	116,019
09I SRF L174675	06/21/11	7/1/21 - 1/1/22	65,197	565,965	22,892	654,054
07A SRF L172625	06/17/10	7/1/21 - 1/1/22	485,190	2,285,266	100,485	2,870,941
07B SRF L172850	07/01/10	7/1/21 - 1/1/22	342,882	1,507,392	67,108	1,917,382
07C SRF L172770	01/01/11	7/1/21 - 1/1/22	—	3,333,334	120,898	3,454,232
09G SRF L173075	07/01/13	7/1/21 - 1/1/22	193,294	1,527,771	62,422	1,783,487
09H SRF L173800	04/23/11	7/1/21 - 1/1/22	—	36,793	1,334	38,127
09E SRF L173005	08/06/11	7/1/21 - 1/1/22	247,039	2,031,957	82,658	2,361,654
07D SRF L172763	06/10/10	7/1/21 - 1/1/22	110,667	521,244	22,920	654,831
09F SRF L174557	07/01/16	7/1/21 - 1/1/22	413,222	3,231,068	132,176	3,776,466
04G SRF L172611	01/31/07	7/1/21 - 1/1/22	29,936	239,033	9,756	278,725
04H SRF L172849	07/01/09	7/1/21 - 1/1/22	546,109	2,991,334	128,301	3,665,744
01A SRF L172126	07/01/04	7/1/21 - 1/1/22	165,859	3,630,813	137,703	3,934,375
97DD SRF L171152	07/01/04	7/1/21 - 1/1/22	36,766	1,002,282	37,686	1,076,734
01B SRF L172127	07/01/05	7/1/21 - 1/1/22	254,533	3,600,616	139,825	3,994,974
01C SRF L172128	06/16/06	7/1/21 - 1/1/22	301,898	3,092,391	123,110	3,517,399
04A SRF L172485	05/15/08	7/1/21 - 1/1/22	193,055	1,385,853	57,266	1,636,174
04B SRF L172488	05/28/08	7/1/21 - 1/1/22	225,525	1,618,947	66,898	1,911,370
04C SRF L172493	03/27/07	7/1/21 - 1/1/22	19,216	153,434	6,262	178,912
04D SRF L172494	01/31/07	7/1/21 - 1/1/22	18,428	147,140	6,005	171,573
04E SRF L172495	05/30/08	7/1/21 - 1/1/22	68,854	448,428	18,762	536,044
04F SRF L172496	04/23/11	7/1/21 - 1/1/22	—	198,736	7,208	205,944
Refunding Bonds - Series:						
2007 Unlimited Tax Series A	03/21/07	6/1/21 - 12/1/21	\$ 1,227,750	\$ 24,555,000	\$ 935,126	\$ 26,717,876
2007 Unlimited Tax Series B	03/21/07	6/1/21 - 12/1/21	4,821,863	—	174,886	4,996,749
2007 Limited Tax Series C	03/21/07	6/1/21 - 12/1/21	5,347,650	—	193,957	5,541,607
2014 Limited Tax Series D	01/06/15	6/1/21 - 12/1/21	789,751	15,795,000	601,519	17,186,270
2016 Unlimited Tax Series A	07/07/16	6/1/21 - 12/1/21	14,046,500	—	509,459	14,555,959
2016 Limited Tax Series B	07/07/16	6/1/21 - 12/1/21	2,066,500	—	74,951	2,141,451
TOTAL			\$ 107,732,777	\$ 131,050,633	\$ 8,660,548	\$ 247,443,958

(A) Reserve at 3.5%

ORDINANCE NUMBER O20-012

**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR BEGINNING
JANUARY 1, 2021 AND ENDING DECEMBER 31, 2021
UPON ALL TAXABLE PROPERTY WITHIN THE TERRITORIAL LIMITS OF
THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO
AS SAID TERRITORIAL LIMITS EXIST ON JANUARY 1, 2021
FOR THE PURPOSE OF PROVIDING REVENUES
FOR THE RESERVE CLAIM FUND**

BE IT ORDAINED by the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago:

Section 1. That there is hereby levied the sum of \$7,500,000 upon all taxable property within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago as said territorial limits exist on January 1, 2021, for the fiscal year ending December 31, 2021, for the purpose of providing revenues for establishing and maintaining a reserve fund for the payment of claims, awards, losses, judgments, liabilities, settlements, or demands, and associated attorney's fees and costs that might be imposed on or incurred by such sanitary district in matters including, but not limited to, the Workers' Compensation Act or the Workers' Occupational Diseases Act, any claim in tort, any claim of deprivation of any constitutional or statutory right or protection, for all expenses, fees, and costs, both direct and in support of any property owned by such sanitary district which is damaged by fire, flood, explosion, vandalism or any other peril, natural or manmade.

Section 2. That the Clerk of the Metropolitan Water Reclamation District of Greater Chicago be, and is hereby directed to certify to the County Clerk of Cook County, the amount above set forth to be raised by taxation in the year 2021 and to file a certified copy of the Ordinance with the said County Clerk of Cook County and said County Clerk of Cook County aforesaid, is hereby directed to cause the aforesaid amount of money to be extended upon and against the taxable property within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago, as said territorial limits exist on January 1, 2021, all in accordance with the laws and statutes of the State of Illinois in such case made and provided, and the Clerk of the Metropolitan Water Reclamation District of Greater Chicago is hereby directed to cause this Ordinance to be published at least once in a newspaper published within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago and to incur the necessary expenses therefor.

Section 3. This Ordinance shall take effect January 1, 2021.

Approved as to Form and Legality:

Deputy General Counsel

General Counsel

Approved:

*President,
Board of Commissioners of the
Metropolitan Water Reclamation District
of Greater Chicago*

ORDINANCE NUMBER O20-013

**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR BEGINNING
 JANUARY 1, 2021 AND ENDING DECEMBER 31, 2021
 UPON ALL TAXABLE PROPERTY WITHIN THE TERRITORIAL LIMITS OF THE
 METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO
 AS SAID TERRITORIAL LIMITS EXIST ON JANUARY 1, 2021
 FOR THE PURPOSE OF PROVIDING REVENUES
 FOR THE STORMWATER MANAGEMENT FUND**

BE IT ORDAINED by the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago:

Section 1. That there be and is hereby levied upon all taxable property within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago, as said territorial limits exist on January 1, 2021, for the fiscal year ending December 31, 2021, to provide revenue for the development, design, planning, construction, operation, and maintenance of regional and local stormwater facilities provided for in the countywide stormwater management plan and the acquisition of real property in furtherance of its regional and local stormwater management activities, and for payment of principal and interest on bonds issued for stormwater projects as authorized under the District’s Act, “the sum of \$52,926,000 which includes the sum of \$1,852,410 as a reserve for loss in collection of taxes”.

Section 2. That the Clerk of the Metropolitan Water Reclamation District of Greater Chicago be, and is hereby directed to certify to the County Clerk of Cook County, the amount above set forth to be raised by taxation in the year 2021, and to file a certified copy of the Ordinance with the said County Clerk of Cook County, and said County Clerk of Cook County aforesaid, is hereby directed to cause the aforesaid amount of money to be extended upon and against the taxable property within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago, as said territorial limits exist on January 1, 2021, all in accordance with the laws and statutes of the State of Illinois in such case made and provided, and the Clerk of the Metropolitan Water Reclamation District of Greater Chicago is hereby directed to cause this Ordinance to be published at least once in a newspaper published within the territorial limits of the Metropolitan Water Reclamation District of Greater Chicago and to incur the necessary expenses therefor.

Section 3. This Ordinance shall take effect January 1, 2021.

Approved as to Form and Legality:

Approved:

Deputy General Counsel

*President,
 Board of Commissioners of the
 Metropolitan Water Reclamation District
 of Greater Chicago*

General Counsel

NOTE PAGE

SECTION IX

APPENDIX

This section explains the structure of the District's compensation plan and financial and technical terminology contained in the District's Budget. It also details the various awards the District has received for its accomplishments over the last 47 years.

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COMPENSATION PLAN NARRATIVE

In accordance with Illinois State Statute, Chapter 70, Section 2605/4.2, a Department of Human Resources for the District was created, the executive officer of which is the Director of Human Resources. The Director shall, with the consent and approval of the Civil Service Board of the District, classify all non-exempt and non-represented positions in the District for the purpose of establishing pay grades.

For the purpose of establishing uniformity of pay and title for positions, the Director prescribes the minimum and maximum pay for each grade and title.

While maintaining internal balance as established by the relative evaluation of classes, the compensation for non-represented and non-exempt positions shall be at least equal to the median compensation provided by other employers for similar work in the Metropolitan Chicago labor market or other appropriate labor market. Compensation for non-represented positions is defined in the Salary Schedule for Technical, Administrative, and Managerial (HP) Employees.

Salary advancement within salary ranges for non-represented positions and certain exempt positions is provided to recognize growth in the job, and the rate of advance shall be based primarily upon the quality of performance. Salary advancement stages are defined as “steps” within the salary schedules for each grade of position.

Employees in positions covered by collective bargaining agreements shall be compensated on the basis of negotiations between unions representing such employees and the management of the District. The rates paid to all such employees shall be adjusted in accordance with changes caused by the duly prescribed negotiations, provided that any change in rates may be made applicable at the beginning of the next budget year following the date of change in the rate, in the event necessary funds are not available. Compensation for these positions is defined in the Salary Schedule for Labor Trades (LT) Employees.

Compensation for exempt positions is established by the Board of Commissioners, with the exception of their own compensation, which is established by Illinois Compiled Statutes. Compensation for exempt positions is defined in the Salary Schedule for Exempt (EX) Employees.

SALARY SCHEDULES (bi-weekly rates)

Exempt (EX)

EX01	\$2,884.62	EX09	\$576.92	EX17	\$9,456.93
EX02	\$2,692.31	EX10	\$9,456.93	EX18	\$5,319.54
EX03	\$7,172.69	EX11	\$10,639.05	EX19	\$9,456.93
EX04	\$2,616.83 to \$4,073.16	EX12	\$10,639.05	EX20	None
EX05	\$9,456.93	EX13	\$9,456.93	EX21	\$2,884.62
EX06	\$2,616.83 to \$4,073.16	EX14	\$10,639.05	EX22	\$3,076.92
EX07	\$11,821.21	EX15	\$10,639.05	EX23	None
EX08	\$9,456.93	EX16	\$673.08	EX24	None

Technical, Administrative, and Managerial (HP)

HP07	\$1,359.62 to \$1,980.18	HP14	\$2,813.70 to \$4,361.95	HP21	\$5,660.93 to \$8,493.95
HP08	\$1,479.75 to \$2,180.09	HP15	\$3,088.22 to \$4,704.51	HP22	\$6,248.77 to \$9,280.31
HP09	\$1,623.83 to \$2,420.08	HP16	\$3,427.28 to \$5,127.63	HP23	\$6,948.03 to \$10,107.08
HP10	\$1,816.02 to \$2,740.04	HP17	\$3,825.58 to \$5,624.65		
HP11	\$2,040.29 to \$3,113.31	HP18	\$4,293.91 to \$6,208.96	TM01	\$1,200.00
HP12	\$2,312.55 to \$3,566.60	HP19	\$4,875.21 to \$6,934.30	TM02	\$1,400.00
HP13	\$2,616.83 to \$4,073.16	HP20	\$5,162.75 to \$7,827.53		

Labor Trades (LT)

NR1541	\$3,275.30	NR6275	\$4,902.40	PR5153	\$3,980.80	PR5975	\$4,360.80	PR7579	\$4,254.40
NR1835	\$2,939.20	NR6441	\$3,537.60	PR5155	\$4,140.80	PR5989	\$4,480.80	PR7743	\$4,100.00
NR1853	\$3,318.40	NR6810	\$3,468.80	PR5159	\$4,180.80	PR6453	\$4,168.00	PR7773	\$4,060.00
NR1857	\$3,537.60	NR6831	\$4,072.00	PR5353	\$3,804.80	PR6459	\$4,488.00	PR7775	\$4,300.00
NR2483	\$3,318.40	NR6832	\$4,218.40	PR5553	\$3,864.00	PR6473	\$3,120.00	PR7779	\$4,460.00
NR3641	\$2,377.60	NR7393	\$4,449.60	PR5555	\$4,105.60	PR6479	\$3,380.00		
NR3642	\$2,601.60	NR7394	\$5,292.80	PR5753	\$4,160.00	PR7343	\$4,000.00	NR1027	\$1,380.00 to \$1,680.00
NR5369	\$3,335.20	NR7399	\$3,605.60	PR5755	\$4,408.00	PR7347	\$4,480.00	PR1025	\$2,185.60 to \$3,576.80
NR6210	\$3,650.40	NR8331	\$3,537.60	PR5759	\$4,492.00	PR7349	\$4,240.00	TR3509	\$2,110.28
NR6232	\$3,832.80	NR8650	\$3,318.40	PR5933	\$4,130.40	PR7423	\$4,392.00		
NR6233	\$4,024.80	NR8651	\$3,159.20	PR5935	\$4,410.40	PR7424	\$4,792.00		
NR6251	\$4,669.60	NR8652	\$2,203.20	PR5953	\$3,720.00	PR7425	\$5,112.00		
NR6271	\$4,700.80	NR8660	\$1,943.20	PR5955	\$4,055.20	PR7573	\$3,974.40		
NR6272	\$4,449.60	NR8661	\$2,137.80	PR5973	\$4,200.80	PR7575	\$4,174.40		

The Position Analysis for each Department shows the Pay Plan and Grade for each budgeted position. The Salary Schedules above display the salary ranges associated with each Pay Plan and Grade. For example, in Section 681 of the General Division of the Maintenance & Operations Department, the Principal Mechanical Engineer position is associated with the HP (Technical, Administrative, and Managerial) Pay Plan at Grade 18. By looking up HP18 in the second table above, the salary range for this or any other title at that Pay Plan and Grade is \$4,293.91 to \$6,208.96 bi-weekly. By multiplying those rates by 26, it can be determined that the annual salary range for such positions is \$111,641.66 to \$161,432.96. For the HP and some EX Pay Plans, the actual salary earned in a position is dependent on the "step" of the incumbent occupying the position. Where applicable, there are nine steps in each Pay Plan and Grade. Which step an incumbent is at is determined by a combination of the incumbent's longevity in the title and at the District. Incumbents with the greatest longevity factors will be at the highest steps, assuming satisfactory job performance.

DEVELOP EMPLOYEES

The District invests in employee growth through providing a tuition reimbursement program which helps employees develop skills and competencies that increases their promotional opportunities and trains future leaders. The support of their education also assists the District in maintaining a leadership role in wastewater through retaining best in class employees. The following is a list of 2019 and 2020 graduates that utilized the tuition reimbursement program.

EMPLOYEE NAME	COLLEGE/UNIVERSITY	MONTH/YEAR OF GRADUATION	FIELD OF STUDY
Eliopoulos, Anna	DePaul University	Mar 2020	Bachelor of Arts
Kowalski, Scott M.	Governors State University	Dec 2019	Master of Business Administration
Redmond, Shawndena D.	University of Phoenix	Apr 2020	Master of Business Administration
Walsh, Daniel R.	University of Illinois	Dec 2019	Master of Science in Engineering

USER CHARGE RATES

Year	Large Commercial/Industrial Users				Tax-Exempt Users			
	Flow per million gallons	BOD ₅ per 1,000 pounds	SS per 1,000 pounds	OM&R Factor	Flow per million gallons	BOD ₅ per 1,000 pounds	SS per 1,000 pounds	Revenues in \$ millions
2021	\$ 278.81	\$ 202.93	\$ 117.81	35.4%	\$ 278.81	\$ 202.93	\$ 117.81	\$ 37.0
2020	273.88	209.94	124.16	31.9%	273.88	209.94	124.16	42.0
2019	269.04	216.64	130.38	32.8%	269.04	216.64	130.38	51.8
2018	264.28	223.03	136.48	30.1%	264.28	223.03	136.48	41.3
2017	259.61	229.13	142.47	33.9%	259.61	229.13	142.47	53.3
2016	255.02	234.95	148.33	34.4%	255.02	234.95	148.33	44.5
2015	250.51	240.49	154.08	39.1%	250.51	240.49	154.08	48.5
2014	246.08	245.75	159.72	43.5%	246.08	245.75	159.72	45.0
2013	241.73	250.76	165.25	42.4%	245.18	254.34	167.60	53.8
2012	256.48	259.22	195.95	48.6%	263.48	266.27	201.24	77.6
2011	243.99	247.48	191.18	47.3%	250.31	253.89	199.21	48.3
2010	262.44	270.68	200.33	55.7%	269.25	277.70	205.33	48.7
2009	229.37	231.90	174.25	50.4%	235.96	238.56	179.25	45.0
2008	223.72	229.23	178.11	49.9%	230.29	235.98	183.35	54.4

BOD₅ Biochemical Oxygen Demand based on standard five-day test

SS Suspended Solids

OM&R Portion of real estate taxes credited to users for the District's Operations, Maintenance, and Replacement costs

User charges are calculated based on sewer discharge volumes and representative sampling of the discharge for concentrations of BOD₅ and suspended solids. Loadings in thousands of pounds annually are extrapolated from the volume and concentration measurements, with the rates listed above applied. Users are given a credit for real estate taxes paid to the District multiplied by the OM&R factor. Users owing more than \$12,000 annually pay monthly estimates.

PROPERTY TAX LEVIES AND COLLECTIONS

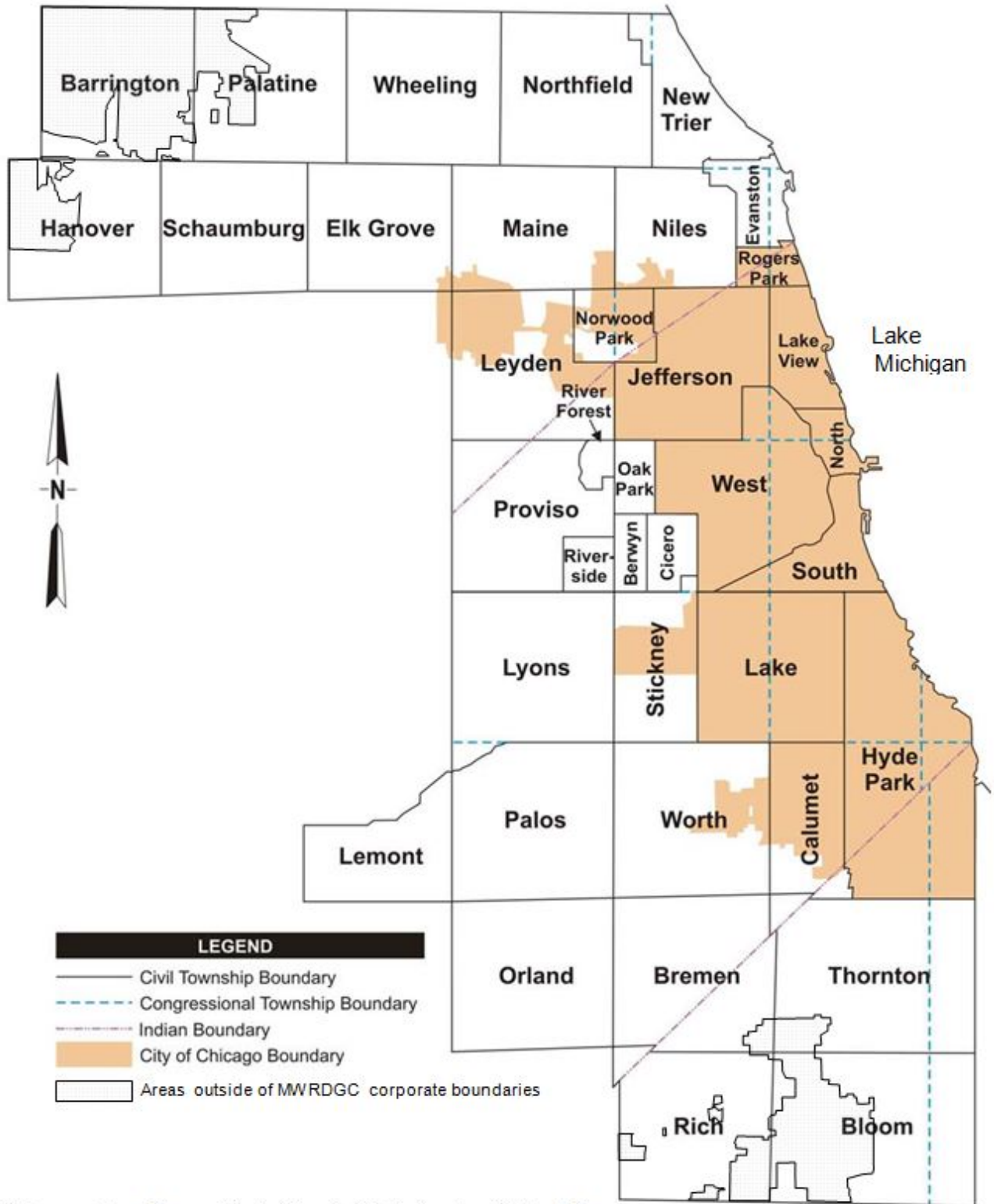
(in thousands of dollars)

Fiscal Year Ended Dec. 31	Taxes Levied for the Fiscal Year	Collected within the First Year		
		Amount	Percentage of Levy	Final Due Date
2019	\$ 637,188	\$ —	—	8/1/2020
2018	616,946	613,477	99.4	8/1/2019
2017	593,135	581,007	98.0	8/1/2018
2016	571,454	559,938	98.0	8/1/2017
2015	555,098	541,008	97.5	8/1/2016
2014	540,666	523,203	96.8	8/1/2015
2013	514,659	497,452	96.7	8/1/2014
2012	493,573	476,881	96.6	8/1/2013
2011	476,955	460,618	96.6	8/1/2012
2010	457,356	435,009	95.1	11/1/2011

NOTE: The source for Property Tax Levies and Collection is the Comprehensive Annual Financial Report of the Metropolitan Water Reclamation District of Greater Chicago for the Year Ended December 31, 2019.

PROPERTY TAX BASE

The Metropolitan Water Reclamation District of Greater Chicago receives the majority of its income from local real estate taxes. Taxes are collected by the Cook County Treasurer based on property values established by the Cook County Assessor. North, South and City of Chicago townships are reassessed on a three-year rotation.



The underlying county township map is derived from the Illinois Secretary of State Archives:
<http://www.cyberdriveillinois.com/departments/archives/TRAD/cook.html>

PROPERTY TAX BASE

MWRDGC Equalized Assessed Valuation by Township 2014 - 2019 (in \$ millions)

Township	2014	2015	2016	2017	2018	2019	Average Annual Change
Suburban							
Barrington	\$ 328	\$ 326	\$ 319	\$ 328	\$ 320	\$ 360	1.84 %
Berwyn	596	581	600	735	707	690	1.53 %
Bloom	450	440	456	490	483	477	0.19 %
Bremen	1,469	1,425	1,480	1,648	1,617	1,608	0.60 %
Calumet	177	176	179	199	189	199	2.19 %
Cicero	555	536	554	647	629	626	1.36 %
Elk Grove	3,184	3,103	3,516	3,559	3,521	4,247	5.56 %
Evanston	2,245	2,196	2,670	2,740	2,721	3,432	8.24 %
Hanover	1,426	1,379	1,608	1,615	1,575	1,810	4.60 %
Lemont	715	711	755	914	892	899	3.77 %
Leyden	2,332	2,409	2,753	2,794	2,727	3,287	6.21 %
Lyons	3,469	3,373	3,523	4,267	4,124	4,132	3.29 %
Maine	3,778	3,666	4,308	4,383	4,281	5,040	5.50 %
New Trier	4,201	4,075	4,987	5,097	4,921	5,220	4.24 %
Niles	3,886	3,818	4,461	4,542	4,456	5,059	5.09 %
Northfield	4,787	4,627	5,531	5,716	5,585	6,375	5.46 %
Norwood Park	745	727	839	852	839	1,031	6.42 %
Oak Park	1,383	1,334	1,387	1,656	1,592	1,692	3.88 %
Orland	2,829	2,753	2,890	3,310	3,221	3,213	1.79 %
Palatine	2,628	2,557	2,977	2,987	2,913	3,302	4.35 %
Palos	1,330	1,290	1,350	1,577	1,509	1,495	1.73 %
Proviso	2,652	2,573	2,679	3,150	3,065	3,063	2.23 %
Rich	988	962	1,007	1,098	1,073	1,044	0.12 %
River Forest	488	470	486	586	565	557	2.38 %
Riverside	489	474	495	575	555	546	1.54 %
Schaumburg	3,999	3,892	4,497	4,549	4,449	5,168	4.88 %
Stickney	935	914	956	1,102	1,073	1,078	1.94 %
Thornton	1,662	1,651	1,699	1,770	1,715	1,712	-0.02 %
Wheeling	4,253	4,152	4,894	4,952	4,906	5,622	5.33 %
Worth	2,847	2,752	2,880	3,341	3,239	3,255	1.55 %
City of Chicago							
Hyde Park	3,648	3,890	4,077	4,143	4,280	4,325	3.24 %
Jefferson	10,741	11,311	11,735	11,960	13,439	13,404	4.18 %
Lake	6,364	6,684	6,970	6,978	7,309	7,310	2.73 %
Lake View	8,654	9,521	9,782	10,020	11,077	11,125	4.83 %
North Chicago	12,509	14,197	14,839	15,718	18,174	18,619	7.60 %
Rogers Park	1,318	1,376	1,433	1,449	1,624	1,626	3.89 %
South Chicago	13,277	14,559	15,297	16,119	18,201	18,761	7.71 %
West Chicago	8,398	9,427	9,883	10,380	12,222	12,646	7.65 %
Total EAV	125,736	130,305	140,752	147,946	155,788	164,055	4.88 %

Shaded figures indicate assessed values following triennial reassessments.

AWARDS AND ACHIEVEMENTS RECOGNITION

Academy of Interactive and Visual Arts	2014	<i>The Interactive Multimedia Communicator Award for "National Save for Retirement Week Campaign"</i>
Algae Biomass Organization	2020	<i>Innovation Collaboration of the Year Award</i>
American Academy of Environmental Engineers	2012	<i>Excellence in Environmental Engineering Grand Prize for the University Research for Chicago Health, Environmental Exposure, and Recreation Study (CHEERS)</i>
	2010	<i>Excellence in Environmental Engineering Honor Award in Research for the Microbial Risk Assessment for Recreational Use of the Chicago Area Waterways</i>
	1995	<i>Honor Award for the Sidestream Elevated Pool Aeration Stations</i>
	1989	<i>Grand Prize Award for Planning the Sidestream Elevated Pool Aeration Stations</i>
American Council of Engineering Companies of Illinois	2017	<i>Special Achievement Water Resources Award for the Wescott Park Stormwater Storage Facility Project in the Village of Northbrook</i>
	2010	<i>Special Achievement Award for the Calumet Isolation Chamber</i>
American Infrastructure Magazine	2016	<i>PUBBY Award for Water Project of the Year: Thornton Composite Reservoir</i>
American Public Works Association	2018	<i>Chicago Metro Chapter Suburban Branch: Public Works Project of the Year Award for the Niles Flood Relief Project</i>
	2017	<i>Strategic Plan Award for Flood Control Project on Midlothian Creek in Robbins</i>
	2016	<i>Project of the Year (Environment, More than \$75 Million) for the Thornton Composite Reservoir</i>
	2012	<i>Chicago City Branch: Project of the Year in the Environmental \$25 to \$75 Million Category for the design of the Calumet Central Boiler Facility</i>
		<i>Chicago Metro Chapter: Project of the Year in the Environmental \$25 to \$75 Million Category for the design of the Calumet Central Boiler Facility</i>
		<i>Chicago Metro Chapter: Public Works Project Excellence Award for the design of the Calumet Central Boiler Facility</i>
	2003	<i>Environmental Project of the Year, Over \$10 Million Category, for the Thornton Transitional Reservoir</i>
	2000	<i>Reversal of the Chicago River, "Top Ten Public Works Projects of the Century" Tunnel and Reservoir Plan Phase I, one of the "Top Ten Chicago Area Public Works Projects of the 20th Century"</i>
		<i>Tunnel and Reservoir Plan Phase I, Member's Choice for "Most Significant Chicago Area Public Works Projects of the 20th Century"</i>
	1995	<i>The American Public Works Association Award for the District's Innovative Energy Audit and Control Program</i>
	1981	<i>Outstanding Public Works Project of the Year for the Tunnel and Reservoir Plan</i>
American Public Works Association, Chicago Metro Chapter	2016	<i>Project of the Year (Environment, More than \$75 Million) for the Thornton Composite Reservoir</i>
		<i>Public Works Project Excellence Award for the Thornton Composite Reservoir</i>
American Council of Engineering Companies - Illinois Chapter	2018	<i>Engineering Excellence Merit Award for the Mayfair Reservoir Expansion</i>
American Rivers, Incorporated	1994	<i>Scientific or Engineering Breakthrough Award for the Calumet River System Sidestream Elevated Pool Aeration Project</i>
American Society of Civil Engineers - Illinois Section	2018	<i>Outstanding Civil Engineering Achievement Award, Over \$100 Million Category, for the McCook Reservoir</i>
	2016	<i>Project of the Year (Higher than \$25 Million) for Thornton Composite Reservoir</i>
		<i>Outstanding Civil Engineering Achievement Award, Under \$10 Million Category, for the Busse Reservoir South Dam Modification Project</i>
		<i>Outstanding Civil Engineering Achievement Award, Over \$25 Million Category, for the Thornton Composite Reservoir</i>
	2003	<i>Outstanding Civil Engineering Achievement of the Year Award, Over \$5 Million Category, for the Thornton Transitional Reservoir</i>
	2000	<i>District's wastewater treatment system was recognized as representing one of civil engineering's "Monuments of the Millennium" of the 20th century</i>
	1998	<i>Outstanding Civil Engineering Achievement Award for the O'Hare-CUP Reservoir Project</i>
	1996	<i>Public Sector Employer Recognition Award</i>

AWARDS AND ACHIEVEMENTS RECOGNITION

American Society of Civil Engineers - Illinois Section (continued)	1994	<i>Outstanding Civil Engineering Achievement received for Sidestream Elevated Pool Aeration Project</i>
	1986	<i>Outstanding Civil Engineering Achievement received for Tunnel and Reservoir Plan Outstanding Civil Engineering Achievement of Past 100 Years in Illinois for the Tunnel and Reservoir Plan</i>
	1985	<i>Tunnel and Reservoir Plan Mainstream System, Phase I, the "Outstanding Civil Engineering Achievement of 1985"</i>
	1974	<i>Special Civil Engineering Achievement Award received for the Prairie Plan in Fulton County</i>
American Society of Landscape Architects - Illinois Chapter	2018	<i>Merit Award for Planning and Analysis for the Robbins Park Project</i>
Black Contractors United	1994	<i>Agency of the Year for Affirmative Action Program</i>
Center for Active Design	2014	<i>Excellence Award (Honorable Mention) for the Space to Grow program, a collaboration between the District, Chicago Public School Systems, and the City of Chicago Department of Water Management. Space to Grow was the only submission from Chicago to be recognized. Fellow award recipients span the globe</i>
Chatham Business Association	2015	<i>Partner Award</i>
Chicago Federation of Labor-AFL CIO	2001	<i>Michael J. Bruton Workplace Safety Award</i>
Chicago Public Schools	2011-2010	<i>Certificate of Appreciation for providing outstanding work-based learning experiences for Chicago Public School Career and Technical Education students through participation in the Work-Based Learning Program</i>
Chicago Southland Convention and Visitor Bureau	2009	<i>Hospitality Award of Merit for outstanding work on behalf of the Calumet-Sag Trail</i>
Chicago Wilderness and United States Environmental Protection Agency	2007	<i>Conservation and Native Landscaping Award for Native Prairie Restorations at the Lemont and North Side Water Reclamation Plants</i>
City of Chicago	2000	<i>Best Practices in expanding employment opportunities for people with disabilities</i>
Conservation Foundation & DuPage River Coalition	2006-2005	<i>Clean Water Award for Hanover Park Water Reclamation Plant</i>
	2002	<i>DuPage River Clean Water Award</i>
Construction Industry Service Corporation (CISCO)	2015	<i>Public Body of the Year</i>
		<i>Project of the Year - Infrastructure category for constructing the Wet Weather Treatment Facility and Reservoir at the Lemont Water Reclamation Plant</i>
Engineering News Record	1999	<i>Construction of the Chicago Sanitary and Ship Canal in 1900 and Tunnel and Reservoir Plan in 1985 named as two of the top 125 engineering projects of the past 125 years</i>
Environmental Systems Research Institute	2019	<i>Special Achievement in Geographic Information System (SAG) Award</i>
Federation of Women Contractors	2016	<i>Outstanding Advocate Award</i>
	2012	<i>Outstanding Program of the Year Award for the MWRD Affirmative Action Program</i>
	2007	<i>Advocacy Award for Affirmative Action Program</i>
Friends of the Chicago River	2019	<i>Silver Ribbon Award with Army Corps of Engineers and Chicago Park District for North Branch Dam Removal Project</i>
	2017	<i>Chicago River Blue Awards, Green Ribbon Award for the Wescott Park Stormwater Storage Facility Project in the Village of Northbrook</i>
	2016	<i>Chicago River Blue Awards, Green Ribbon Award for Disinfection at the Calumet Water Reclamation Plant and O'Brien Water Reclamation Plant and Thornton Reservoir</i>
	2014	<i>Chicago River Blue Awards, Silver Ribbon Award for Space to Grow: Greening Chicago Schoolyards</i>
Government Finance Officers Association of the United States and Canada	2019-1985	<i>Budget document recognized for Distinguished Budget Presentation</i>
	2016	<i>Budget document received Special Performance Measures recognition</i>
	2015	<i>Budget document received outstanding in the overall category of Communications Device</i>
	2018-2007	<i>Certificate of Achievement for Excellence in Financial Reporting for the MWRD Retiree Health Care Trust - Comprehensive Annual Financial Report for Fiscal Years 2007 through 2019</i>
	2018-1975	<i>Certificate of Achievement for Excellence in Financial Reporting - Comprehensive Annual Financial Report for Fiscal Years 1975 through 2019</i>

AWARDS AND ACHIEVEMENTS RECOGNITION

Government Finance Officers Association of the United States and Canada (continued)	2018-1993	<i>Certificate of Achievement for Excellence in Financial Reporting for the MWRD Retirement Fund - Comprehensive Annual Financial Report for Fiscal Years 1993 through 2018</i>	
	1999, 1996-1993	<i>Outstanding Achievement in Popular Annual Financial Reporting</i>	
	1998-1988	<i>Budget document recognized as "Especially Notable" or "Outstanding" in various categories</i>	
Illinois Association for Floodplain and Stormwater Management	2018	<i>Legislative Award for the Watershed Management Ordinance</i>	
	2017	<i>Flood Reduction Project Award for Floodway Buyouts in the Village of Glenview Innovation Project Award for Master Plan Pilot Study: Using Green Infrastructure to Solve Urban Flooding</i>	
	2016	<i>Flood Reduction Project Award for Large Project for the Thornton Composite Reservoir</i>	
	2014	<i>Sustainability Award for the Space to Grow program for the redevelopment of four school properties using a variety of Best Management Practices for creating green space</i>	
Illinois Department of Natural Resources	2017	<i>Illinois Mined Land Reclamation Award in the non-coal category for the McCook Reservoir</i>	
	2016	<i>Illinois Mined Land Reclamation Award in the non-coal category for the Thornton Composite Reservoir</i>	
Illinois Engineering Council	2006	<i>Outstanding Engineering Achievement Award for Tunnel and Reservoir Plan Phase I</i>	
Illinois Environmental Protection Agency	1994, 1983, 1981	<i>Certificate of Excellence Award for Wastewater Safety for James C. Kirie Water Reclamation Plant</i>	
	1993-1992	<i>Certificate of Excellence Award for Safety received by various treatment plants</i>	
	1992-1987	<i>Certificate of Excellence Award for Wastewater Safety received by various treatment plants</i>	
	1991-1988	<i>Letters of Commendation of Excellence on Maintenance, Operation, and Compliance for various treatment plants</i>	
	1988	<i>Hanover Park Treatment Plant named Plant of the Year</i>	
Illinois Safety Council and Greater Chicago Safety Council	2007	<i>Safety and Health Outstanding Safety Performance Award for North Side and Calumet Water Reclamation Plants Fleet and Transportation Outstanding Safety Performance Award - District-wide</i>	
	2006	<i>Safety and Health Outstanding Safety Performance Award for Calumet and Stickney Water Reclamation Plants</i>	
	2005	<i>Safe Driving Award - District-wide, Fulton County Prairie Plan, Main Office Building, Main Office Building Annex, Lockport Powerhouse, John E. Egan, Hanover Park, James C. Kirie, Lemont, North Side, and Stickney Water Reclamation Plants Health and Safety Award for North Side Water Reclamation Plant</i>	
	2004, 2001	<i>Transportation Award for Outstanding Safety Performance - District-wide</i>	
	2004	<i>Health and Safety Award - Fulton County Prairie Plan, James C. Kirie Water Reclamation Plant, Lawndale Avenue Solids Management Area, Racine Avenue Pumping Station, Main Office Building Annex, Lemont, North Side, and Stickney Water Reclamation Plants Outstanding Safety Performance Award</i>	
	2003	<i>Health and Safety Award - District-wide, Fulton County Prairie Plan, Lockport Powerhouse, Main Office Building, Main Office Building Annex, John E. Egan, Hanover Park, James C. Kirie, Lemont, and North Side Water Reclamation Plants</i>	
	2003-2002 1996-1994	<i>Safety and Health Award for Outstanding Safety Performance</i>	
	2002, 2000	<i>Outstanding Safety Performance in maintaining a safe and healthy working environment for its employees</i>	
	Illinois Society of Professional Engineers	2010	<i>Chicagoland Excellence in Engineering Project Award, Mechanical Division, for the Calumet Central Boiler Facility</i>
		1986	<i>MWRDGC System deemed one of the "Ten Outstanding Engineering Achievements in Illinois in the Last 100 Years"</i>
1985		<i>Outstanding Engineering Accomplishment Award for the Tunnel and Reservoir Plan - Phase I System</i>	

AWARDS AND ACHIEVEMENTS RECOGNITION

Illinois Society of Professional Engineers (continued)	1984	<i>Outstanding Engineering Accomplishment Award for Upper Salt Creek Watershed Floodwater Management Plan</i>
Illinois Water Environment Association	2019	<i>Best Presentation Award: A Reduction in Pharmaceutical and Personal Care Products in Class A Biosolids by Open Composting</i>
	2017	<i>Mariyana Spyropoulos, President, is the recipient of the Public Official of the Year award. The Public Official of the Year award is presented to an elected or appointed public official that has made a documented significant contribution in the areas of clean water legislation, public policy, government service, or another area of public prominence that resulted in improvements to the water environment</i>
	2016	<i>Best Presentation Award, "Biosolids Beneficial Reuse Programs: SWOT and PEST Evaluations to Ensure Sustainability"</i>
	2013	<i>Debra Shore, Commissioner, is the recipient of the inaugural Public Official of the Year award. The Public Official of the Year award is presented to an elected or appointed public official that has made a documented significant contribution in the areas of clean water legislation, public policy, government service, or another area of public prominence that resulted in improvements to the water environment</i>
	2010	<i>Best Technical Presentation Award: Protozoa as Indicators of Activated Sludge Treatment System Conditions</i>
	2008	<i>Best Technical Presentation Award: Concerns about Endocrine Disrupting Chemicals in Land Applied Biosolids - Media Hype or Reality?</i>
International Personnel Management Association	1995	<i>Award for Excellence - Best personnel department in a medium-sized agency</i>
Interstate Mining Compact Commission	2017	<i>Kenes C. Bowling National Mine Reclamation Award for the McCook Reservoir</i>
Lake Michigan Water Analysts	1995	<i>Award of Excellence</i>
Metropolitan Chicago Masonry Council	1981	<i>"Excellence in Masonry '80" for James C. Kirie Water Reclamation Plant Masonry Design</i>
Metropolitan Planning Council	2018	<i>Burnham Award for Excellence in Planning for the Space to Grow Partnership</i>
National Association of Clean Water Agencies (NACWA), formerly known as Association of Metropolitan Sewerage Agencies	2019	<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Platinum Award for 28 consecutive years of full compliance for Calumet Water Reclamation Plant; Platinum Award for 23 consecutive years of full compliance for Lemont Water Reclamation Plant; Platinum Award for 15 consecutive years of full compliance for James C. Kirie Water Reclamation Plant; Platinum Award for 14 consecutive years of full compliance for Terrence J. O'Brien Water Reclamation Plant; Platinum Award for 12 consecutive years of full compliance for Hanover Park Water Reclamation Plant; and Platinum Award for six consecutive years of full compliance for John E. Egan Water Reclamation Plant</i>
		<i>National Environmental Achievement Award (NEAA) in the Operations & Environmental Performance Category</i>
	2018	<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Platinum Award for 27 consecutive years of full compliance for Calumet Water Reclamation Plant; Platinum Award for 22 consecutive years of full compliance for Lemont Water Reclamation Plant; Platinum Award for 14 consecutive years of full compliance for James C. Kirie Water Reclamation Plant; Platinum Award for 13 consecutive years of full compliance for Terrence J. O'Brien Water Reclamation Plant; Platinum Award for 11 consecutive years of full compliance for Hanover Park Water Reclamation Plant; and Platinum Award for five consecutive years of full compliance for John E. Egan Water Reclamation Plant</i>
		<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Silver Award for Stickney Water Reclamation Plant</i>
2017	<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Platinum Award for 26 consecutive years of full compliance for Calumet Water Reclamation Plant; Platinum Award for 21 consecutive years of full compliance for Lemont Water Reclamation Plant; Platinum Award for 13 consecutive years of full compliance for James C. Kirie Water Reclamation Plant; Platinum Award for 12 consecutive years of full compliance for Terrence J. O'Brien Water Reclamation Plant; and Platinum Award for 10 consecutive years of full compliance for Hanover Park Water Reclamation Plant</i>	
	<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Gold Award for John E. Egan Water Reclamation Plant</i>	
	<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Silver Award for Stickney Water Reclamation Plant</i>	

AWARDS AND ACHIEVEMENTS RECOGNITION

- National Association of Clean Water Agencies (NACWA), formerly known as Association of Metropolitan Sewerage Agencies (continued)
- 2016 *NACWA Award for Compliance with National Pollutant Discharge Elimination System, Platinum Award for 25 consecutive years of full compliance for Calumet Water Reclamation Plant; Platinum Award for 20 consecutive years of full compliance for Lemont Water Reclamation Plant; Platinum Award for 12 consecutive years of full compliance for James C. Kirie Water Reclamation Plant; Platinum Award for 11 consecutive years of full compliance for Terrence J. O'Brien Water Reclamation Plant; and Platinum Award for nine consecutive years of full compliance for Hanover Park Water Reclamation Plant*
- NACWA Award for Compliance with National Pollutant Discharge Elimination System, Gold Award for John E. Egan Water Reclamation Plant*
- NACWA Award for Compliance with National Pollutant Discharge Elimination System, Silver Award for Stickney Water Reclamation Plant*
- Utility of the Future Today Recognition*
- 2015 *NACWA Award for Compliance with National Pollutant Discharge Elimination System, Platinum Award for 24 consecutive years of full compliance for Calumet Water Reclamation Plant; Platinum Award for 19 consecutive years of full compliance for Lemont Water Reclamation Plant; Platinum Award for 11 consecutive years of full compliance for James C. Kirie Water Reclamation Plant; Platinum Award for ten consecutive years of full compliance for Terrence J. O'Brien Water Reclamation Plant; and Platinum Award for eight consecutive years of full compliance for Hanover Park Water Reclamation Plant*
- NACWA Award for Compliance with National Pollutant Discharge Elimination System, Gold Award for John E. Egan and Stickney Water Reclamation Plants*
- 2014 *Excellence in Management Platinum Award for excellence in utility management and successful implementation of programs that address the range of management challenges facing public wastewater utilities in today's competitive environment*
- NACWA Award for Compliance with National Pollutant Discharge Elimination System, Platinum Award for 23 consecutive years of full compliance for Calumet Water Reclamation Plant; Platinum Award for 18 consecutive years of full compliance for Lemont Water Reclamation Plant; Platinum Award for ten consecutive years of full compliance for James C. Kirie Water Reclamation Plant; Platinum Award for nine consecutive years of full compliance for Terrence J. O'Brien Water Reclamation Plant; and Platinum Award for seven consecutive years of full compliance for Hanover Park Water Reclamation Plant*
- NACWA Award for Compliance with National Pollutant Discharge Elimination System, Gold Award for John E. Egan and Stickney Water Reclamation Plants*
- 2013 *NACWA Award for Compliance with National Pollutant Discharge Elimination System, Platinum Award for 22 consecutive years of full compliance for Calumet Water Reclamation Plant; Platinum Award for 17 consecutive years of full compliance for Lemont Water Reclamation Plant; Platinum Award for nine consecutive years of full compliance for James C. Kirie Water Reclamation Plant; Platinum Award for eight consecutive years of full compliance for Terrence J. O'Brien Water Reclamation Plant; and Platinum Award for six consecutive years of full compliance for Hanover Park Water Reclamation Plant*
- NACWA Award for Compliance with National Pollutant Discharge Elimination System, Silver Award for John E. Egan and Stickney Water Reclamation Plants*
- Richard Lanyon, former Executive Director, was inducted into the Hall of Fame and became the fifth former District executive in its ranks. The other four are former Director of M&R Dr. Cecil Lue-Hing and former General Superintendents Bart Lynam, Hugh McMillan, and Ben Sosewitz*
- 2012 *NACWA Award for Compliance with National Pollutant Discharge Elimination System, Platinum Award for 21 consecutive years of full compliance for Calumet Water Reclamation Plant; Platinum Award for 16 consecutive years of full compliance for Stickney and Lemont Water Reclamation Plants; Platinum Award for eight consecutive years of full compliance for James C. Kirie Water Reclamation Plant; Platinum Award for seven consecutive years of full compliance for North Side Water Reclamation Plant; and Platinum Award for five consecutive years of full compliance for Hanover Park Water Reclamation Plant*
- NACWA Award for Compliance with National Pollutant Discharge Elimination System, Silver Award for John E. Egan Water Reclamation Plant*
- 2011 *NACWA Award for Compliance with National Pollutant Discharge Elimination System, Platinum Award for 20 consecutive years of full compliance for Calumet Water Reclamation Plant; Platinum Award for 15 consecutive years of full compliance for Stickney and Lemont Water Reclamation Plants; Platinum Award for seven consecutive years of full compliance for James C. Kirie Water Reclamation Plant; and Platinum Award for six consecutive years of full compliance for North Side Water Reclamation Plant*

AWARDS AND ACHIEVEMENTS RECOGNITION

National Association of Clean Water Agencies (NACWA), formerly known as Association of Metropolitan Sewerage Agencies (continued)	2011	<i>NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award for Hanover Park Water Reclamation Plant</i>
		<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Silver Award for John E. Egan Water Reclamation Plant</i>
	2010	<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Platinum Award for 19 consecutive years of full compliance for Calumet Water Reclamation Plant; Platinum Award for 14 consecutive years of full compliance for Stickney and Lemont Water Reclamation Plants; Platinum Award for six consecutive years of full compliance for John E. Egan and James C. Kirie Water Reclamation Plants; and Platinum Award for five consecutive years of full compliance for North Side Water Reclamation Plant</i>
		<i>NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award for Hanover Park Water Reclamation Plant</i>
	2009	<i>NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award for Hanover Park and North Side Water Reclamation Plants</i>
		<i>NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Platinum Award for John E. Egan, James C. Kirie, Stickney, Calumet, and Lemont Water Reclamation Plants</i>
	2008	<i>National Environmental Achievement Award in Public Information and Education - Education Program category for "Mission Possible: Educating People to Promote Beneficial Use of Biosolids"</i>
		<i>NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award for John E. Egan, Hanover Park, James C. Kirie, and North Side Water Reclamation Plants</i>
		<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Platinum Award for 17 consecutive years of full compliance for Calumet Water Reclamation Plant and Platinum Award for 12 consecutive years of full compliance for Stickney and Lemont Water Reclamation Plants</i>
		2007
		<i>NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Platinum Award for Stickney, Calumet, and Lemont Water Reclamation Plants</i>
		<i>NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award for James C. Kirie, John E. Egan, and North Side Water Reclamation Plants</i>
	2006	<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Platinum Award for Stickney, Calumet, and Lemont Water Reclamation Plants</i>
		<i>NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award for James C. Kirie, John E. Egan, Hanover Park, and North Side Water Reclamation Plants</i>
	2005-2003	<i>Certificate of Recognition for Excellence in Management for excellence in utility management and successful implementation of programs that address the range of management challenges facing public wastewater utilities in today's competitive environment</i>
	2005	<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Silver Award for North Side Water Reclamation Plant</i>
		<i>NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award for Stickney, Calumet, James C. Kirie, John E. Egan, Hanover Park, and Lemont Water Reclamation Plants</i>
	2004	<i>NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award for Stickney, Calumet, North Side, and Lemont Water Reclamation Plants</i>
		<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Silver Award for James C. Kirie, John E. Egan, and Hanover Park Water Reclamation Plants</i>
	2003	<i>Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award for Stickney, Calumet, North Side, Hanover Park, John E. Egan, James C. Kirie, and Lemont Water Reclamation Plants</i>
	2002	<i>Award for Full Compliance with National Pollutant Discharge Elimination System, Platinum Award for Hanover Park, North Side, and Calumet Water Reclamation Plants</i>

AWARDS AND ACHIEVEMENTS RECOGNITION

National Association of Clean Water Agencies (NACWA), formerly known as Association of Metropolitan Sewerage Agencies (continued)	2002	<i>Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award for John E. Egan, James C. Kirie, Stickney, and Lemont Water Reclamation Plants</i>
	2001	<i>Research and Technology Award on "Biosolids as a Topsoil Substitute for the Germination and Growth of Turf, Forage, Prairie Grasses and Wild Flower Plants"</i>
		<i>National Environmental Achievement Award for Excellence in Research and Technology</i>
		<i>Award for Full Compliance with National Pollutant Discharge Elimination System, Platinum Award for Stickney and Lemont Water Reclamation Plants</i>
		<i>Award for Compliance with National Pollutant Discharge Elimination System, Silver Award for John E. Egan Water Reclamation Plant</i>
	2000	<i>Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award for Hanover Park, James C. Kirie, North Side, and Calumet Water Reclamation Plants</i>
		<i>Award for Compliance with National Pollutant Discharge Elimination System, Silver Award for John E. Egan and James C. Kirie Water Reclamation Plants</i>
	1999	<i>Award for Full Compliance with National Pollutant Discharge System Permit Standards, Gold Award for Hanover Park, North Side, Stickney, Calumet, and Lemont Water Reclamation Plants</i>
		<i>Gold Award for 100% Compliance with National Pollutant Discharge System Permit Standards - Stickney, Calumet, North Side, Hanover Park, John E. Egan, James C. Kirie, and Lemont Water Reclamation Plants</i>
	1998	<i>National Environmental Achievement Award - Research and Technology for Optimization of Conventional Low Technology Sludge Process to Produce Class A Sludge</i>
<i>Gold Award for 100% Compliance with National Pollutant Discharge System Permit Standards - Stickney, Calumet, North Side, Hanover Park, James C. Kirie, and Lemont Water Reclamation Plants</i>		
1997	<i>National Achievement Outstanding Operations Award to North Side Water Reclamation Plants for its Instrumentation Project</i>	
	<i>Platinum Award for 100% Compliance for more than five years with National Pollutant Discharge System Permit Standards - Calumet and North Side Water Reclamation Plants</i>	
	<i>Gold Award for 100% Compliance with National Pollutant Discharge System Permit Standards - James C. Kirie, Lemont, and Stickney Water Reclamation Plants</i>	
	<i>Silver Award for 99.9% Compliance with National Pollutant Discharge System Permit Standards - John E. Egan and Hanover Park Water Reclamation Plants</i>	
1993	<i>Outstanding Operations Award for Sidestream Pool Aeration Stations</i>	
National Association of Flood and Stormwater Management Agencies (NAFSMA)	2016	<i>Green Infrastructure Award, First Place in the Large Agency Category for the Space to Grow Program</i>
National Association of Government Defined Contribution Administrators	2013, 2009	<i>Leadership Recognition Award of Distinction for National Save for Retirement Week Campaign</i>
National Association of State Land Reclamationists (NASLR)	2017	<i>Best Innovation Award in Mining Category for the McCook Reservoir Stage 2</i>
National Biosolids Partnership (Water Environment Federation and National Association of Clean Water Agencies)	2018	<i>Ten-Year Platinum Award for the Dedication to Environmentally Sound Biosolids Management Practices</i>
	2008	<i>Certificate of Achievement for meeting all the requirements for admittance and certification to the National Biosolids Partnership Environmental Management System Program</i>
National Institute of Governmental Purchasing	2020-2003	<i>Outstanding Agency Accreditation Achievement Award</i>
National Physical Plan Alliance	2014	<i>Champion Award for the Space to Grow program for the collaborative efforts of the District, Chicago Public Schools, and the Department of Water Management in transforming Chicago's underused and outdated schoolyards into vibrant outdoor spaces that benefit students, communities and the environment</i>
National Purchasing Institute	2006-2005	<i>Achievement of Excellence in Procurement</i>
National Society of Professional Engineers	1985	<i>Outstanding Engineering Accomplishment Award for the Tunnel and Reservoir Plan - Phase I System</i>
	1973	<i>Outstanding Engineering Achievements in the United States for the Brookfield LaGrange Rock Tunnel</i>

AWARDS AND ACHIEVEMENTS RECOGNITION

Risk & Insurance Magazine	2016	<i>Honorable Mention in the national Theodore Roosevelt Workers' Competition and Disability Management (TEDDY) Award competition for excellence in safety and workers' compensation risk management</i>
Rotary Club of Naperville	2016	<i>Paul Harris Award</i>
Storm Water Solutions Magazine	2017	<i>Top 10 Stormwater Project for Space to Grow</i>
	2016	<i>Top 10 Stormwater Project for the Blue Island Green Infrastructure Project</i>
Structural Engineers Association of Illinois	1985	<i>Honor Award for the Structural-Geotechnical Design of the Tunnel and Reservoir Plan Mainstream Pumping Station</i>
The Consulting Engineers Council of Illinois	1985	<i>Engineering Excellence Honor Award for the Tunnel and Reservoir Plan Mainstream System Phase I</i>
United States Department of Defense	2003	<i>Certificate of Appreciation for Outstanding Achievement through Value Engineering</i>
United States Environmental Protection Agency	2017	<i>Honorable Mention of the Phosphorus Recovery System for Excellence and Innovation within the Clean Water State Revolving Fund Program</i>
	2008	<i>Exemplary Biosolids Management Award - First Place in the Public Acceptance Category</i>
	2004	<i>National Second Place Clean Water Act Recognition Award, James C. Kirie Water Reclamation Plant, for Outstanding Operations and Maintenance, Large Advanced Plant</i>
	2003	<i>Certificate of Recognition as a Clean Water Partner for the 21st Century</i>
	1998	<i>Designation of the Chicago River as "One of the 25 Outstanding Success Stories in the Nation on the Occasion of the 25th Anniversary of the Clean Water Act"</i>
	1996	<i>Award of Excellence for First Place in Category Five in the National Pretreatment Program</i>
	1995	<i>National Pretreatment Award recognizing excellence in the administration of the District's Pretreatment Program</i>
	1994	<i>National First Place Award recognizing the District's Outstanding Combined Sewer Overflow Control Program</i>
		<i>Award for Excellence in Maintenance and Operations Category in Region V as the Best Large Advanced Plant - James C. Kirie Water Reclamation Plant</i>
	1993	<i>Second Place for Outstanding Treatment Facility by Stickney and John E. Egan Water Reclamation Plants in the Area of Maintenance and Operations</i>
	1992	<i>North Side Treatment Plant named "Best in the Midwest" for Municipal Pollution Control</i>
		<i>Affirmative Action Program named "Best in the Country"</i>
	1991	<i>Special Award for Sustained Outstanding Long-Term Contribution to the Beneficial Use of Sludge at the Prairie Plan, Fulton County</i>
		<i>Award for the Affirmative Action Program</i>
United States Green Building Council	2015	<i>Best of Green Schools Award for Collaboration, Space to Grow Partnership</i>
	2014	<i>Emerald Award for the Space to Grow Program in the Chapter Mission category recognizes the impact collaborations can have in building better, brighter, and healthier spaces to live, learn, and work</i>
United States Minority Contractor Association	2019	<i>Legacy Award for Excellence in Diversity and Inclusion</i>
Water and Wastes Digest	2016	<i>Thornton Composite Reservoir, one of the "Top Projects for 2016 Award"</i>
Water Environment Federation	2020	<i>Utility of the Future Today Recognition</i>
		<i>Public Communication & Outreach Program Award</i>
		<i>Ralph Fuhrman Medal for Outstanding Water Quality Academic-Practice Collaboration</i>
	2018	<i>Project Excellence Award for the McCook Reservoir</i>
	2017	<i>Project Excellence Award for the Nutrient Recovery Facility at the Stickney Water Reclamation Plant</i>
		<i>Water Quality Improvement Award for the Calumet Tunnel and Reservoir Plan</i>
		<i>Schroepfer Innovative Facility Design Medal for the Calumet Tunnel and Reservoir Plan</i>
	1999-1989	<i>Award for Outstanding Achievement in Water Quality Improvement</i>

AWARDS AND ACHIEVEMENTS RECOGNITION

Water Environment Federation (continued)	1992	<i>Recognition for the Solids Dewatering Prototype at the Stickney Water Reclamation Plant</i>
Water Environment Research Foundation	2013	<i>Award for Excellence in Innovation</i>
The Waterfront Center	2008	<i>Excellence on the Waterfront Award for Sidestream Elevated Pool Aeration Project</i>

LEADING PARTNERSHIPS

The District recognizes the importance of involvement in the world around us and encourages its employees to become actively involved in organizations, particularly in the water industry. We firmly believe that participation in professional organizations will enhance our awareness of current issues in our industry and help us make informed decisions. We also encourage our employees to take leadership roles in these organizations to further uphold the District as one of the top leaders in the water industry.

PROFESSIONAL ORGANIZATION	MEMBERSHIP ROLE	EMPLOYEE NAME	JOB TITLE
American Contract Compliance Association	Board of Directors	Berry, Regina D.	Diversity Administrator
American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America	Student Contest Committee	Oladeji, Dr. Olawale	Senior Environmental Soil Scientist
American Society of Civil Engineers, Illinois Section	Member, Illinois Infrastructure Report Card Wastewater Subcommittee	Goldrich, Michael	Senior Environmental Specialist
Asian Carp Regional Coordinating Committee	Technical and Policy Workgroup Member	Gallagher, Dustin	Associate Aquatic Biologist
Calumet Bi-State Collaborative	Communications Committee	Fore, Allison	Public & Intergovernmental Affairs Officer
	Brownfield Working Group Committee	Scapardine, Barbara	Environmental Specialist
Central States Water Environment Association	Global Water Stewardship Committee	Durkin, Maureen	Managing Civil Engineer
Chicago Bar Association	Vice-Chair of the Environmental Law Committee	Mihalopoulos, Jorge	Head Assistant Attorney
Chicago Region Trees Initiative	Work Group	Fore, Allison	Public & Intergovernmental Affairs Officer
City of Chicago Sister Agencies	Human Resources Round Table Committee	Kosowski, Thaddeus	Assistant Director of Human Resources
Civil Engineer Professional Advisory Council	Member	Podczerwinski, Edward	Director of Monitoring & Research
Decalogue Society	Anti-Semitism Committee	Saindon, Pamela	Principal Attorney
DuPage River Salt Creek Workgroup, Nutrient Trading Framework Projects Committee	Board Member	Serafino, Sergio	Assistant Director of Maintenance & Operations
	Member	Minarik, Thomas	Principal Environmental Scientist
Emerson Process Management's Ovation Group	Executive Board Member on the Ovation User's Group	Majka, Jeff	Senior Electrical Engineer
Environtropica	Associate Editor	Tian, Dr. Guanglong	Principal Environmental Scientist
Global Tunnel Xchange	Committee Member	Fitzpatrick, Kevin	Managing Civil Engineer
Government College Relations Council	Council Member	Coleman, Edward	Human Resources Manager
Great Lakes Employment Assessment Network	Program Chair	Urian, Stefanie	Senior Human Resources Analyst
Illinois Association of Public Procurement Officials	Member	LoCascio, Darlene A.	Director of Procurement & Materials Management
Illinois Association of Wastewater Agencies	Committee Chair, Subcommittee on Biosolids	Cox, Dr. Albert	Environmental Monitoring & Research Manager
Illinois Association of Wastewater Agencies	Member, Legislative Subcommittee and the Nutrients Workgroup	Perkovich, Brian	Executive Director
	Nutrients and Total Maximum Daily Loads Committee	Szyszkza, Theodore	Senior Civil Engineer
	Vice President, Technical, Executive Committee	Wasik, Jennifer	Assistant Director of Monitoring & Research
	Subcommittee: Water Quality; Nutrients and Total Maximum Daily Loads; and Pretreatment		

PROFESSIONAL ORGANIZATION	MEMBERSHIP ROLE	EMPLOYEE NAME	JOB TITLE
Illinois Coastal Management Program	Water Quality Trends Analysis Advisory Group Member	Minarik, Thomas	Principal Environmental Scientist
Illinois Environmental Protection Agency	Nutrient Reduction Strategy, Performance and Benchmarks Committee	Cox, Dr. Albert	Environmental Monitoring & Research Manager
	Nutrient Loss Reduction Strategy, Policy Working Group		
	Nutrient Loss Reduction Strategy, Agricultural Watershed Partnership	Tian, Dr. Guanglong	Principal Environmental Scientist
	Nutrient Loss Reduction Strategy, Nutrient Monitoring Council	Vick, Justin	Associate Aquatic Biologist
Illinois Public Employer Labor Relations Association	Bacteria Stakeholders Workgroup		
	Vice-President and Chair of Training Committee	Bonner, Roxanne J.	Human Resources Manager
	Marketing Committee	Kosowski, Thaddeus J.	Assistant Director of Human Resources
Illinois State Bar Association's Section on Environmental Law	Chair of the Environmental Section Counsel	Mihalopoulos, Jorge	Head Assistant Attorney
Illinois State (IEPA) Wastewater Board of Certification	Board Member	Gronski, Adam	Managing Engineer
	Board Member	Murray, John	Director of Maintenance & Operations
	Board Member	Oduocha, Lucille	Principal Engineer
Illinois Water Environment Association	Committee Chair, Sustainability Committee	Brose, Dr. Dominic	Senior Environmental Research Scientist
	Member, Biosolids Committee		
	Committee Chair, Social Media	Cooney, Dylan	Senior Civil Engineer
	Biosolids and Resources Recovery Committee	Cox, Dr. Albert	Environmental Monitoring & Research Manager
	Leaders Innovation Forum for Technology Committee	Cummings, Joseph	Managing Engineer
	Chairman, Safety and Security Committee	Delathouwer, Tim	Safety Coordinator
	Collection Systems Committee	Durkin, Maureen	Managing Civil Engineer
	Member, Operator Training Committee	Kohlhaas, Lynn	Principal Engineer
	Committee Chair, Plant Operations Removal and Recovery Committee		
		Kozak, Dr. Joseph A.	Principal Environment Scientist
	Nutrient Removal Committee		
	Biosolids and Resources Recovery Committee	Kumar, Dr. Kuldip	Principal Environmental Scientist
	Chairperson of the Students and Young Professionals Committee	Jankun, Edward	Assistant Civil Engineer
	Plant Operations Committee	Matual, Sandra	Treatment Plant Operator III
	Biosolids and Resources Recovery Committee	McGregor, Matthew	Principal Engineer
	Chair, Biosolids and Resources Recovery Committee	Oladeji, Dr. Olawale	Senior Environmental Soil Scientist
	Member, LIFT Intelligent Water System Subcommittee	Pluth, Thais Bremm	Environmental Research Scientist
	Vice-Chair of the Lab Committee	Poole, Tiffany	Senior Environmental Chemist
	Sustainability Committee	Qin, Dongqi	Senior Environmental Research Scientist
Committee Chair, Leaders Innovation Forum for Technology	Schipma, Jane	Treatment Plant Operator III	
Nutrient Renewal and Recovery Committee			
Operator Training Committee			

PROFESSIONAL ORGANIZATION	MEMBERSHIP ROLE	EMPLOYEE NAME	JOB TITLE
Illinois Water Environment Association (continued)	Chair, Industrial Pretreatment Committee	Scapardine, Barbara	Environmental Specialist
	Vice-Chair, Sustainability Committee		
	Treasurer	Storino, Louis	Principal Civil Engineer
	Leaders Innovation Forum for Technology Committee		
	Scholarship and Charitable Giving Committee		
	Awards Committee		
	Scholarship and Charitable Giving Committee	Wawczak, Brian	Senior Civil Engineer
	President	Wu, Fred	Senior Civil Engineer
	Membership Committee		
	Collection Facilities Committee Member		
	Vice Chair, Scholarship and Charitable Giving Committee		
	Students and Young Professionals Committee		
	Collection Systems Committee	Zigulich, Michael	Associate Civil Engineer
	Operator Training Committee		
Plant Operations Committee			
Industrial Water, Waste, and Sewage Group	Vice Chair	Scapardine, Barbara	Environmental Specialist
Institute of Electrical and Electronics Engineers, Power & Energy Society-Chicago	Vice Chair of the Executive Committee	Nator, Mohammed	Senior Electrical Engineer
Inter-Governmental Panel on Climate Change	Agricultural Soil CO2 Expert Committee	Tian, Dr. Guanglong	Principal Environmental Scientist
International Journal of Environmental Science and Technology	Editorial Board	Oskouie, Dr. Ali	Senior Environmental Research Scientist
International Water Association	North American Utility Subcommittee for the Task Group on Meta-Data Collection and Organization in Wastewater Treatment and Wastewater Resource Recovery System	Yang, Fenghua	Senior Environmental Research Scientist
Local Governmental Law Consortium	Founding and Organizing Member	Goldberg, Lisa A.	Deputy General Counsel
	Founding and Organizing Member	Saindon, Pamela	Principal Attorney
Lower Des Plaines Watershed Group	Member at Large, Executive Committee	Wasik, Jennifer	Assistant Director of Monitoring and Research
Midwest Water Analysts Association	Secretary	Miller, Sarah	Senior Environmental Chemist
	Steering Committee	Poshyvanyk, Paul	Environmental Chemist
Molecular Diversity Preservation International and Multidisciplinary Digital Publishing Institute	Peer Reviewer for the Water Journal, the Fluids Journal, Geoscientific Model Development, and Resources	Oskouie, Dr. Ali	Senior Environmental Research Scientist
The National Association of Clean Water Agencies	Utility and Resource Management Committee	Carmody, Steve	Engineer of Treatment Plant Operations I
	Biosolids Management Committee	Cox, Dr. Albert	Environmental Monitoring and Research Manager
	Communications and Public Affairs Committee	Fore, Allison	Public & Intergovernmental Affairs Officer
	Climate and Resiliency Committee	Grabowy, Jonathan	Managing Civil Engineer

PROFESSIONAL ORGANIZATION	MEMBERSHIP ROLE	EMPLOYEE NAME	JOB TITLE
The National Association of Clean Water Agencies (continued)	Biosolids Management Committee	McGregor, Matthew	Principal Engineer
	Legal Affairs Committee	Mihalopoulos, Jorge	Head Assistant Attorney
	Security & Emergency Preparedness Committee	Poonsapaya, Aruch	Managing Engineer
	Facility and Collection System Committee	Storino, Louis	Principal Civil Engineer
	Water Quality Committee	Vick, Justin	Aquatic Biologist
	Water Quality Committee Emerging Contaminants Committee	Wasik, Jennifer	Assistant Director of Monitoring and Research
	Pretreatment Program Committee	Yarnik, Greg	Supervising Environmental Specialist
	Facility and Collection Systems Committee	Zigulich, Michael	Associate Civil Engineer
The National Environmental Laboratory Accreditation Conference	Contributing Member	Grunwald, Pawel	Supervising Environmental Chemist
National Public Employee Labor Relations Association	Board of Directors and Chair of Training Committee	Bonner, Roxanne J.	Human Resources Manager
North Branch Watershed Group	MWRD Representative	Vick, Justin	Associate Aquatic Biologist
Partnership for River Restoration in the Upper Midwest	Technical Committee	Vick, Justin	Associate Aquatic Biologist
Suburban Cook County Local Emergency Planning Committee	Chairperson of the Chemical Liaison Committee	Wienberg, Kristine	Environmental Specialist
United States Department of Agriculture	W-3170 Workgroup	Tian, Dr. Guanglong	Principal Environmental Scientist
US Water Alliance	Value of Water Campaign Communications Committee	Fore, Allison	Public & Intergovernmental Affairs Officer
Water & Waste Management	Director	Hiteshkumar, Shah	Managing Engineer
Water Environment Federation	Residuals and Biosolids Committee	Cox, Dr. Albert	Environmental Monitoring & Research Manager
	Collection Systems Committee	Durkin, Maureen	Managing Civil Engineer
	Collection Systems Committee	Fitzpatrick, Kevin	Managing Civil Engineer
	Communications Committee	Fore, Allison	Public & Intergovernmental Affairs Officer
	Air Quality and Odor Control Committee	Grabowy, Jonathan	Managing Civil Engineer
	Municipal Resource Recovery Design Committee	Kozak, Dr. Joseph	Principal Environmental Scientist
	Collaborative Water Energy Research Center, Energy and Carbon Efficient Phosphorus Removal Project Member		
	Residuals and Biosolids Committee	Laban, Ahmad	Managing Engineer
	Residuals and Biosolids Committee	McGregor, Matthew	Principal Engineer
	Air Quality and Odor Committee	Oskouie, Dr. Ali	Senior Environmental Research Scientist
	Utility Management Committee	Patel, Sanjay	Engineer of Treatment Plant Operations I
	Stormwater Institute Advisory Committee	Sheriff, William	Assistant Director of Engineering
	Collection Systems Committee and the Students and Young Professionals Committee	Storino, Louis	Principal Civil Engineer
	Water Environment Federation's Annual Technical Exhibition and Conference Advisory Committee		
	Stormwater Committee	Watson, John	Associate Civil Engineer
	Membership Committee	Wu, Fred	Senior Civil Engineer

PROFESSIONAL ORGANIZATION	MEMBERSHIP ROLE	EMPLOYEE NAME	JOB TITLE
Water Environment & Reuse Foundation Leaders Innovation Forum for Technology	Vice Chairman of the Workgroup on Shortcut Nitrogen Removal	Zhang, Dr. Heng	Assistant Director of Monitoring & Research
Water Research Foundation (formerly Water Environment & Reuse Foundation)	Project Advisory Committee, Occurrence of PFAS Compounds in U.S. Wastewater Treatment Plants	Cox, Dr. Albert	Environmental Monitoring & Research Manager
	Leaders Innovation Forum for Technology Committee	Fitzpatrick, Kevin	Managing Civil Engineer
	Practices to Enhance Internal Fermentation of Side-Stream Secondary Sludge and Mixed Liquor Suspended Solids for Biological Phosphorus Removal Project Committee	Kozak, Dr. Joseph	Principal Environmental Scientist
	Trace Organics in Biosolids Research Challenge Committee	Kumar, Dr. Kuldip	Principal Environmental Scientist
	Steering Committee, Leaders Innovation Forum for Technology	Kunetz, Thomas	Assistant Director of Monitoring & Research
	Member, LIFT - Link New Technology Review Committee	Oskouie, Dr. Ali	Senior Environmental Research Scientist
	Member, Odors and Air Pollutants Review Committee		
	Project Advisory Committee, Unlocking the Potential of Mixed-Microbial Fermentation for Enhancing Carbonaceous Resource Recovery from Organic Wastes	Patel, Kamlesh	Principal Environmental Scientist
	Unintended Consequences of Resource Recovery on Overall Plant Performance: Solving the Impacts on Dewaterability Properties Committee		
	Leaders Innovation Forum for Technology Committee	Storino, Louis	Principal Civil Engineer
	Understanding the Impacts of Low-Energy and Low-Carbon Nitrogen Removal Technologies of Bio-P and Nutrient Recovery Processes Project Committee	Yang, Fenghua	Senior Environmental Research Scientist
	Issue Area Team on the Nutrient Challenge Program Committee	Zhang, Dr. Heng	Assistant Director of Monitoring & Research
	Leaders Innovation Forum for Technology - Vice Chairman of the Workgroup on Shortcut Nitrogen Removal		
Project Advisory Committee for Implementation of Innovative Biological Nutrient Removal Processes through Improvement of Control Systems and On-Line Analytical Measurement, Reliability and Accuracy			
The World Academy of Sciences	Advisor	Tian, Dr. Guanglong	Principal Environmental Scientist

FINANCIAL GLOSSARY

Abatement: A complete or partial cancellation of tax levy imposed by a government.

Accrual Basis of Accounting: The basis of accounting under which transactions are recognized when they occur, regardless of the timing of cash receipts and disbursements.

Accrued: The accumulation of a receivable or payable during a given period even though no explicit transaction occurs within that period.

Activities: The major programs and projects performed by an organizational unit.

Ad Valorem Tax: A tax levied in proportion to the value of the property against which it is levied (also known as property tax).

Appropriation: An amount of money in the budget, authorized by the Board of Commissioners, for expenditure or obligation within organizational units for specific purposes. The Corporate Fund appropriates money for operating and general purposes. The Capital Improvements Bond Fund appropriates money for major improvements, plant expansion, sewers, etc.

Assessed Valuation: The value of all taxable property within the boundaries of the District as a basis for levying taxes (i.e., the property's value). See Tax Base.

Assets: Resources owned or held by the District which have monetary value.

Balance Sheet: A statement showing the financial position at a given time, disclosing assets, liabilities and fund balances.

Balanced Budget: Budgeted resources are equal to budgeted requirements.

Bond: A written promise to pay a specified sum of money (called the principal) at a specified date in the future, together with periodic interest at a specified rate. In the budget document, these payments are identified as debt service.

Bond Redemption & Interest Fund (Debt Service Fund): Established to account for annual property tax levies and certain other revenues, primarily interest on investments, which are used for the payment of principal and interest of general obligation bond issues.

Budget: A balanced financial plan for a given period of time, which includes appropriations and tax levy ordinances for the various sources of revenue which finance the various funds. The budget is not only a financial plan; it also serves as a policy guide, as an operations guide and as a communications medium.

Capital Equipment: Fixed assets such as vehicles, marine equipment, computers, furniture, technical instruments etc., which have a life expectancy of more than one year and a value over \$5,000.

Capital Improvement Program: The aggregate compilation of those individual construction projects identified as necessary for new facilities, or to rehabilitate, replace, or expand existing District facilities for the District to continue to meet its statutory service mandates in keeping with existing regulatory requirements.

Capital Improvements Bond Fund: Established to account for the proceeds of bonds authorized by the Illinois General Assembly, government grants and certain other revenues, all to be used in connection with improvements, replacements and additions to the District's facilities.

Capital Outlay: Expenditures which result in the acquisition of, or addition to, fixed assets, including land, buildings, improvements, machinery and equipment. Most equipment or machinery is included in the annual operating budget. Capital improvements such as acquisition of land, construction and engineering expenses are included in the Capital Budget.

Capital Projects Fund: Established to account for all resources, principally bond proceeds and construction grants, which are used for the acquisition or construction of capital facilities. Included in Capital Projects Funds are the Capital Improvements Bond Fund and the Construction Fund.

Capitalized: Capital outlays recorded as additions to the asset account, not as expenses.

Carryover (Net Assets Appropriable): That resource balance left after subtracting Current Liabilities and Designated Fund Balances from Current Assets.

Cash Basis of Accounting: Revenues are not recorded until cash is received, and expenditures are recorded only when cash is disbursed.

Cash Management: A conscious effort to manage cash flows in such a way that interest and penalties paid are minimized and interest earned is maximized. Funds received are deposited on the day of receipt and invested as soon as the funds are available. The District maximizes the return on all funds available for investment without sacrifice of safety or necessary liquidity.

Classification of Budgetary Code Accounts: A manual published annually which specifies the official code designations set forth in the annual budget for the purposes of accounting and expenditure control. Budgetary code listings for funds, organizations, locations, programs and line items are included.

Commitment Items: Expenditure classifications established to account for and budget the appropriations approved. Also referred to as Line Item.

Construction Fund: Established to account for an annual property tax levy and certain other revenues to be used in connection with improvements, replacements and additions to the District's facilities.

FINANCIAL GLOSSARY (continued)

Construction Working Cash Fund: Established to make temporary loans (repayable from the tax levy of the applicable year) to the Construction Fund, reducing the need for issuing short-term debt and the resultant interest expense.

Consumer Price Index (CPI): A measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services.

Corporate Fund: Established to account for an annual property tax levy and certain other revenues which are to be used for the operations and payments of general expenditures of the District not specifically chargeable to other funds.

Corporate Working Cash Fund: Established to make temporary loans (repayable from the tax levy of the applicable year) to the Corporate Fund, thus reducing the need for issuing short-term debt and the resultant interest expense.

Crosshatch (#): The crosshatch mark (#) indicates a restriction on the filling of a vacated position.

Current Assets: Cash plus assets that are expected to be converted to cash, sold or consumed during the next twelve months or as a part of the normal operating cycle.

Current Liabilities: Obligations that will become due within the next year or within the normal operating cycle, if longer than a year.

Debt Service Fund: See Bond Redemption & Interest Fund.

Debt Service Requirements: The amount of money required to pay interest and principal on outstanding debt.

Delinquent Taxes: Taxes remaining unpaid on and after the date to which a penalty for nonpayment is attached.

Depreciation: The allocation of the acquisition cost of plant, property and equipment to the particular periods or products that benefit from the utilization of the asset in service.

Disbursements: Payments made on obligations.

Encumbrances: Obligations incurred in the form of orders, contracts and similar items that will become payable when goods are delivered or services rendered.

Equalization: After the County Assessor has established the assessed valuation for a given year, and following any revisions by the Board of (Tax) Appeals, the Illinois Department of Revenue is required by statute to review the assessed valuation. The Illinois Department of Revenue establishes an equalization factor, commonly called the “multiplier,” for each county to make all valuations uniform among the 102 counties in the state.

Equalized Assessed Valuation (EAV): Once the equalization factor (multiplier) is established, the assessed valuation, as revised by the Board of (Tax) Appeals, is multiplied by the equalization factor (multiplier) to determine the EAV.

Expenditure: An amount of money disbursed or obligated. Expenditures include current operating expenses requiring the present or future use of net current assets, debt service, and capital outlays. (see Accrual and Cash Basis of Accounting).

Fiduciary Funds: Established to account for transactions related to assets held in trust for a public purpose.

Fiscal Year: The timeframe to which the budget applies. The period for the District is from January 1 through December 31.

Fixed Assets: Long-term tangible assets that have a normal use expectancy of more than one year and do not lose their individual identity through use. Fixed assets include buildings, equipment, improvements other than buildings and land.

Function: A group of related tasks, such as sewage treatment and collection, or the reduction of water pollution, which is aimed at accomplishing a major service or regulatory program for which a governmental unit is responsible.

Fund: An accounting entity established to account for sums of money or other resources, such as taxes, charges, fees, etc., to conduct specified operations and to attain certain objectives. Funds are frequently under specific limitations. For more information regarding specific funds, refer to the Financial Narrative in Section III, “Financial Statements by Fund.”

Fund Accounting: A governmental accounting system which is organized and operated on a fund basis.

Fund Balance: The cumulative difference of all revenues and all expenditures of the fund from the time the governmental entity was established. Fund balance is also considered to be the difference between fund assets and fund liabilities and is sometimes referred to as “fund equity.”

Generally Accepted Accounting Principles (GAAP): Uniform minimum standards of, and guidelines for, external financial accounting and reporting. They govern the form and content of the basic financial statements of an entity. GAAP encompasses the conventions, rules, and procedures necessary to define accepted accounting practices at a particular time. They include not only broad guidelines of general application, but also detailed practices and procedures. GAAP provides a standard by which to measure financial presentations. The primary authoritative statement on the application of GAAP to state and local governments is Government Accounting Standards Board (GASB) pronouncements.

General Obligation Bonds: Bonds, the payment for which the full faith and credit of the issuing government are pledged.

Governmental Funds: Group of funds utilized to account for revenues and expenditures in compliance with the legal requirements and constraints of current statutes for governmental agencies.

Grant: A contribution by one governmental unit to another unit. The contribution is usually made to aid in the support of a specified function, such as sewer construction, pollution control, etc.

FINANCIAL GLOSSARY (continued)

Home-Rule Unit: The principle or practice of self-government in the internal affairs of a dependent political unit. In Illinois, any municipality with population of more than 25,000 is a home-rule unit unless it elects by referendum not to be a home-rule unit. Any other municipality may elect by referendum to become a home-rule unit.

Internal Control: Methods and procedures that are mainly concerned with the authorization of transactions, safeguarding of assets, and accuracy of the financial records.

Liabilities: Obligations incurred in past or current transactions requiring present or future settlement.

Limited Tax Bonds: A form of non-referendum bonding authority granted by Illinois PA 89-385 allowing the District to issue additional debt for projects initiated after October 1, 1991. Limited Tax Bonds can be issued to the extent that the total debt service requirements of any new debt, when combined with existing debt service, do not exceed the debt service extension base established by the Act.

Line Items: Expenditure classifications established to account for and budget the appropriations approved. Also referred to as Commitment Item.

Mid-Year Reviews: Twice during the fiscal year (in May and August), the current year budget is evaluated based on spending to date and current projections. The primary areas reviewed and analyzed are (1) current year budget versus previous year revenues and expenditures; (2) year-to-date expenditure and revenue status plus expenditure and revenue projections for the remainder of the year; and (3) data to support recommendations for budget transfers.

Modified Accrual Basis of Accounting: The basis of accounting under which revenues are recognized when measurable and available to pay liabilities, and expenditures are recognized when the liability is incurred except for interest on long-term debt which is recognized when due.

Multiplier: See Equalization.

Net Assets Appropriable: That resource balance left after subtracting Current Liabilities and Designated Fund Balances from Current Assets. Commonly referred to as carryover.

Net Present Value: A mathematical formula used to measure the expected return on investments by calculating how much money needs to be invested today to result in a certain sum at a future time.

Object Classification: A grouping of expenditures on the basis of goods or services purchased (e.g., personal services, materials and supplies, equipment, etc.), also referred to as Object of Expenditure.

Objectives: The annual organizational levels of achievement expected. A statement of purpose defined more specifically than a goal. (A goal can include several related objectives.) Objectives are listed in order of priorities with their associated costs including estimates of salaries, equipment, supplies, etc.

Obligations: Amounts which a government may be legally required to meet out of its resources. They include not only actual liabilities, but also encumbrances not yet paid.

Ordinance: A bill, resolution or order by means of which appropriations are given legal effect. It is the method by which the appropriation of the annual budget is enacted into law by the Board of Commissioners per authority of state statutes.

Other Postemployment Benefits (OPEB): Cost of retiree health insurance benefits recognized over the active service life of the employees rather than on a pay-as-you-go basis.

Performance: The measurable unit of types of work, related to District activities and, where meaningful, the costs of operation that are used to develop the costs for each unit of activity (e.g., dollars per one million gallons of sewage treated).

Personal Property Replacement Tax: Since July 1979, this income tax on corporations, partnerships and invested capital of utilities replaces the personal property taxes previously levied.

Pollution Control Facilities: The State of Illinois directly assesses all pollution control facilities which have been certified by the Pollution Control Board. Pollution control facilities include any system, method, construction, device or appliance appurtenant that is designed, constructed, installed or operated for the primary purpose of eliminating, preventing or reducing air and water pollution as defined in the Environmental Protection Act. This does not include any pollution control facility used for radioactive waste, nuclear generation of electrical energy or for sewage disposal or treatment.

Programs: The essential activities performed by the District such as collection, treatment, flood and pollution control, etc., including specific and related sub-activities.

Property Tax Extension Limitation Laws: Illinois Public Act 89-1 provides for limitations on real estate property tax levies. As applicable to the District, the 1994 tax levy, payable in 1995 is limited to a 5 percent increase from the 1993 levy. Future levies are limited to increases of the lesser of 5 percent or the percentage change in the national Consumer Price Index (CPI-U).

Property Tax Rate: The amount of tax stated in terms of a unit of the tax base, expressed as dollars per \$100 of equalized assessed valuation.

Railroad Property: The State of Illinois directly assesses railroad property which includes all railroad "operating property." Tracks and right-of-way, all structures, equipment, and all property connected with or used in the operation of the railroad along with real estate held for expansion. Nonoperating railroad property is assessed by the County Assessor.

Real Property: Real Estate, including land and improvements (buildings, fences, pavements, etc.) classified for purposes of assessment.

FINANCIAL GLOSSARY (continued)

Refunding Bonds: Bonds issued to retire bonds already outstanding.

Reserve Claim Fund: Established for the payment of claims, awards, losses, judgments or liabilities which might be imposed against the District, and for the emergency repair or replacement of damaged District property.

Resources: The actual assets of a governmental unit, such as cash, taxes receivable, land, buildings, etc., including estimated revenues applying to the current fiscal year, and bonds authorized and unissued.

Retirement Fund: Established to account for annual pension costs and supported in part by property taxes which are levied in accordance with statutory requirements.

Revenue: Income generated by taxes, notes, bonds, investment income, land rental, user charge, sludge and scrap sales as well as federal and state grants.

Sinking Fund: See Bond Redemption & Interest Fund.

Special District: A governmental entity established by the State of Illinois for a specific purpose or purposes. The District was originally organized under an act of the General Assembly of the State of Illinois in 1889.

State Revolving Fund (SRF): Under the Water Quality Act Amendment of 1987, federal authorization created State Revolving Funds administered by State agencies which provide loans from these funds to municipal agencies for their wastewater construction programs. These loans carry interest rates which are below general rates available in the municipal bond market. Therefore, pollution control facilities receive subsidies which can provide the approximate equivalent of a 25 to 30 percent grant.

Tax Base: The aggregate value of the items being taxed. The base of the District's real property tax is the market value of all taxable real estate within the boundaries of the District. See assessed valuation.

Tax Cap: (Property Tax Extension Limitation Laws). Illinois Public Act 89-1 provides for limitations on real estate property tax levies. As applicable to the District, the 1994 tax levy, payable in 1995 is limited to a 5 percent increase from the 1993 levy. Future levies are limited to increases of the lesser of 5 percent or the percentage change in the National Consumer Price Index (CPI-U).

Tax Levy: An amount of money raised through the collection of property taxes to finance each fund operation.

Tax Levy Ordinance: An ordinance through which taxes are levied. See ordinance.

Tax Rate: See Property Tax Rate.

Taxes: Mandatory charges levied by a governmental unit for the purpose of financing services performed for the common benefit.

User Charge System: In compliance with the 1977 Clean Water Act, the District is required to augment the ad valorem property tax system with a charge related to the actual use of waste treatment services. Users exceeding their ad valorem amount pay additional amounts for services received.

Working Cash Funds (Corporate, Construction, and Stormwater): Authorized by Illinois State Statutes to make temporary loans to the Corporate, Construction, and Stormwater Management Funds. Loans are repaid to the Working Cash Funds from the tax levies of the funds. The use of Working Cash funds eliminates the need for the issuance of short-term financing.

GLOSSARY OF TECHNICAL TERMS

Biochemical Oxygen Demand (BOD): The quantity of oxygen used in the biochemical oxidation of organic matter in a specified time, at a specific temperature, and under specific conditions; the BOD analysis is a standard test used in assessing wastewater strength. See “Carbonaceous Biochemical Oxygen Demand.”

Biological Oxidation: The process whereby living organisms in the presence of oxygen, convert the organic matter contained in wastewater into new cells and subsequently into more stable compounds.

Biosolids: The nutrient-rich organic materials resulting from the treatment of domestic sewage in a wastewater treatment facility. These organic materials are generated when solids (sewage sludge) generated during the treatment of domestic sewage are treated further to meet the 40 CFR (Code of Federal Regulations) Part 503 sewage sludge regulatory requirements for beneficial reuse.

Carbonaceous Biochemical Oxygen Demand (CBOD): The portion of BOD attributable to organic matter containing carbon; does not include nitrogenous oxygen demand.

Centrifuge: A mechanical device in which centrifugal force is used to separate solids from liquids and/or to separate liquids of different densities, e.g., a dewatering device.

Coarse and Fine Screens: A coarse screen is a bar screen with approximate 3” openings located at the point of incoming wastewater which is used to capture large objects and other debris; this device protects the sewage pumps. A fine screen is a bar screen with approximately 5/8” openings to collect and remove small debris via a traveling rake. The screening is conveyed to a scavenger disposal box.

Collection System: A system of underground conduits/sewers collecting wastewater from a source and conveying it to the treatment facility.

Combined Sewer: A sewer that transports wastewater and (in wet weather conditions) stormwater.

Design Capacity: The maximum rate of sewage flow which a treatment plant is capable of treating, on a long-term basis, to continuously attain required effluent quality.

Dewatering: Water removal or concentration of solids by filtration, centrifugation, or drying.

Digestion, Anaerobic: The biological decomposition of organic matter in the absence of oxygen, resulting in partial gasification, liquidation, and mineralization. The digester gas is collected, compressed and used to fuel the plant boilers.

Drying Bed: Large areas on which solids are placed for dewatering by gravity, drainage, and evaporation.

Effluent: The resulting product of the wastewater treatment process which is also used for tank cleaning, grass watering, and conveyor belt cleaning.

Exceptional Quality (EQ): Exceptional Quality refers to biosolids or composted biosolids that meet the Class A pathogen standard, lowest metal concentration limits, and vector attraction reduction requirement specified in 40 CFR Part 503. Biosolids meeting the EQ criteria can be beneficially used without any restrictions.

503 Regulations: The United States Environmental Protection Agency issued on February 19, 1993, comprehensive federal sewage sludge use and disposal regulations which are organized in five parts: general provisions, land application, surface disposal, pathogens and vector attraction reduction, and incineration. Parts addressing standards for land application, surface disposal, and incineration practices consist of sections covering applicability and special requirements, management practices, frequency of monitoring, recordkeeping, and reporting requirements.

Industrial User (IU): A person who conducts any industrial, manufacturing, agricultural, trade, or business process or who conducts the development, recovery or processing of natural resources.

Industrial Waste: All solid, liquid, or gaseous waste resulting from an industrial user.

Infrastructure: Assets that are long-lived capital assets that normally are stationary in nature and normally can be preserved for a significantly greater number of years than most capital assets. Examples from our infrastructure holdings include: wastewater tankage, LASMA Drying sites, SEPA stations, the Deep Tunnel, and sewerage interceptors.

Interceptor: A larger sewer which “intercepts” the wastewater from smaller and/or local sewers.

Interceptor Inspection and Rehabilitation Program (HRP): The inspection and repair of District sewers and interceptors.

Lagoon, Solids: An earthen basin which is used for the storage, continued stabilization, and dewatering of solids.

Lysimeter: A device used for collecting water from the pore spaces of soils and for determining the chemical composition of the water that percolates through a certain depth of soil.

Maintenance Management System (MMS): A District-wide computerized system to assist management in maintaining the District’s infrastructure.

National Pollutant Discharge Elimination System (NPDES): The permit and regulation system governing direct discharges into navigable waters administered by the IEPA and USEPA.

Odor Control Program: The systematic modifying or altering of certain processes to minimize obnoxious odors. Ferric chloride, ozonation (conversion of oxygen into ozone), and deodorants are some of the various methods used in combating odors.

GLOSSARY OF TECHNICAL TERMS (continued)

Phycoremediation: The process of using algae (macro-algae or micro-algae) for the removal of pollutants, like nutrients (nitrogen and phosphorus), from the wastewater and carbon dioxide (CO₂) from waste air.

Pretreatment (Industrial): Any method, construction, device, arrangement, or appliance installed for the purpose of treating, neutralizing, stabilizing, disinfecting, or disposing of sewage, industrial waste, or other wastes prior to entry into the District's sewerage system.

Pretreatment Program: The District's efforts to identify, monitor and control by enforcement, the discharge of industrial waste from industrial sources into the District's sewerage system, in conformance with federal regulations promulgated pursuant to the Clean Water Act.

Primary Treatment: The District uses a series of large screens to remove large debris from the wastewater which can clog the machinery. Heavy solids like sand and grit are then removed in the grit chamber. Any remaining heavy solids settle to the bottom of the primary settling tanks.

Reservoirs, Storm: Temporary storage areas for containing surface waters during extreme storm conditions.

Secondary Treatment Process: The wastewater flows to aeration tanks which have been seeded with bacteria. Filtered air is pumped through the liquid to provide oxygen for the bacteria. The bacteria consume organic materials in the wastewater, grow and multiply. The mixture of bacteria and water then flow into a secondary settling tank. The bacteria clump together and become heavy "flocs" which settle to the bottom of the tank and are removed. At this point, the water can be discharged to a nearby waterway after disinfection, with over 90 percent of its contaminants removed.

Set Point: The desired or target value for an essential variable of a system.

Sewage: Water-carried human wastes or a combination of water-carried wastes from residences, business buildings, institutions and industrial establishments, together with such ground, surface, storm, or other waters as may be present.

Sewage and Waste Control Ordinance: An ordinance to provide for the abatement and prevention of pollution by regulating and controlling the quantity and quality of sewage and industrial waste admitted to or discharged into the sewerage systems, sewage treatment facilities, and waterways under the jurisdiction of the District. This ordinance was originally adopted by the District's Board of Commissioners in 1969 and continues to be amended as necessary.

Sewerage System: Sewers, intercepting sewers, pipes or conduits, pumping stations, force mains, constructed drainage ditches, surface water intercepting ditches, and all other constructions, devices, and appliances used for collecting or conducting sewage, industrial waste, or other wastes to a point of treatment or ultimate disposal.

Sidestream Elevated Pool Aeration (SEPA): A process in which a portion of the flow of a body of water is pumped up approximately 15 feet; the water is then allowed to cascade downward over a series of weirs, thus increasing the dissolved oxygen content of the body of water.

Solids: The accumulated solids separated from wastewater during processing. The precipitate or product from chemical treatment, coagulation, or sedimentation of wastewater.

Solids Content: The weight of total solids in sludge per unit total weight of sludge, expressed in percent. Water content plus solids content equal 100 percent.

Solids Processing: A variety of settling or filtering operations (grit and scum dewatering, raw sludge concentration, sludge stabilization, dewatered stabilized sludge air drying, for example) used to collect solid material from wastewater or other liquids for subsequent utilization.

Spoil Pile: Excavated materials such as soil and rock that are piled for storage as the result of canal construction activities.

Struvite: A salt precipitate of magnesium, ammonium, and phosphate in wastewater treatment facilities which may build up to the level that cause operational blockages.

Suspended Solids: Solid material that either floats on the surface of, or contained in suspension in, wastewater or other liquids. This material is largely removed by settling or filtering processes at a treatment plant. (See Solids Processing, above.)

TARP (Deep Tunnel): The Tunnel and Reservoir Plan (TARP) improves water quality by capturing combined sewer overflows (CSOs), storing this polluted wastewater, and then pumping it to a treatment plant for processing.

Tertiary Treatment: The third stage of wastewater treatment which purifies the wastewater by removal of fine particles, nitrates, and phosphates with sand filtration. This process removes 99 percent of the impurities.

USEPA: The United States Environmental Protection Agency. This federal agency is responsible for setting the guidelines and policies related to wastewater effluents and solids disposal. The Illinois EPA issues the District's National Pollutant Discharge Elimination System permit and other regulatory constraints.

Utilization: Solids used for daily landfill cover, final cover for a landfill closure, and to reclaim severely disturbed soil such as strip-mining land.

Wastewater Treatment: Processes which involve physical removal of contaminants from the wastewater by use of coarse screens, fine screens, grit tanks and settling tanks (primary treatment); further treatment via aeration and clarification (secondary treatment); and in some cases, the physical or chemical separation and removal of impurities from secondary-treated effluent (tertiary treatment).

Wetlands: Areas which are inundated by surface or groundwater at a frequency which maintains saturation. The wetlands can be natural (marshes, bogs, swamps, for example) or man-made.

ACRONYMS

ACH	Automated Clearing House	ITD	Information Technology Department
BOD	Biochemical Oxygen Demand	JULIE	Joint Utility Location Information for Excavators, Inc.
CAFR	Comprehensive Annual Financial Report	kWh	kilowatt-hour
CALSMA	Calumet Solids Management Area	KWRP	Kirie Water Reclamation Plant
CAWS	Chicago Area Waterway System	LASMA	Lawndale Avenue Solids Management Area
CBOD	Carbonaceous Biochemical Oxygen Demand	LSSS	Local Sewer Systems Section
CIBF	Capital Improvements Bond Fund	LWRP	Lemont Water Reclamation Plant
CIP	Capital Improvement Program	mg/L	milligrams per liter
CPI	Consumer Price Index	M&O	Maintenance & Operations
CPR	Cardio-Pulmonary Resuscitation	M&R	Monitoring & Research
CSA	Calumet Service Area	MBE	Minority-owned Business Enterprise
CSO	Combined Sewer Overflow	MGD	Millions of Gallons per Day
CUP	Chicago Underflow Plan	MOB	Main Office Building - 100 E. Erie St., Chicago, Illinois
CWRP	Calumet Water Reclamation Plant	MOBA	Main Office Building McMillan Pavilion - 111 E. Erie St., Chicago, Illinois
DWP	Detailed Watershed Plan	MOBC	Main Office Building Complex - MOB & MOBA
EAV	Equalized Assessed Valuation	MSPS	Mainstream Pumping Station
EBPR	Enhanced Biological Phosphorus Removal	MWRD	Metropolitan Water Reclamation District
ESG	Environmental, Social, Governance/Leadership	NAA	Net Assets Appropriable
EQ	Exceptional Quality	NACWA	National Association of Clean Water Agencies
EWRP	Egan Water Reclamation Plant	NBPS	North Branch Pumping Station
FTE	Full-Time Equivalent	NPDES	National Pollutant Discharge Elimination System
GAAP	Generally Accepted Accounting Principles	NSA	North Service Area
GASB	Government Accounting Standards Board	OM&R	Operations, Maintenance, & Replacement costs
GFOA	Government Finance Officers Association	OPEB	Other Postemployment Benefits
GIS	Geographic Information System	OUC	Office of Underground Coordination
GPS	Global Positioning System	OWRP	O'Brien Water Reclamation Plant (formerly known as Northside Water Reclamation Plant)
HPWRP	Hanover Park Water Reclamation Plant	P&MM	Procurement & Materials Management
HSOM	High Strength Organic Materials	PPRT	Personal Property Replacement Tax
HVAC	Heating, Ventilation, and Air Conditioning	RAPS	Racine Avenue Pumping Station
IDOT	Illinois Department of Transportation	RAS	Return Activated Sludge
IEPA	Illinois Environmental Protection Agency	RFP	Request for Proposal
IGA	Intergovernmental Agreement		
IT	Information Technology		

ACRONYMS (continued)

RMIS	Risk Management Information System
SAP	SAP is a German computer software firm
SBE	Small Business Enterprise
SBP	Strategic Business Plan
SEPA	Sidestream Elevated Pool Aeration stations
SIU	Significant Industrial User
SRF	State Revolving Fund loan program
SS	Suspended Solids
SSA	Stickney Service Area
SSMP	Small Streams Maintenance Program
SWRP	Stickney Water Reclamation Plant
TAM	Technical, Administrative, and Managerial
TARP	Tunnel and Reservoir Plan
TGM	Technical Guidance Manual
TIF	Tax Increment Financing
USEPA	United States Environmental Protection Agency
VBE	Veteran-owned Business Enterprise
WBE	Women-owned Business Enterprise
WEFTEC	Water Environment Federation's Technical Exhibition and Conference
WMO	Watershed Management Ordinance
WRP	Water Reclamation Plant



Metropolitan Water Reclamation District of Greater Chicago Historical Information And Milestones

- 1837** Chicago was incorporated as a city. The city's primary source of drinking water is Lake Michigan. Due to poor drainage and discharges to Lake Michigan, water-borne diseases plagued the city throughout the 1800s.
- 1856** Sewers were constructed to collect the city's wastewater. These sewers emptied into the Chicago River, ultimately becoming a health hazard.
- 1885** A torrential rainstorm flushed pollution from the river into Lake Michigan prompting public concern for ways to safeguard the quality of the drinking water.
- 1886** A Drainage and Water Supply Commission was created to study the growing problem of contamination of the city's water supply.
- 1889** Illinois Legislature passed an act enabling the establishment of the Sanitary District of Chicago to keep sewage pollution out of Lake Michigan. Referendum passed creating the Sanitary District of Chicago.
- 1892** Ground was broken on the 28-mile Main Channel of the Sanitary and Ship Canal. The canal would reverse the flow of the Chicago River by linking it to the Des Plaines River, and thus prevent pollution of Lake Michigan by the river.
- 1900** Main Channel of the Sanitary and Ship Canal opened.
- 1907** Main Channel Extension including Lockport Powerhouse and Lock completed.
- 1910** North Shore Channel completed.
- 1919** District's Board of Commissioners passed an ordinance committing the District to the construction and operation of treatment plants.
- 1922** The 16-mile Calumet-Sag Channel became operational; Calumet Treatment Plant placed into operation.
- 1928** North Side Treatment Plant placed into operation.
- 1930** U.S. Supreme Court Decree issued reducing diversion of Lake Michigan in steps. Effective January 1, 1939, diversion reduced to 1,500 cubic feet per second; West Side Treatment Plant placed into operation.
- 1939** Southwest Treatment Plant placed into operation.
- 1949** West and Southwest Treatment Plants combined.
- 1955** District's name changed to the Metropolitan Sanitary District of Greater Chicago (MSDGC); the Chicago Sewage Disposal System named one of the Seven Wonders of Modern Engineering by the American Society of Civil Engineers (ASCE), recognizing the size of the system, including intercepting sewers, treatment plants, and waterways.
- 1956** Referendum, enabled by legislation, passed adding 412 square miles to the District.
- 1961** Lemont Treatment Plant placed into operation.
- 1963** Hanover Park Treatment Plant placed into operation.
- 1969** Board adopted the Sewage and Waste Control Ordinance, prohibiting any waste discharge into Lake Michigan.
- 1971** Fulton County "Prairie Plan" began whereby abandoned strip-mines were reclaimed into agriculturally productive land; won "Special Civil Engineering Achievement Award" in 1974 from the ASCE.
- 1972** District adopted the Tunnel and Reservoir Plan (TARP) as recommended by a committee of representatives from the state, city, county, and MSDGC. The plan provided for the collection, transportation, storage, and treatment of combined rainwater and sewage that in periods of heavy rain overflowed into waterways, underpasses, and basements.
- 1975** Egan Treatment Plant placed into operation.
- 1980** O'Hare Treatment Plant (later renamed Kirie Water Reclamation Plant) and Upper Des Plaines TARP tunnel system placed into operation.
- 1985** Mainstream tunnel system placed into operation, capable of storing one billion gallons of combined sewage and stormwater; TARP Mainstream System, Phase I, received award for "Outstanding Civil Engineering Achievement" from the ASCE.
- 1986** TARP received awards for "Outstanding Civil Engineering Achievement" and "Outstanding Civil Engineering Achievement of Past 100 Years in Illinois"; 9.2-mile Calumet tunnel system placed into operation.
- 1988** Water quality improvements recognized as causing increased real estate development along the waterway system.
- 1989** District celebrated its 100th anniversary. As part of the Centennial Celebration, the District changed its name to the Metropolitan Water Reclamation District of Greater Chicago and dedicated the Centennial Fountain.
- 1992-1994** District's five Sidestream Elevated Pool Aeration Stations (SEPA) completed along the Calumet River system. These stations add oxygen to the waterways to enhance the aquatic environment. The District received "Outstanding Civil Engineering Achievement" in 1994 by ASCE for these projects.
- 1998** O'Hare-CUP Reservoir placed into operation, capable of storing 350 million gallons of combined sewage and stormwater; North Branch tunnel placed into operation.
- 1999** Des Plaines tunnel placed into operation.
- 2000** District celebrated the 100th anniversary of the reversal of the Chicago River and completed a century of protecting Chicago's water environment; ASCE names Chicago Wastewater System one of only 10 worldwide civil engineering Monuments of the Millennium.
- 2003** Thornton Transitional Reservoir placed into operation.
- 2004** By an act of the Illinois Legislature, the District became responsible for stormwater management in Cook County.
- 2006** TARP Phase I 109-mile tunnel system completed; all four TARP tunnel systems in operation.
- 2012** North Side Water Reclamation Plant renamed Terrence J. O'Brien Water Reclamation Plant.
- 2013** Board adopted the Watershed Management Ordinance, establishing uniform and minimum stormwater regulations throughout Cook County.
- 2015** Disinfection facility at the Calumet Water Reclamation Plant placed into operation. Thornton Composite Reservoir placed into operation.
- 2016** Phosphorus recovery facility placed into operation at the Stickney Water Reclamation Plant; implemented an ultraviolet disinfection process at the O'Brien Water Reclamation Plant; Board adopted the Resource Recovery Ordinance, which provides legal framework for resource recovery initiatives.
- 2017** Phase I of the McCook Reservoir completed.



Claiming its spot as an economic, recreational and cultural asset for Chicago and the region, the Chicago River is an imprint of the work of the Metropolitan Water Reclamation District of Greater Chicago (MWRD) and evidence of the excellent water quality. The MWRD strives to protect the regional water environment and pursue a healthier waterway system for wildlife and future generations of residents and visitors to come.

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

Metropolitan Water Reclamation District of Greater Chicago

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