



2022 Budget

Metropolitan Water Reclamation District
of Greater Chicago

Executive Director's Recommendations
October 12, 2021



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Metropolitan Water Reclamation District of Greater
Illinois**

For the Fiscal Year Beginning

January 01, 2021

Christopher P. Morill

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, 2021. 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

2022 Budget

Executive Director's Recommendations

October 12, 2021

Officers

Brian A. Perkovich

Executive Director

Mary Ann Boyle

Treasurer

Allison Fore

Public & Intergovernmental Affairs Officer

Darlene A. LoCascio

Director of Procurement & Materials Management

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

Shellie A. Riedle

Acting Administrative Services Officer

Beverly K. Sanders

Director of Human Resources

John H. Sudduth

Director of Information Technology

Jacqueline Torres

Clerk/Director of Finance

Board of Commissioners



Kari K. Steele

President



Barbara J. McGowan

Vice President



Marcelino Garcia

Chairman of Finance



Cameron Davis

Commissioner



Kimberly Du Buclet

Commissioner



Josina Morita

Commissioner



Eira L. Corral Sepúlveda

Commissioner



Debra Shore

Commissioner



Mariyana T. Spyropoulos

Commissioner

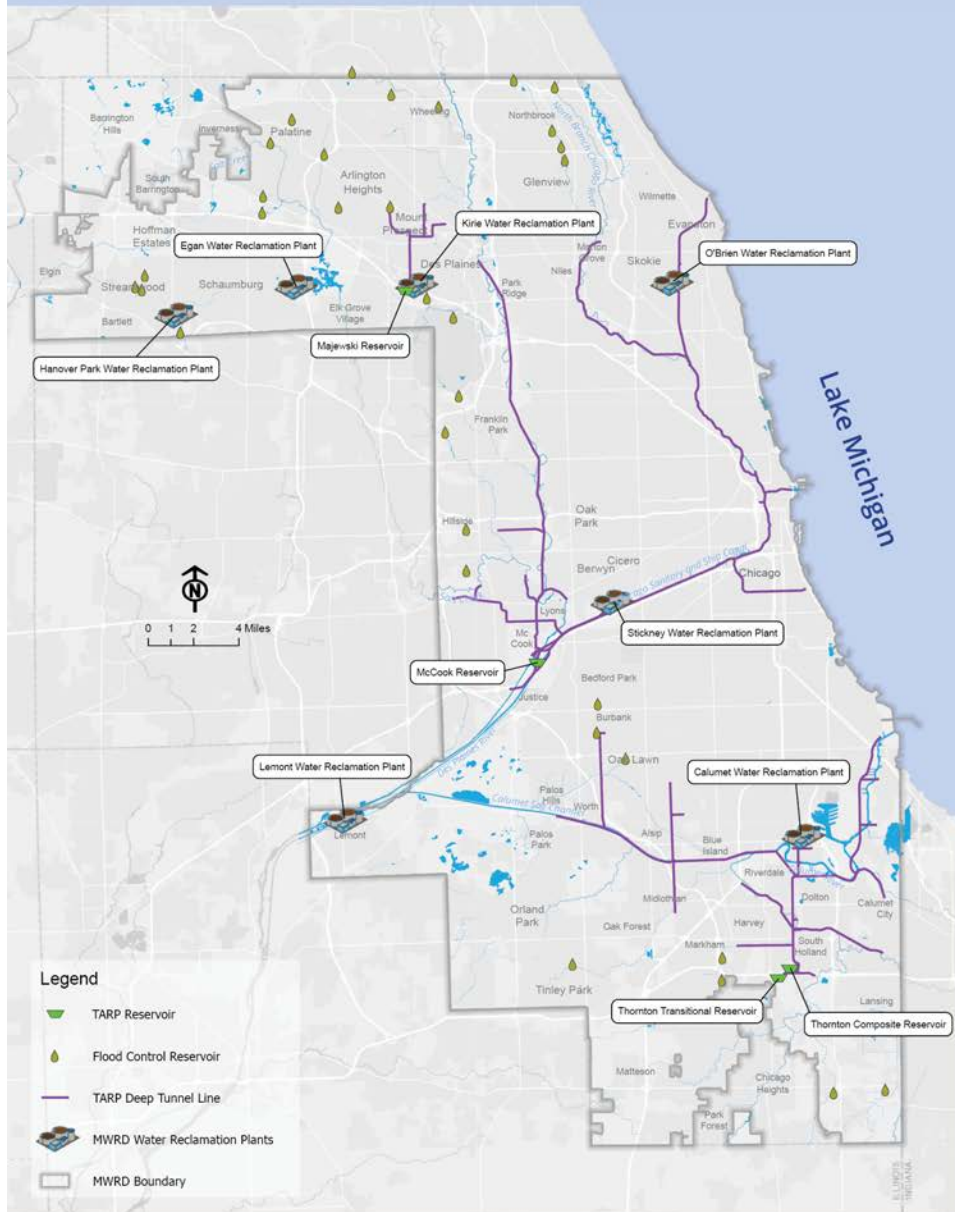
For additional copies of this document, contact:

Shellie A. Riedle, Acting Administrative Services Officer

100 East Erie Street, Chicago, IL 60611-3154

www.mwrd.org

MWRD Summary of Wastewater Treatment Services



**RESIDENTS
5.28 MILLION
SERVED**



**882.1 SQUARE
MILES SERVED**



**7 AWARD WINNING
WATER RECLAMATION
PLANTS**



**TREATMENT CAPACITY
OVER 2.0 BILLION
GALLONS PER DAY**



**NEARLY 500
BILLION GALLONS
TREATED PER YEAR**



**AVERAGE OF 1.3
BILLION GALLONS
TREATED PER DAY**

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 sewered 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 1.3 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

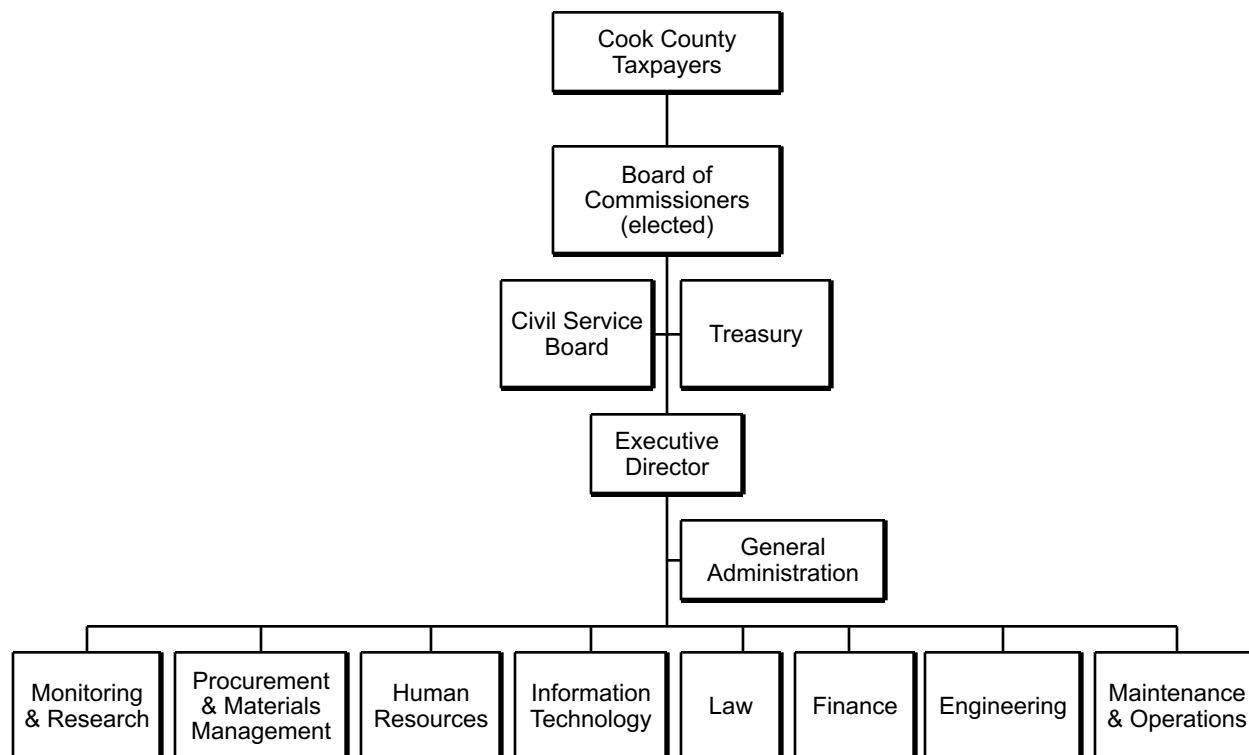
The District is governed by a nine-member Board of Commissioners (Board). Commissioners are elected at large and serve on a salaried basis. Three Commissioners are elected every two years for six-year terms. Biannually, the Board elects from its membership a President, Vice President, and Chairman of 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 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 53 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 2022.
- 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		
2020	2021	2022
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.

TABLE OF CONTENTS

INTRODUCTION

Map of Cook County	i
Description of the Metropolitan Water Reclamation District of Greater Chicago	ii
How to Use the District's Budget	iv
Table of Contents	v

SECTION I. BUDGET FOREWORD

Executive Director's Budget Message	1
Strategic Plan	5
Budget Message/Highlights	31
Financial Policies, Objectives, and Accomplishments	42
Policy Development and the Budget Process	48
Annual Appropriation Ordinance	53

SECTION II. BUDGET AND FINANCIAL SUMMARIES, SCHEDULES, AND EXHIBITS

Where the Money Comes From; Where the Money Goes	55
Net Assets Appropriable	56
Estimated Tax Rate	57
Taxable Property (Equalized Assessed Valuation - Graph and Table)	58
Appropriations & Expenditures, Tax Levies, and Tax Rates	59
Comparative Statement of Appropriations, Tax Levies, and Tax Rates	60
Comparative Appropriations:	
by Major Object/Character of Expenditure (Graph)	62
by Major Object of Expenditure	63
by Character of Expenditure	64
by Department and Major Program	65
by Fund and Major Program (Graph)	66
by Program Objective and by Fund	67
Annual Debt Service (Graph)	68
Outstanding Bonds and Estimated Statutory Debt Margin	69
Account and Personnel Summary (Table and Graph)	71
Five-Year Financial Forecast, 2022 - 2026	74

SECTION III. FINANCIAL STATEMENTS BY FUND

Financial Narrative	87
Summary of Revenue, Expenditures, and Net Assets Appropriable, 2022 - 2020	91
Summary of 2022 Estimated Assets Appropriable for All Funds	95
Combined Balance Sheets, 2020 - 2019	96
Appropriation for Liabilities, 2022 - 2021	98
Taxes Receivable, 2021 and Prior Years, Including Estimate for 2022	99
Personal Property Replacement Taxes Receivable, 2022 and Prior Years, Including Estimate for 2022	100

TABLE OF CONTENTS

SECTION III. FINANCIAL STATEMENTS BY FUND (continued)

Corporate Fund:

Financial Narrative	101
Revenue Graphs, 2015 - 2022	103
Estimated Balance Sheet, 2022 - 2021	104
Appropriable Revenue, 2022 - 2019	105
Financing, 2022 - 2017	106

Corporate Working Cash Fund:

Estimated Balance Sheet, 2022 - 2021	107
Revenues, 2022 - 2019	107

Capital Funds:

Financial Narrative	108
---------------------------	-----

Capital Improvements Bond Fund:

Estimated Balance Sheet, 2022 - 2021	110
Appropriable Revenue, 2022 - 2019	111

Construction Fund:

Estimated Balance Sheet, 2022 - 2021	112
Financing, 2022 - 2017, and Appropriable Revenue, 2022 - 2019	113

Construction Working Cash Fund:

Estimated Balance Sheet, 2022 - 2021	114
Revenues, 2022 - 2019	114

Other Funds:

Financial Narrative	115
---------------------------	-----

Stormwater Management Fund:

Estimated Balance Sheet, 2022 - 2021	116
Financing, 2022 - 2017, and Appropriable Revenue, 2022 - 2019	117

Stormwater Working Cash Fund:

Estimated Balance Sheet, 2022 - 2021	118
Appropriable Revenue, 2022 - 2019	118

Bond Redemption & Interest Fund:

Estimated Balance Sheet, 2022 - 2021	119
Appropriable Revenue, 2022 - 2019	120

Reserve Claim Fund:

Estimated Balance Sheet, 2022 - 2021	121
Appropriable Revenue, 2022 - 2019	121

Retirement Fund:

Estimated Balance Sheet, 2022 - 2021	122
Appropriable Revenue, 2022 - 2019	122

SECTION IV. DETAIL OF DEPARTMENTAL APPROPRIATIONS FOR THE CORPORATE FUND

Corporate Fund Appropriations, Expenditures, and Budgeted FTE Positions, 2013 - 2022	123
Corporate Fund Organization Chart	124
Corporate Fund Line Item Analysis	125

TABLE OF CONTENTS

SECTION IV. DETAIL OF DEPARTMENTAL APPROPRIATIONS FOR THE CORPORATE FUND (continued)

Detailed Appropriations by Department:

Board of Commissioners	129
General Administration	139
Monitoring & Research	153
Procurement & Materials Management	175
Human Resources	189
Information Technology	205
Law	219
Finance	233
Maintenance & Operations	
Summary of All Divisions	243
General Division	258
North Service Area	272
Calumet Service Area	288
Stickney Service Area	301
Engineering	317

SECTION V. CAPITAL BUDGET

Transmittal Letter	333
Capital Improvement Program Functions and Narrative	334
Ten-Year Capital Improvement Program Summary, 2017 - 2026	338
Construction Fund:	
Narrative	339
Project List	341
Projects Listed by Service Area	343
Project Fact Sheets	346
Objectives and Program Summary	373
Line Item Analysis	375
Capital Improvements Bond Fund:	
Narrative	377
Project List	379
Tunnel and Reservoir Plan (TARP) Project Costs and Status Chart	383
Projects Listed by Service Area	385
Project Fact Sheets	390
Other Project Exhibits	429
Stormwater Management Project List	443
Objectives and Program Summary	444
Line Item Analysis	446

SECTION VI. STORMWATER MANAGEMENT FUND

Transmittal Letter	449
Appropriations, Expenditures, and Budgeted FTE Positions, 2013 - 2022	450
Organization Chart	451

TABLE OF CONTENTS

SECTION VI. STORMWATER MANAGEMENT FUND (continued)

Budget Narrative	452
Project List	455
Projects Listed by Service Area	459
Project Fact Sheets	463
Project Exhibits	519
Objectives and Program Summary	525
Performance Data	527
Line Item Analysis	529
Position Analysis	531

SECTION VII. OTHER FUNDS

Reserve Claim Fund:

Description of Fund, Purpose, and Operation	535
Line Item Analysis	537

Bond Redemption & Interest Fund:

Description of Fund, Purpose, and Operation	538
Appropriation for Payment of Outstanding Bonds, 2022	541

Retirement Fund:

Description of Fund, Purpose, and Operation	543
Appropriation Ordinance (continued)	546

SECTION VIII. TAX LEVY ORDINANCES

Retirement Fund and Corporate Fund	547
Construction Fund	548
Bond Redemption & Interest Fund:	
Tax Levy Ordinance for Outstanding Bonds	549
Tax Levy for Payment of Outstanding Bonds, 2022	552
Reserve Claim Fund	554
Stormwater Management Fund	555

SECTION IX. APPENDIX

Compensation Plan Narrative	557
Salary Schedules	558
User Charge Rates/Property Tax Levies and Collections	559
Property Tax Base	560
Awards and Achievements Recognition	562
Financial Glossary	571
Glossary of Technical Terms	575
Acronyms	577

NOTE PAGE

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 2022 Budget. It includes the following:

- In the *Budget Message*, the Executive Director discusses his 2022 Budget Recommendations.
- In the *Strategic Plan*, an update of the strategic 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 13 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 (#) and (AC) symbols used with some personnel positions within the budget, indicating changes to positions once vacated.

Executive Director's Budget Message	1
Strategic Plan	5
Budget Message/Highlights	31
Financial Policies, Objectives, and Accomplishments	42
Policy Development and the Budget Process	48
Annual Appropriation Ordinance	53

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

October 12, 2021

Honorable Ladies and Gentlemen:

I am pleased to present the 2022 Executive Director's Budget Recommendations for the Metropolitan Water Reclamation District of Greater Chicago (District). The \$1.2 billion 2022 Budget is a fiscally responsible spending plan that will prepare the District for the future, while reflecting current economic volatility and increasing inflationary pressures. The budget invests in the District's Water Reclamation Plants (WRPs) and addresses flooding, while prioritizing sound fiscal management. The District will invest \$30.0 million in the District's Retirement Fund, providing advance funding to maintain growth in the Retirement Fund's funded ratio.

2021-2025 Strategic Plan

In the fall of 2020, the Board of Commissioners began the process of developing a Strategic Plan for 2021-2025 that builds on the accomplishments of the 2015-2020 plan. After months of planning and multi-stakeholder input, the Board of Commissioners adopted the plan on June 3, 2021. Throughout the process, the District committed to ensuring that a range of perspectives were included in the development of goals and strategies. We engaged leadership, staff, local governments, community organizations, regional planning and policy organizations, and others using the following principles to inform the development of strategies and initiatives.

- **Engagement** - Including a broad range of interested parties in the creation and implementation of key initiatives.
- **Collaboration** - Working with other entities to ensure "One Water" management of the water ecosystem.
- **Innovation** - Exploring fresh approaches to key challenges, including through partnerships with universities and other entities.
- **Equity** - Ensuring the fair treatment, access, opportunity, and advancement of all people, including identifying and eliminating barriers that may have prevented the full participation of some groups.
- **Resilience** - Anticipating disruptions to the environment, economy, and equity, and addressing them proactively.

The resulting plan consists of five goals that will be the framework for the District's planning and budget process for the next five years. Each goal contains a series of strategies and progress against each strategy will be evaluated. Successes and failures will be examined, and new issues will be addressed and incorporated into the Strategic Plan on an annual basis as part of the budget process. Please see the full plan beginning on page 5 of this budget document or on the District's website.



The District is committed to water stewardship and incorporated strategies that maintain a high level of performance in the Strategic Plan.

In addition to developing and adopting a new Strategic Plan during 2021, the District will adopt a Climate Action Plan that will include policy direction on net energy neutrality, carbon neutrality, and greenhouse gas reduction goals. During 2021, the District continued our efforts to reduce our carbon footprint by incorporating electric passenger vehicles, battery-operated mowers, and boiler and blower replacements. The District also continued our efforts to protect public health and the water environment by participating in Wastewater Surveillance for COVID-19 studies by the U.S. Department of Health and Human Services, a team of regional institutions, and a National Science Foundation research project led by Stanford University.

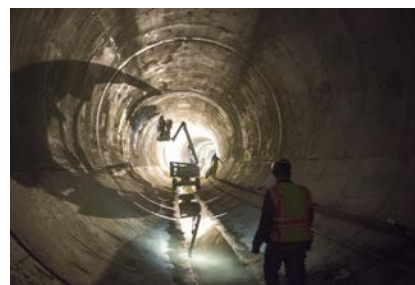
The District's vision is to continue to be a world-leading wastewater and stormwater management utility focused on flooding mitigation, resource recovery, sustainability, resilience, and innovation. While we look to the future, we have incorporated lessons learned from the global events of 2020 and 2021 into our Strategic Plan. The 2022 Budget was prepared within the framework of a new 2021-2025 Strategic Plan.

Operating Budget

The District serves 129 communities covering nearly all of Cook County, treating an average of 1.3 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.

In 2020, six of seven 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 99.2 percent or higher compliance since 2011. 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.

The District has a long history of proactive and responsible financial management. The 2022 Corporate Fund Budget is \$429.2 million, an increase of \$29.9 million from the 2021 Budget, reflecting strong revenue performance. During 2021, the District was successful in obtaining statutory authority to transfer lawfully available revenue to the District's Retirement Fund. Based on positive results in 2019, 2020, and projected for 2021, the District will contribute \$30.0 million in Corporate Fund budgetary reserves to the Retirement Fund to maintain the funded ratio. The operating budget reflects inflationary cost increases that have been realized or are anticipated. Two of the District's largest non-personnel expenditures, chemicals and electricity, are expected to see price increases in 2022. The District will invest \$6.3 million in technology infrastructure, including a phased replacement of the distributed control systems that are necessary to operate modern water reclamation plants.



Locally-owned municipal sewers carry wastewater from 129 municipalities to the District's 560 miles of large intercepting sewers, which carry wastewater to one of seven water reclamation plants across Cook County. Tunnel and Reservoir Plan (TARP) tunnels located 150-300 feet under ground capture and store excess flow during severe rain events.

Capital Budget

The Capital Improvement Program is critical to implementing a circular economy approach detailed in the Strategic Plan. The District must balance modernizing aging infrastructure and implementing innovative and sustainable solutions. The 2022 Capital Improvement Program Budget is \$226.7 million. Of the total budget, 56.3 percent is dedicated to projects at the seven WRPs, including roof replacements, service tunnel rehabilitation, concrete replacement, and boiler replacements. In 2021, the District began construction on a series of phosphorus reduction strategies necessary over the next 10 years to meet evolving regulatory requirements.

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.

In late 2021, the District plans to close on a \$500.0 million bond sale to fund our capital program and take advantage of low interest rates by issuing \$345.0 million in refunding bonds resulting in savings estimated at \$60.0 million. The District also plans to prepay \$43.0 million in State Revolving Fund loans, a projected savings of \$12.7 million over 15 years.

Stormwater Management

Climate change and changing weather patterns with intense bursts of precipitation can quickly overwhelm systems throughout the region. Flooding has led to major road, rail, and utility outages. One of the five 2021-2025 Strategic Plan goals is to continue to mitigate flooding across Cook County through a proactive, equitable stormwater management program, including implementation of gray and green infrastructure, enforcement of the Watershed Management Ordinance, and acquisition of flood-prone property.

The District has made significant investments in developing nearly 180 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 District continues to advance strategic partnerships with the local municipalities, park districts, and the Forest Preserve District of Cook County to address local flooding.



The District partnered with the Village of Wheeling and the Wheeling Park District to develop stormwater storage at the park and recreation center.

During 2021, the District developed a Volumetric Approach to Stormwater Planning to serve as a long-term vision plan that is flexible, dynamic, and compatible with local communities' timeline and strategies for addressing flooding problems. This approach will be implemented in 2022. The Volumetric Approach includes building an online platform to access the District's Geographic Information System database which can incorporate climate change trends to estimate the location and size of possible flooding. The District continues to provide guidance to design engineers and developers considering construction of offsite stormwater detention and volume control facilities through our permitting process.

The 2022 Budget continues the District's commitment to reduce flooding. The 2022 Stormwater Management Fund Budget is \$93.4 million to further our investment in flood control projects and support of local stormwater issues. The 2021 Property Tax Levy is \$57.9 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's property tax levy is statutorily limited in the aggregate to an annual increase of five percent or the Consumer Price Index (CPI), whichever is lower for all purposes except Stormwater Management and the payment of Bond redemption and interest. While CPI is projected to end 2021 near 4.5 percent, the recommended 2022 aggregate levy increase is 3.6 percent, or less than the maximum projected increase for 2022, demonstrating the District's continued commitment to providing taxpayer value to the residents of Cook County.



The District serves the residents of Cook County and protects Lake Michigan, the region's water source.

The District's appropriation and tax levy for the 2022 Budget, compared to the 2021 Budget as Adjusted is:

	<u>2022</u>	<u>2021 Adjusted</u>	<u>Increase (Decrease)</u>	<u>Percent Change</u>
Total Tax Levy \$	674,834,095	\$ 658,768,086	\$ 16,066,009	2.4%
Aggregate Levy \$	371,053,900	\$ 358,122,400	\$ 12,931,500	3.6%
Appropriation \$	1,189,942,787	\$ 1,205,024,150	\$ (15,081,363)	(1.3)%

Conclusion

Using the Strategic 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 2022 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



**Metropolitan Water
Reclamation District
of Greater Chicago**

STRATEGIC PLAN

2021–2025



INTRODUCTION

In the fall of 2020, the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago (MWRD) and the MWRD Executive Team began working together to develop the 2021-2025 Strategic Plan. This new plan builds on the accomplishments of the 2015-2020 Strategic Plan by:

- Articulating the MWRD’s strategic goals for the next five years;
- Identifying a set of strategies and initiatives to achieve those goals;
- Providing measures (both qualitative and quantitative) and targets to assess progress;
- Establishing a framework to review and update the Strategic Plan on an annual basis.

A Steering Committee was formed to oversee the effort, which includes the following members:

Commissioner Marcelino Garcia, co-chair
 Commissioner Debra Shore, co-chair
 Brian Perkovich, Executive Director
 Mary Ann Boyle, Treasurer
 Susan Morakalis, General Counsel
 John Murray, Director of Maintenance and Operations
 Catherine O’Connor, Director of Engineering

From September 2020 through February 2021, the Steering Committee led a multi-phase strategic planning process, against the backdrop of a global pandemic and the growing threat of climate change, using the lens of racial and social equity in the communities served by the MWRD.

Outreach was a critical part of the process - including outreach to MWRD staff, local governments, members of the public, and others - to ensure the inclusion of a range of perspectives in the development of the Strategic Plan. During that outreach, several consistent themes emerged. Those themes are reflected in the following guiding principles, which informed the development of strategies and initiatives for the new Strategic Plan:

Engagement	Collaboration	Innovation	Equity	Resilience
Including a broad range of interested parties in the creation and implementation of key initiatives.	Working with other entities to ensure “One Water” management of the water ecosystem.	Exploring fresh approaches to key challenges, including through partnerships with universities and other entities.	Ensuring the fair treatment, access, opportunity, and advancement of all people, including identifying and eliminating barriers that may have prevented the full participation of some groups.	Anticipating disruptions to the environment, economy, and equity, and addressing them proactively.

A more detailed description of the strategic planning process follows.

Strategic Planning Process

The strategic planning process included significant engagement from a range of interested parties to gather their perspectives on the MWRD’s strategic direction, including:

- In-depth interviews with the MWRD’s Executive Team and Board of Commissioners;
- A **Workshop**, facilitated by Arup, which engaged approximately 50 attendees, including local governments, community organizations, regional planning and policy organizations, environmental organizations, and others;
- An **Employee Survey** that garnered almost 550 responses from MWRD staff;
- **Public-facing Surveys** that provided the opportunity for more than 200 members of the public to offer their ideas and feedback; and
- A review of internal documents and existing performance measures.

The Steering Committee then participated in a two-day **Strategic Planning Workshop** to consider input from the engagement process and align on five overarching strategic goals for the new Plan.

Working Groups were then formed around each strategic goal that included representatives from the MWRD’s Executive Team, Board of Commissioners, and more than 50 members of MWRD staff who were selected based on their expertise and commitment to the MWRD’s ongoing success. These Working Groups were tasked with the continued development and finalization of 32 strategies that support the five strategic goals, as well as measures to gauge progress.

The following pages summarize the MWRD's 2021-2025 Strategic Plan. It includes an overview of the MWRD and the community it serves; the MWRD's mission, vision, and values; the overarching strategic goals that will guide the MWRD over the next five years; and strategies to achieve each of those goals. Each strategy is supported by an internal action plan that includes specific initiatives, activities, and timeframes that will be tracked throughout the implementation of the Strategic Plan.

The ongoing implementation of the Strategic Plan, as well as the annual update process described below, will be led by the Steering Committee with oversight from the Board of Commissioners.

Annual Strategic Plan Update

The MWRD will update the 2021-2025 Strategic Plan on a yearly basis. The update process will include:

- A high-level review of trends to identify any changes that may affect strategies and initiatives. For example, this review will consider any needed updates to the assumptions about climate change, as well as any new trends that need to be taken into account;
- An assessment of any major organizational changes that may impact the Strategic Plan;
- An evaluation of strategies, baseline and stretch targets, and initiatives (which are included in the internal action plan). Progress against each strategy will be evaluated, successes and failures will be examined, and any new issues that need to be addressed will be incorporated into the updated Strategic Plan.

The update process will be led by the Steering Committee, supported by the Working Groups that were assigned to specific strategic goals, with oversight from the Board of Commissioners. It will be coordinated with the annual budget process, which will allow the consideration of updates that require additional resources during the budget process and will ensure that the updated Strategic Plan and annual Budget are aligned.

OVERVIEW

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) is an award-winning, special-purpose district responsible for treating wastewater and providing stormwater management for residents and businesses in Cook County. With over 1,700 employees, it has an annual budget of \$1.2 billion and maintains a AAA credit rating. A nine-member Board of Commissioners governs the MWRD; each Commissioner is elected at large and serves a six-year term.

The MWRD owns and operates seven water reclamation plants, 560 miles of intercepting sewers and force mains, 23 pumping stations, 34 stormwater detention reservoirs, and three Tunnel and Reservoir Plan reservoirs. In addition, the MWRD controls 76.1 miles of navigable waterways, which are part of the inland waterway system connecting the Great Lakes with the Gulf of Mexico. Each day, the MWRD cleans an average of 1.4 billion gallons of wastewater, while recovering and reusing valuable resources such as energy, biosolids, algae, phosphorus, nitrogen, and other nutrients that are removed from the wastewater stream.

The wastewater collection and treatment processes are performed in compliance with discharge permits issued by the Illinois Environmental Protection Agency (EPA). The MWRD's high level of performance is reflected in its 99.89% overall compliance with the EPA's National Pollutant Discharge Elimination System (NPDES) requirements in 2020, as well as recognition from the National Association of Clean Water Agencies - including six Platinum and one Silver Peak Performance Awards. In addition, as the stormwater management agency for Cook County, the MWRD partners with communities to build capital improvement and green infrastructure projects that address regional and local flooding issues. The MWRD also administers the Watershed Management Ordinance and manages a flood-prone property acquisition program that removes homes built in the floodplain. Through these and other efforts, the MWRD is working to manage stormwater, prevent flooding, and build a more resilient Cook County.



Mission, Vision, Values

The MWRD's mission, vision, and values, illustrated below, serve as a high-level framework for the 2021-2025 Strategic Plan. By comparison, the specific goals, strategies, and success measures included in the Strategic Plan provide a detailed roadmap for the MWRD over the next five years.

The mission statement describes the MWRD's role within its service area and remains unchanged since the last Strategic Plan. However, as a result of the strategic planning process, the desired future state summarized in the MWRD's vision has been updated, and the MWRD's core values have been expanded to include the values of equity and diversity.

Mission	The MWRD 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.
Vision	We will continue to be a world-leading wastewater and stormwater management utility focused on flooding mitigation, resource recovery, sustainability, resilience, and innovation.
Values	<p>Excellence</p> <p>We believe excellence is a never-ending journey to exceed the expectations placed upon us as individuals and as an organization.</p> <p>Respect</p> <p>We create an atmosphere of open communication that rewards commitment and performance and is responsive to the needs of our employees and communities.</p> <p>Innovation</p> <p>We endeavor to foster a culture of creativity to find solutions to the operational and environmental challenges facing us in order to build a more resilient region.</p> <p>Safety</p> <p>We are dedicated to safeguarding our greatest assets, our employees, as well as the environment and our communities.</p> <p>Equity and Diversity</p> <p>We strive in all areas of our work to treat people in a fair and just manner, to have a workforce and work practices that reflect the diversity of our region, and to ensure the full participation of all groups in our programs and services.</p> <p>Accountability</p> <p>We fulfill our responsibilities by being accountable to the people we serve, each other, and our environment in a prudent manner.</p>

History

The MWRD has been improving the environment and protecting public health since its inception as the Sanitary District of Chicago in 1889. At that time, a polluted river flowed directly into Lake Michigan, contaminating the water supply for the City of Chicago and causing waterborne illnesses. The Sanitary District's first priority was reversing the flow of the Chicago and Calumet River Systems to prevent the discharge of sewage into Lake Michigan. Instead, flow was diverted into the Des Plaines River, followed by the Illinois River, and eventually the Mississippi River.

To reverse the river system, the Sanitary District had to construct a 61.3-mile system of canals and waterway improvements that cut through the subcontinental dividing ridge, allowing the river to flow by gravity away from the lake.

This engineering marvel not only improved environmental conditions for the residents of Chicago but also helped to distinguish the agency around the world and set a tone of visionary environmental engineering accomplishments and scientific breakthroughs. The Sanitary District went on to build a hydropower plant, intercepting sewers, pumping stations, and water reclamation plants to clean water, and the agency's mission grew from protecting the lake to creating a flourishing new waterway system.

The groundbreaking construction of the Chicago Sanitary and Ship Canal led to the creation of the Chicago Area Waterway System (CAWS) and the reversal of the Chicago River to protect the region's water environment.



Bubbly Creek in the early 1900s (L) and the same area of Bubbly Creek today (R).

These early advancements were followed by a century of innovation, including the construction of the Tunnel and Reservoir Plan (TARP), flood control facilities, aeration stations, nutrient recovery facilities, and green infrastructure projects. From 1955 through 1988, the District was called the Metropolitan Sanitary District of Greater Chicago. In 1989, the name was changed to the Metropolitan Water Reclamation District of Greater Chicago to more accurately reflect the agency's expanding functions and responsibilities.

Today, the MWRD operates the world's largest water reclamation facility, the world's largest nutrient recovery facility, the world's largest wastewater treatment ultra-violet (UV) disinfection installation, and the world's largest combined sewer reservoir.



Clockwise from top left: Construction of Des Plaines Tunnel; construction of Thornton Reservoir; SEPA 5 aeration station; phosphorus recovery at Stickney Water Reclamation Plant, UV disinfection facility at O'Brien Water Reclamation Plant; green infrastructure in Pilsen.



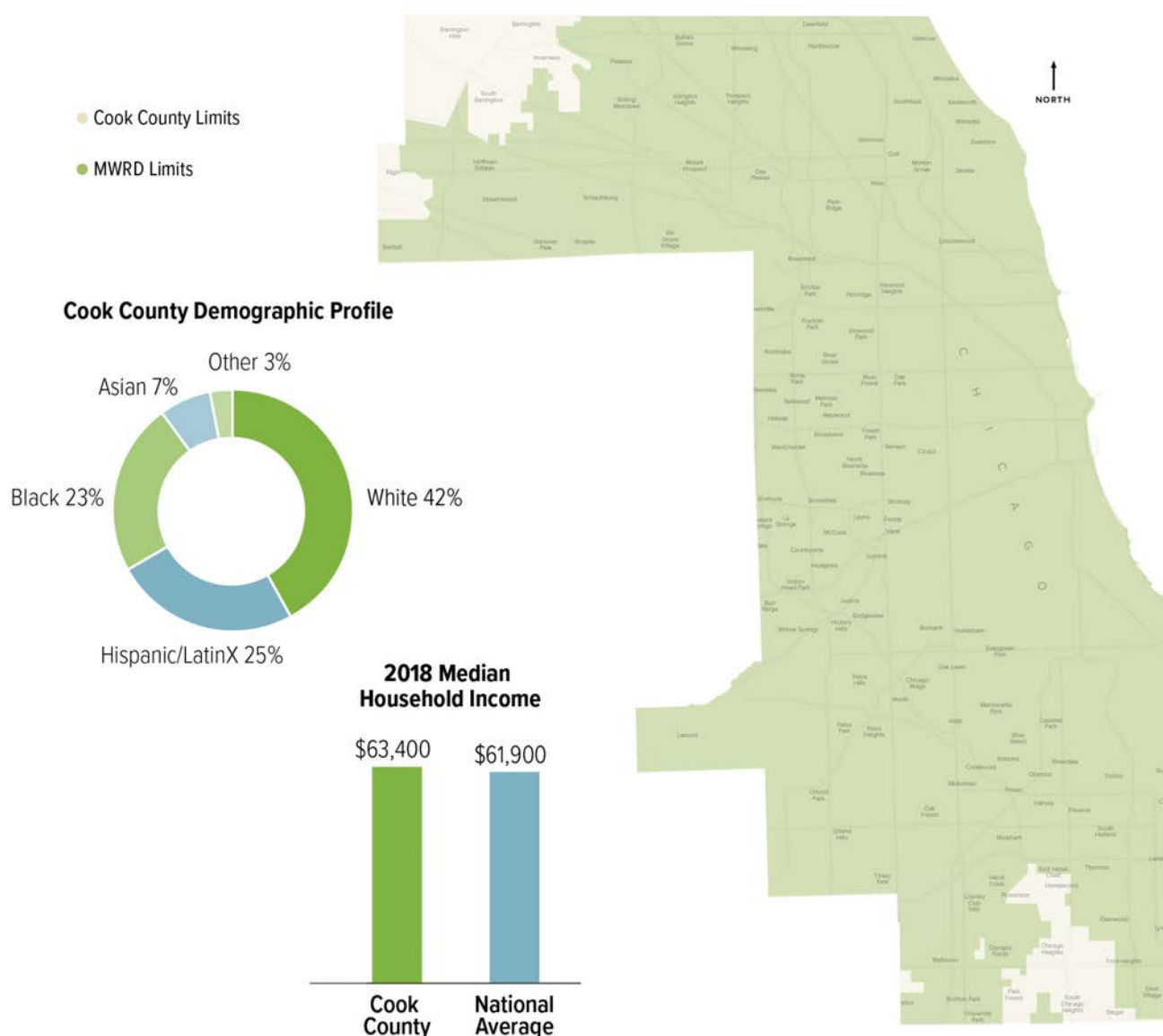
Community Profile

The MWRD's service area encompasses 882.1 square miles and includes the City of Chicago and 128 suburban communities throughout Cook County. It serves an equivalent population of 10.35 million people: 5.25 million residents, a commercial and industrial equivalent of 4.5 million people, and a combined sewer overflow volume equivalent to the flow generated by 600,000 people.

As illustrated in the map below, the MWRD provides wastewater treatment services for those communities that lie within its corporate boundary—including most of Cook County. By comparison, the MWRD is the stormwater management agency for all of Cook County.

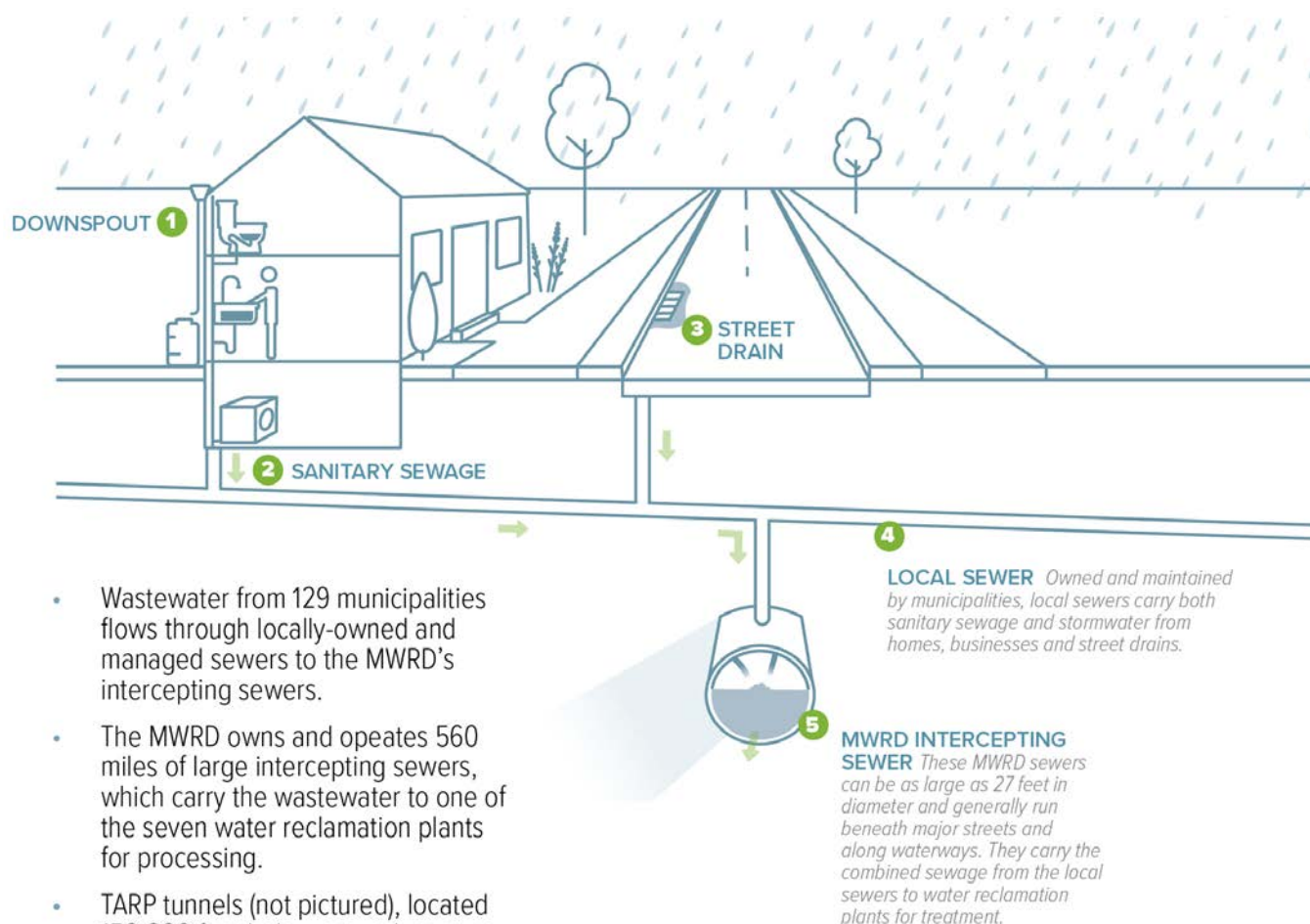
Cook County is the largest county in Illinois and second-largest in the United States. Cook County's population is diverse, with a demographic profile that is approximately 42% White, 25% Hispanic/LatinX, 23% Black, 7% Asian, and 3% other categories, and reported a median household income in 2018 (\$63,400) that was higher than the national average (\$61,900). However, this summary view obscures significant disparities in the average household income of Cook County's 129 municipalities, which reflect long-standing racial inequities in the region.

Cook County and Metropolitan Water Reclamation District of Greater Chicago



Source: Data USA, Cook County, IL; <https://datausa.io/profile/geo/cook-county-il#:~:text=Median%20Household%20Income,-%2463%2C353&text=Households%20in%20Cook%20County%2C%20IL,represents%20a%203.17%25%20annual%20growth.>

How Sewers Work In Cook County

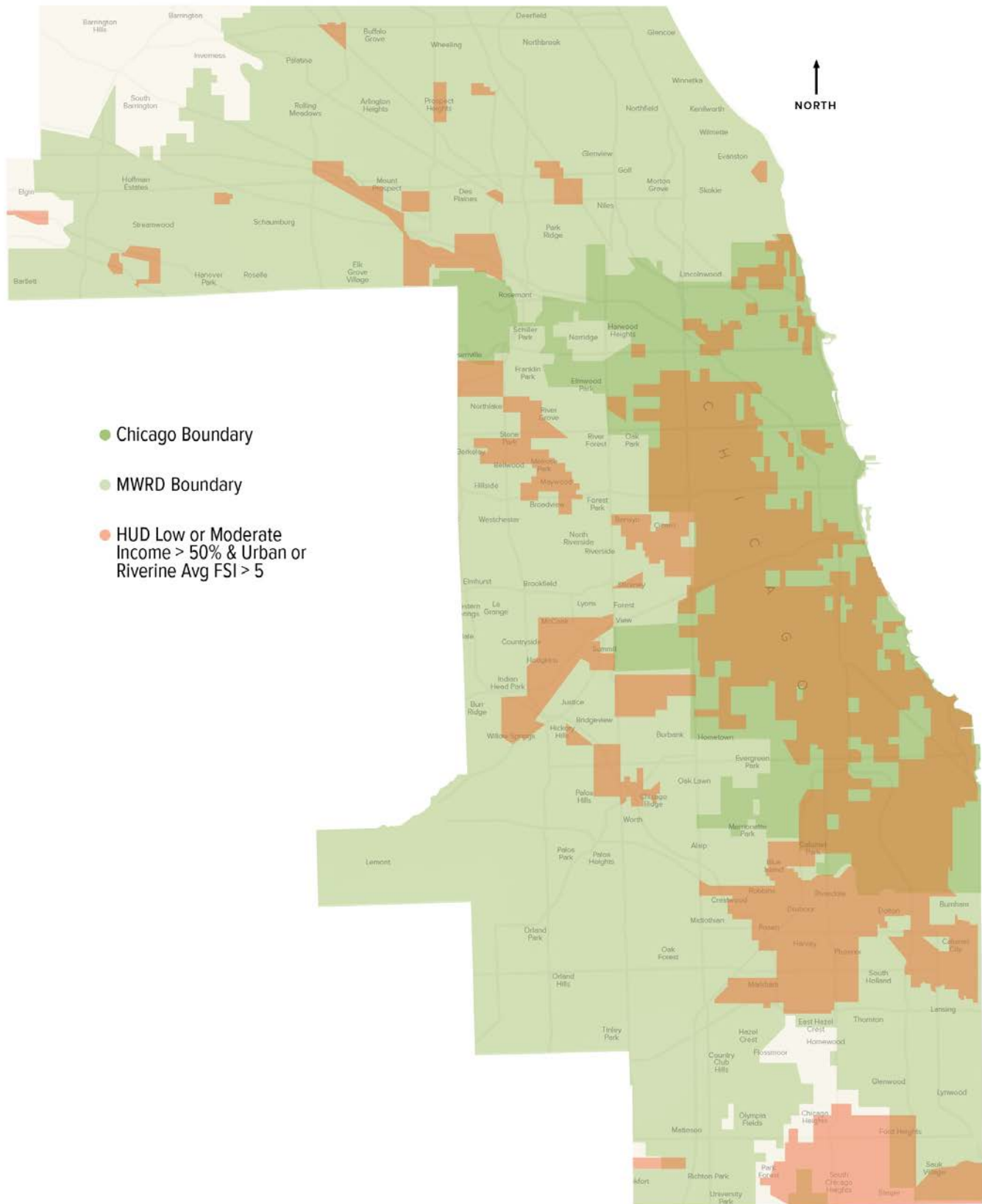


These disparities impact the MWRD because, as illustrated above, individual municipalities—not the MWRD—own and operate their local sewer systems. The MWRD owns large intercepting sewers that receive wastewater from these local systems.

Because different entities own different parts of the sewer system in Cook County, efforts to implement stormwater solutions and alleviate local flooding require close collaboration and partnership between impacted communities and the MWRD. Low- and moderate-income communities may not have the same capacity to partner with the MWRD as high-income communities, and these capacity constraints may serve as a barrier to the equitable implementation of stormwater projects across Cook County.

To support participation by all impacted communities regardless of their capacity, the MWRD has identified certain communities as disproportionately impacted areas (DIAs). These communities, illustrated on the following map, are low-to-moderate income areas that may be more susceptible to flooding. Efforts to identify and eliminate barriers to participation are a key focus of the new Strategic Plan.

Disproportionately Impacted Areas (DIAs) in Cook County



Disproportionately impacted area (DIA): An area that has a Chicago Metropolitan Agency for Planning (CMAP) Urban or Riverine Flood Susceptibility Index (FSI) mean value of 5-10, as of July 24, 2018, and is within a Low to Moderate Income Area as defined by the U.S. Department of Housing and Urban Development (HUD).

TRENDS AND OPPORTUNITIES

The new Strategic Plan must be responsive to significant trends, both positive and negative, that will impact the MWRD and its future success. The impact of climate change is discussed below, as well as key industry trends – Utility of the Future and circular economy – that continue to spur innovation and collaboration in the water industry.

Utility of the Future

A Utility of the Future represents an agency that is forward-thinking, innovative, a leader in sustainability and resilience, and transformative in the way that it recovers resources. The Utility of the Future Today recognition is a joint initiative led by the Water Environment Federation (WEF), the National Association of Clean Water Agencies (NACWA), the Water Research Foundation (WRF) and the WaterReuse Association and is supported by the Environmental Protection Agency (EPA) Office of Wastewater Management, and the Department of Energy (DOE) Office of Energy Efficiency & Renewable Energy.



The MWRD was named a Utility of the Future Today in 2020 for its organizational culture, leadership, and innovation in stormwater management and wastewater treatment. The MWRD also earned this distinction, which is active for three years, in 2017.

The MWRD is committed to water stewardship and applied this approach during the development of the new Strategic Plan by including strategies such as maintaining a high level of performance, pursuing opportunities to recover and reuse resources, mitigating flooding through an equitable stormwater management program, and engaging with the community. While the recognition as a Utility of the Future Today

is a premier achievement, the MWRD is responding to, and planning for, an uncertain tomorrow by considering key trends and opportunities such as climate change and circular economy.

Climate Change

The earth's climate is changing because of increased levels of greenhouse gases (GHGs) in the atmosphere; these changes are expected to produce a number of negative outcomes. First, as temperatures rise, sea levels will rise due to warmer ocean temperatures and melting glaciers. Rising temperatures are expected to produce two important seasonal conditions in our region: warmer and shorter winters, and warmer and more drought-prone summers. Lastly, warming is expected to accelerate and amplify the hydrological cycle, producing more intense rainfall events.

Northeastern Illinois has already experienced such adverse weather events, including record-breaking flooding, heat, and drought. The region broke the record for the most consecutive days above 100°F during the Midwest's drought in 2012, followed by flooding in 2013 and 2019 that warranted Presidential Disaster Declarations.

The impacts of climate change have significant implications for the region's economy, built environment, ecosystems, and residents. Flooding has led to major road, rail, and utility outages, sewer overflows, mold, damaged property, disruptions to freight traffic, and financial losses for local residents and businesses. Heat waves have caused illnesses, hospitalizations, and deaths in vulnerable populations, and drought has had significant adverse effects on the region's agricultural sector and natural areas.

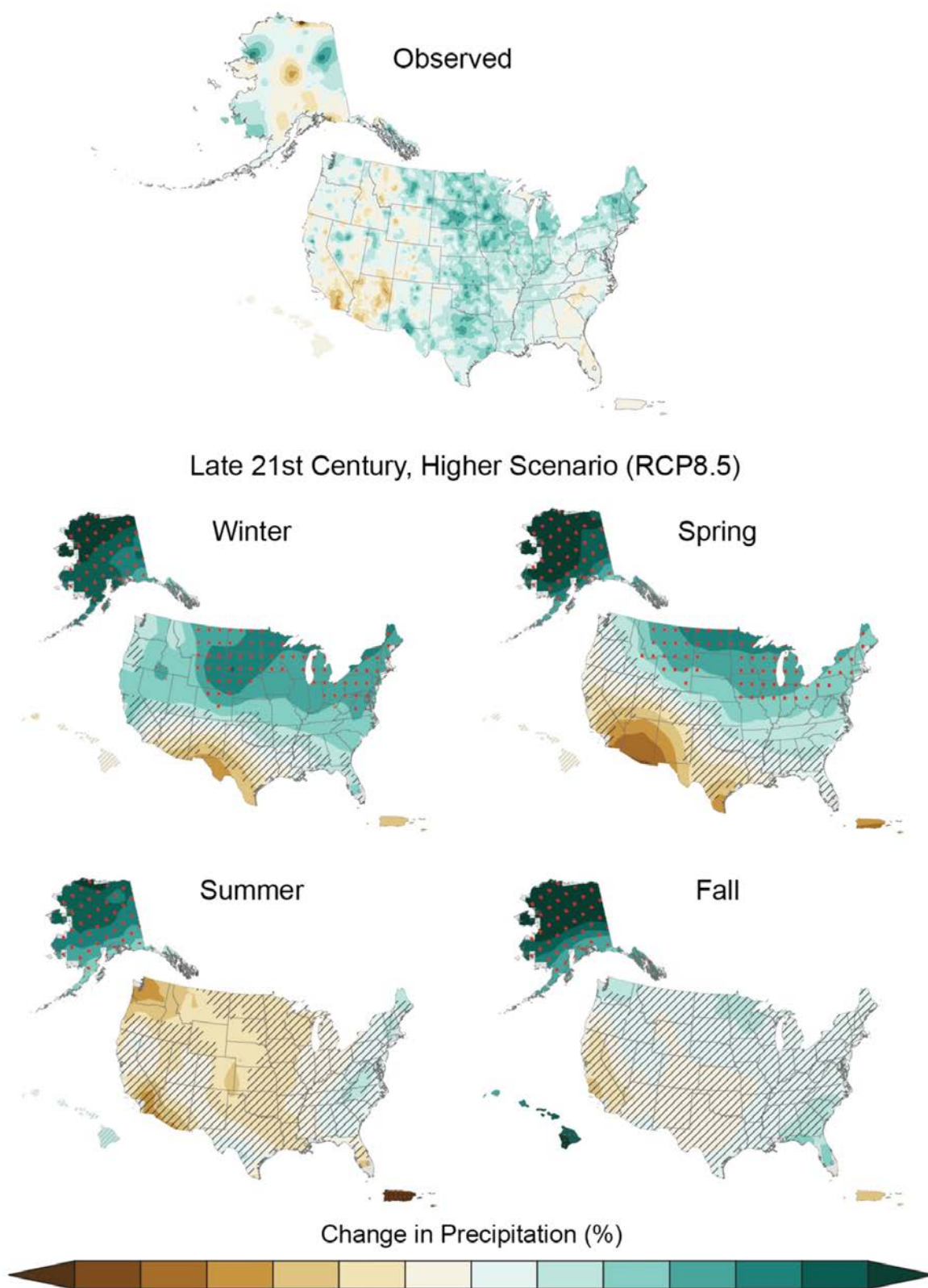


The effects of climate change are also changing our assumptions about water resources, which are predicted to be one of the first significant areas impacted. As climate change warms the atmosphere and alters the hydrological cycle, changes in the amount, timing, form, and intensity of precipitation will continue. The following maps depict projected changes in seasonal precipitation across the United States in the late 21st century. These impacts are likely to affect water and wastewater utilities and efforts to protect water quality, public health, and safety.

The MWRD recently completed a draft of its Climate Action Plan (CAP), which was developed by an interdepartmental task force. The purpose of the CAP is to forecast changes in wastewater treatment and stormwater management capacity requirements and water quality goals to (1) guide future infrastructure planning, (2) support “climate resiliency infrastructure investment” decisions, (3) guide mitigation of the MWRD’s greenhouse gas emissions that contribute to climate change, and (4) adapt to climate change-related impacts.

The draft CAP was submitted to the MWRD’s Board of Commissioners in July of 2020 and was an important consideration in the development of the new Strategic Plan. One of the Strategic Plan’s overarching goals, Enterprise Resilience, includes efforts to “achieve climate change and environmental justice protections.”

Observed and Projected Changes in Seasonal Precipitation



Source: <https://nca2018.globalchange.gov/downloads>.

Circular Economy

The three principles of circular economy are designing out waste externalities, keeping resources in use, and regenerating natural capital. Using this approach, materials, water, and products are managed in loops to maintain them at their highest possible intrinsic value.



**DESIGN OUT WASTE
EXTERNALITIES**



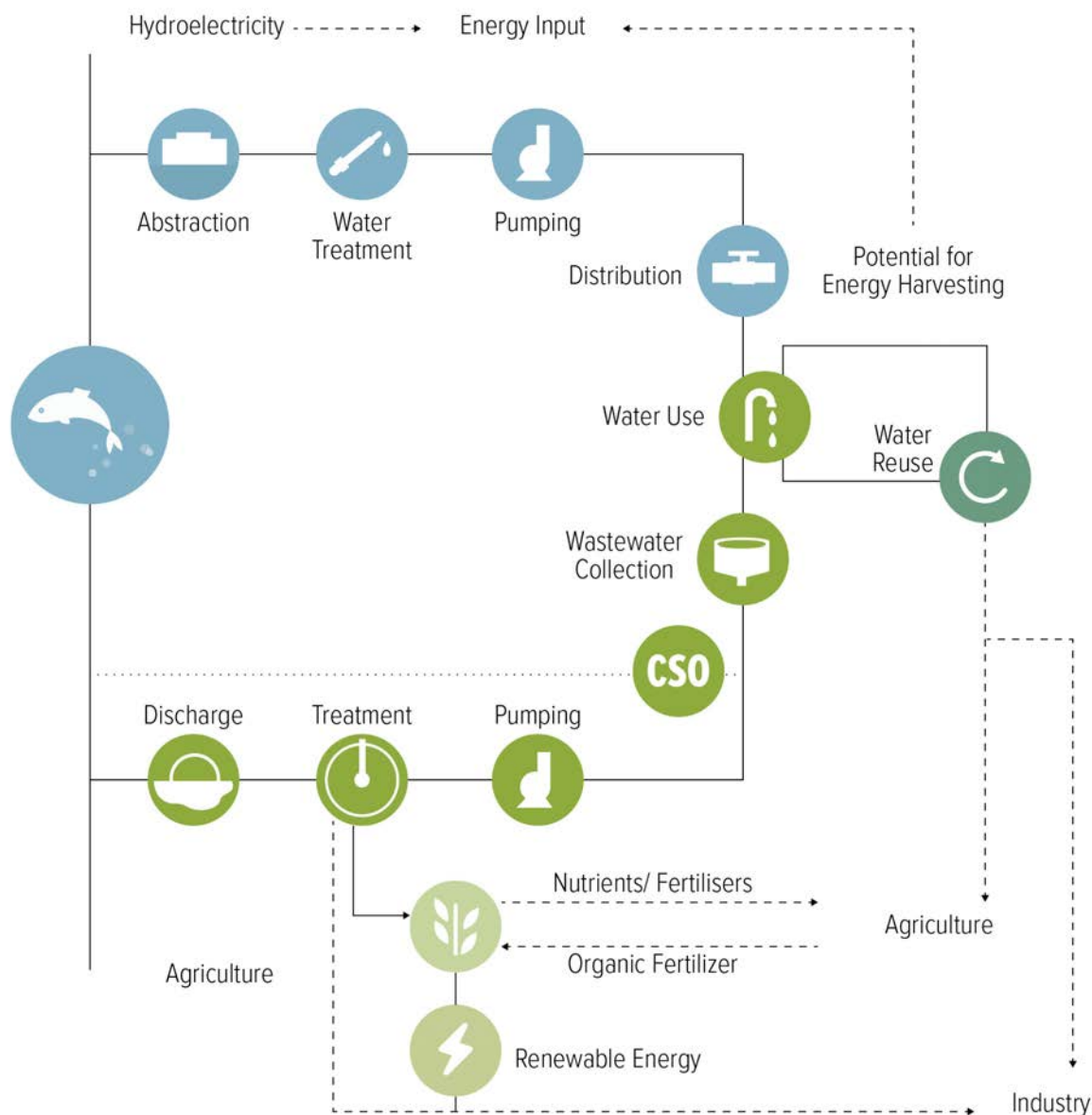
**KEEP RESOURCES
IN USE**



**REGENERATE
NATURAL CAPITAL**

The diagram below illustrates circular economy principles as applied to a typical water system.

Simplified View of the Components of a Municipal Water System



Source: "Water and Circular Economy: A White Paper," Arup, Ellen MacArthur Foundation, AnteaGroup, November 2019, p. 17.

Implementing a circular economy approach over the next five years will enhance the MWRD's current operating business model, thereby improving asset productivity, reducing costs and delivering wider benefits, and regenerating the environment.

Circular economy enhancements are included across all aspects of the new Strategic Plan and include:

- New sources of value creation from waste flows and current assets, e.g., resource recovery at water reclamation plants;
- Significant resource productivity improvements (especially energy and chemicals);
- Equitable deployment of nature-based solutions and green infrastructure through partnerships;
- New collaborative ventures across the value chain;
- Creation of new value chains to generate social capital, employment opportunities, and community benefits – including education and skills attainment;
- Greater business resilience and reduced risk; and
- Platforms for long term collaboration and innovation.

STRATEGIC GOALS

The Strategic Planning Steering Committee aligned on five strategic goals to serve as the foundation of the 2021-2025 Strategic Plan.

Strategic Goal #1: Resource Management	Maintain a high level of performance on the core mission of protecting the public health and area waterways while pursuing opportunities to recover, reuse, and monetize resources.
Strategic Goal #2: Stormwater Management	Continue to mitigate flooding across Cook County through a proactive, equitable stormwater management program, including implementation of gray and green infrastructure, enforcement of the Watershed Management Ordinance, and acquisition of flood-prone property.
Strategic Goal #3: Workforce Excellence	Invest in the future by investing in employees; continue to recruit, develop, and retain best-in-class employees as the foundation of the MWRD's ongoing success.
Strategic Goal #4: Community Engagement	Engage with the community to position the MWRD as a critical community asset and to ensure that the MWRD is a responsive neighbor and inclusive business partner.
Strategic Goal #5: Enterprise Resilience	Ensure ongoing services that are reliable, equitable, and cost-effective; achieve climate change and environmental justice protections; prepare for other manmade and natural events; strengthen the MWRD's operational and financial positions.

Working Groups then developed strategies that will be implemented over the next five years to achieve these goals, as well as success measures and targets to gauge progress. The following pages present the identified strategies and selected success measures and targets for each of the five strategic goals. Baseline target refers to the present level of performance upon which future performance levels will be compared. To achieve a stretch target, staff must develop new strategies.

Strategic Goal #1: Resource Management

Goal

Maintain a high level of performance on the core mission of protecting the public health and area waterways while pursuing opportunities to recover, reuse, and monetize resources.

Current Efforts

The MWRD's seven water reclamation plants treat residential and industrial wastewater and achieved 100% overall compliance with the EPA's National Pollutant Discharge Elimination System (NPDES) requirements in 2020. As regulatory requirements continue to evolve (e.g., upcoming regulations limiting phosphorus contained in treated effluent), the MWRD is implementing innovative technologies and processes to maintain its record of compliance.

In addition, the water that flows into the MWRD's water reclamation plants is treated as a collection of raw resources to be recovered and reused. The MWRD produces clean water as well as sustainable resources like biosolids, energy, and nutrients like phosphorus that are increasing in scarcity and value. Resource recovery is a new frontier that benefits the environment and offers opportunities to recover operational costs.

The MWRD launched the Tunnel and Reservoir Plan (TARP) in 1972 to meet water quality standards in the 375 square mile combined sewer service area; the TARP is on schedule to be completed by 2029. The goal of the TARP is to reduce combined sewer overflows, thereby providing both pollution control and flood control, and it has already demonstrated its value in achieving this goal:

- In the south suburbs, combined sewer overflows have been nearly eliminated since the 7.9 billion gallon Thornton Composite Reservoir was completed in 2015.
- In 2018, during its first year in operation, the McCook Reservoir Stage 1 was filled 39 times and captured 27.2 billion gallons of water that would have overwhelmed area combined sewer systems and flooded streets, homes, and communities. When completed, the McCook Reservoir is estimated to provide more than \$143 million annually in flood reduction benefits to 3.1 million people in Chicago and 36 suburban communities.

Not only do the tunnels and reservoir systems protect from flood damage, findings from a recent water quality monitoring study showed water quality improvements (e.g., decreases in concentrations of mean fecal coliform and total suspended solids) in the Calumet River System.



2021 - 2025 Resource Management Strategies

Strategy	SELECTED SUCCESS MEASURES AND TARGETS		
	Success measure	Baseline target	Stretch target
Strategy #1: Maintain high level of permit compliance as requirements evolve; continue efforts to improve water quality	NPDES permit compliance	100%	100% for 5 consecutive years
	TARP completion	100% (2029)	100% (2029); analyze/ retrofit completed TARP, as needed
Strategy #2: Monitor and continue to reduce CSOs into area waterways	Outreach to Chicago/other municipalities regarding TARP, using green infrastructure to reduce CSOs, etc.	Develop outreach program and team	Hold regular meetings; develop additional joint projects to address CSOs
	Biogas utilization	Develop plan to achieve 100% utilization	100% utilization
Strategy #3: Manage MWRD assets to maintain optimal performance and long-term sustainability	Biosolids used locally	25,000 dry tons/year	40,000 dry tons/year
	Internal effluent reuse	15% increase in reuse	Maximize use of effluent
Strategy #4: Pursue resource recovery opportunities to increase sustainability and recover costs	Number of ongoing pilot/ full scale research studies	10 studies	15 studies
	Number of external partner projects aligned with strategic goals	20 projects	25 projects
Strategy #5: Develop innovation ecosystem; drive innovation through partnerships with water associations, universities, labs, water technology firms, etc.			

* This chart does not reflect every success measure and target.



Stickney Water Reclamation Plant

Strategic Goal #2: Stormwater Management

Goal

Continue to mitigate flooding across Cook County through a proactive, equitable stormwater management program, including implementation of gray and green infrastructure, enforcement of the Watershed Management Ordinance (WMO), and acquisition of flood-prone property.

Current Efforts

The MWRD partners with communities to build capital improvement and green infrastructure projects that address regional and local flooding issues and manages a flood-prone property acquisition program that removes homes built in the floodplain. Today, the MWRD has nearly 100 stormwater management projects in design or construction. These projects incorporate elements of both gray and green infrastructure, ranging in size from massive reservoirs to green alleys and permeable parking lots. One example is the Space to Grow program, which implements green infrastructure in schoolyards while creating vibrant places to play and learn through a partnership with Chicago Public Schools, the Chicago Department of Water Management, Healthy Schools Campaign, and Openlands.



*Cook School
before (L) and
after (R).*



*Davis School
before (L) and
after (R).*

The MWRD also administers the WMO, which regulates sewer construction within the MWRD's service area and development within suburban Cook County.

A recent update to the WMO reflects current conditions, including increasing stormwater detention requirements based on the Illinois State Water Survey's Updated Bulletin 75 rainfall data (published in March 2019), which indicated that annual average rainfall across Illinois has increased by 11 percent over the past century.

2021 - 2025 Stormwater Management Strategies

Strategy	SELECTED SUCCESS MEASURES AND TARGETS		
	Success measure	Baseline target	Stretch target
Strategy #1: Develop comprehensive framework to guide proactive implementation of stormwater solutions across Cook County	Coverage of Stormwater Master Plans	100% of service area*	100% of service area*
	Expansion of green infrastructure (GI) project and local stormwater project (LSP) partnerships with municipal agencies	92 projects	120 projects
Strategy #2: Partner with local communities to significantly increase stormwater management projects	Expansion of GI and LSP partnerships with non-municipal agencies (park districts, school districts, etc.)	30 projects	45 projects
	Increased number of projects in underserved areas prone to flooding - Local projects - Green infrastructure	Develop specific metrics to apply to stormwater programs; use for targeted outreach to ensure underserved areas have access	Develop specific metrics to apply to stormwater programs; use for targeted outreach to ensure underserved areas have access
Strategy #3: Ensure that stormwater management programs support participation by all communities, regardless of local capacity	Portion of projects that receive funding from agencies and organizations other than the MWRD and the immediate partnering agency	20%	25%
	Number of best practices for which pilot study has started in past 5 years	2 practices	3 practices
Strategy #4: Identify and pursue opportunities for partnering on multi-benefit projects and for coordination with other agencies to minimize cost of stormwater management projects	Number of partnerships with agencies and universities on climate research related to impacts of flooding	1 partnership	2 partnerships
	Number of watersheds where hydrologic and hydraulic models are updated with new rainfall data	2 watersheds	3 watersheds
Strategy #5: Identify and pilot stormwater management best practices and innovation; scale most promising practices			
Strategy #6: Partner with climate scientists to model long-term regional climate changes and impact on flooding			

* The Board of Commissioners will be making a policy decision regarding the coverage of the stormwater service area in 2021.

**This chart does not reflect every success measure and target.

Strategic Goal #3: Workforce Excellence

Goal

Invest in the future by investing in employees; continue to recruit, develop, and retain best-in-class employees as the foundation of the MWRD's ongoing success.

Current Efforts

The MWRD is committed to building a talented and diverse workforce that reflects the communities it serves and currently employs over 1,700 full time employees with an overall minority workforce rate of 44% and an overall female workforce rate of 26%. A wide range of recruitment strategies are used to source qualified and talented candidates, including leveraging online job boards and social media to advertise employment opportunities, and regularly participating in job fairs sponsored by career and community development offices, on-campus student organizations, and state workforce development agencies. The MWRD works hard to source talent for historically underrepresented job classifications, taking additional steps to increase outreach among ethnically diverse and female candidates. This includes an internship program focused on diversity and inclusion that exposes this potential future candidate pool to careers in wastewater treatment, stormwater management, and resource recovery.

The MWRD is also committed to the continued growth and development of current employees - employees have an annual 24-hour training goal to foster personal and professional development. A robust and customizable online training platform facilitates the individual training needs of all employees and helps in meeting their development goals. In addition, the MWRD strives to provide management soft skills and compliance training annually through in-person and on-line training, as well as industry-specific and technical training in a variety of operating departments. For employees interested in furthering their education, the MWRD offers a generous tuition reimbursement program.



Treatment plant operators at the Egan Water Reclamation Plant discuss operations to remove nutrients from wastewater using the most efficient, economical ways possible that also reduce the District's energy and carbon use.

2021 - 2025 Workforce Excellence Strategies

Strategy	SELECTED SUCCESS MEASURES AND TARGETS	
	Success measure	Baseline target Stretch target
Strategy #1: Foster a culture that recognizes the value of every employee	Employees feel they are valued equitably (including intrinsic rewards, feelings of respect, job satisfaction)	Measurement tool is developed and shows a positive trend over time
Strategy #2: Provide a workplace environment that meets evolving needs	Employees understand their value and role in accomplishing MWRD mission	Measurement tool is developed and shows a positive trend over time
Strategy #3: Ensure that performance evaluation system is tied to measurable competencies and distinguishes between different levels of performance	Employees are participating in their individual personal development plans	Measurement tool is developed and shows a positive trend over time
Strategy #4: Ensure that roles and descriptions evolve with industry trends and strategic direction	Employees are pursuing promotional opportunities	Measurement tool is developed and shows a positive trend over time
Strategy #5: Provide ongoing training to supervisory staff regarding coaching and giving feedback	Supervisors are mentoring employees or sharing their knowledge	Measurement tool is developed and shows a positive trend over time
Strategy #6: Continue to offer all staff a baseline training allocation	Employees are receiving coaching from their managers	Measurement tool is developed and shows a positive trend over time
Strategy #7: Identify and scale existing best practices for staff advancement and promotion within civil service system	Internal candidates are mentored to encourage interest in promotional opportunities	Expansion of existing mentor program
Strategy #8: Continue to develop targeted recruitment, mentoring, and professional development programs to increase diverse representation in key job categories		

* This chart does not reflect every success measure and target.

Strategic Goal #4: Community Engagement

Goal

Engage with the community to position the MWRD as a critical community asset and to ensure that the MWRD is a responsive neighbor and inclusive business partner.

Current Efforts

The MWRD's Board of Commissioners and talented staff of scientists, engineers, and water experts speak in communities and classrooms and take leadership roles in professional organizations. In addition, the MWRD hosts thousands of visitors for tours of its water reclamation plants, pumping stations, and other facilities to educate members of the public and encourage their participation in helping to protect the water environment. The MWRD also holds open houses for all ages, distributes EQ Compost and free oak tree saplings, and participates in public outreach events.



The MWRD educates thousands of visitors and empowers them to join efforts to protect the water environment.

The MWRD's Diversity Section continues to fulfill its community leadership role regarding contract and employment diversity in the MWRD's service communities by establishing and monitoring goals for Minority-owned Business Enterprises, Women-owned Business Enterprises, and Small Business Enterprises.

2021 - 2025 Community Engagement Strategies

Strategy	SELECTED SUCCESS MEASURES AND TARGETS		
	Success measure	Baseline target	Stretch target
Strategy #1: Develop and express consistent branding and messaging to all audiences	Branding and graphic standards in place and used consistently across all MWRD touch points	100% in use	100% in use
	Increased requests for educational services and speakers	80% increase	100% increase
Strategy #2: Raise public awareness of the value of the MWRD's work and encourage public involvement	Increase in the number of new partnerships	10% overall increase in number of attendees who participate in outreach events, partnerships, social media followers, visits to website and presentations by December 2022	20% overall increase in number of attendees who participate in outreach events, partnerships, social media followers, visits to website and presentations by December 2022
	Increase in social media followers (Facebook, Twitter, LinkedIn, Twitter, YouTube)		
Strategy #3: Expand partnerships, outreach, and engagement to new audiences	Increase in number of attendees who participate in outreach events and presentations		
	Increase in the number of bidders on contracts	20% increase	20% increase
Strategy #4: Continue to improve the experience of vendors that do business with the MWRD	Reduction in the time from award to start date of the contract and agreement	Within one month of award	Within one month of award
Strategy #5: Increase diverse participation in MWRD contracts	Number of diverse vendors newly engaging with the MWRD	Year-over-year increase	Year-over-year increase
	Impact of outreach efforts to develop new partnerships	Relationships with new agencies/ prime contractors	Relationships with new agencies/ prime contractors
Strategy #6: Expand diversity partnerships and focus outreach (internal and external) on specific groups			

* This chart does not reflect every success measure and target.

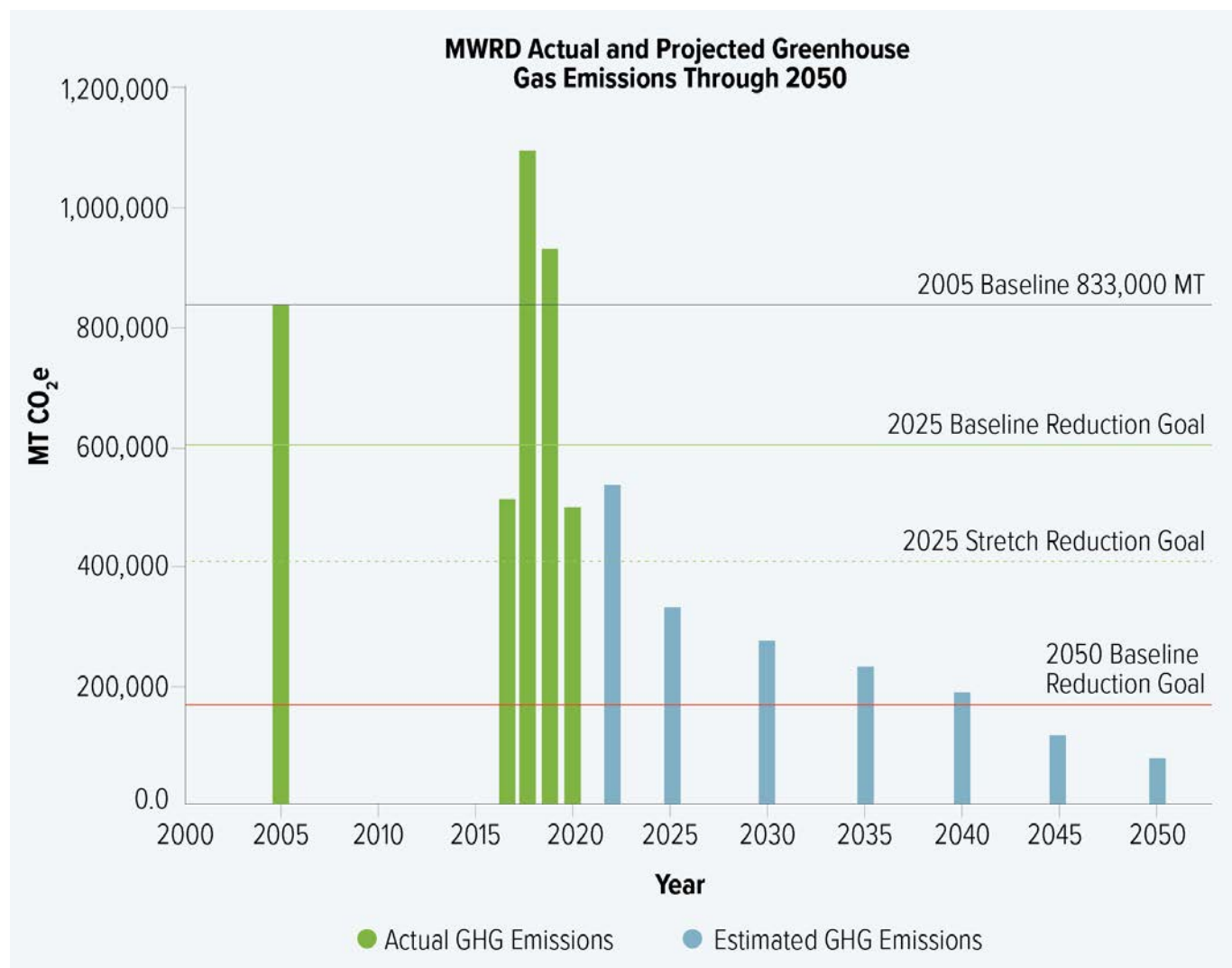
Strategic Goal #5: Enterprise Resilience

Goal

Ensure ongoing services that are reliable, equitable, and cost-effective; achieve climate change and environmental justice protections; prepare for other manmade and natural events; strengthen the MWRD's operational and financial positions.

Current Efforts

The MWRD established interdepartmental task forces to draft a Climate Action Plan (CAP) to reduce the agency's greenhouse gas emissions in accordance with the Paris Agreement and to draft a Sustainability and Resiliency Action Plan (SARAP) to provide an integrated approach to addressing challenges in continuing to deliver affordable wastewater treatment and stormwater management services. Both plans have been submitted to the Board of Commissioners for their review and approval.



The agency has also implemented ongoing efforts to assure the continuity of operations in adverse circumstances, including annual updates to the agency's Emergency Response Plan (EOP), Business Continuity Plan (BCP), and Critical Operational Guidance Documents (COGs), as well as regular exercises to test its emergency response plans.

The MWRD continues to maintain a AAA bond rating from Fitch Ratings and a AA bond rating from Standard & Poor's. Its funding policies for both its Retirement Fund and Other Postemployment Benefits Fund demonstrate a commitment to long-term fiscal management and contribute to the MWRD's strong credit ratings.

2021 - 2025 Enterprise Resilience Strategies

SELECTED SUCCESS MEASURES AND TARGETS			
Strategy	Success measure	Baseline target	Stretch target
Strategy #1: Proactively expand efforts to strengthen functionality in the face of future events; finalize and implement climate change and resiliency plans*	Reduction of greenhouse gas (GHG) emissions in accordance with Paris Agreement and Board Resolution File #17-0728 (28% reduction from 2005 GHG emissions)	28% reduction of 2005 GHG emissions by 2025	50% reduction of 2005 GHG emissions by 2025
	Further reduction of GHG emissions	80% reduction of 2005 GHG emissions by 2050	100% reduction of 2005 GHG emissions by 2050
Strategy #2: Assure agency resilience and readiness for effective response to emergencies that could put at risk the health and safety of employees, negatively affect operations, disrupt essential services, or put at risk the general public	Completion of plan to study paths and costs to net district-wide energy neutrality by 2035 and a plan to achieve energy neutrality at one of our smaller WRPs by 2030	100% energy neutral by 2035	Energy positive by 2050
	Emergency plans are updated regularly, incorporating learnings, as appropriate	Annual update	Real time, if online
Strategy #3: Support innovation and harness problem-solving capacity at all organizational levels	Emergency exercises are conducted	Annual exercise	2-3 exercises/year
	Risk assessment activities are conducted periodically and inform emergency plans and exercises	Risk assessment project undertaken in Year 3	Risk assessment project undertaken in Year 2
Strategy #4: Identify and scale existing practices for cross-departmental collaboration, e.g., task forces for Climate Action Plan, phosphorus, etc.	Cyber security maturity assessment (baseline document)	Maintain Level 3	Progress to Level 4
	Year-over-year increase to the number of employees publicly recognized for innovation and problem-solving	10%	20%
Strategy #5: Standardize operations – streamline and automate internal processes, scale lessons learned from pandemic response	Number of problems solved annually through task forces	Increasing	Doubled
	Number of processes that have been improved	1 process per year	Up to 3 processes per year
Strategy #6: Maintain strong fiscal management; identify and leverage opportunities for cost reduction and cost recovery	Maintain strong credit ratings	AAA/AA	AAA/AA+
	Centralized, public-facing, interactive reporting around Strategic Plan and goals that is easy to use	One operational system online by December 2022	One operational system online by July 2022
Strategy #7: Increase visibility around goals and performance indicators			

* The Board of Commissioners will be discussing and adopting a Climate Action Plan in 2021 that will include policy direction on net energy neutrality, carbon neutrality, and greenhouse gas reduction goals.

**This chart does not reflect every success measure and target.

CONCLUSION

Since undertaking the extraordinary feat of reversing the flow of the Chicago River to protect Lake Michigan, the MWRD has engaged in more than a century of progress and continuous innovation to care for the region's water environment. Today, that record of innovation continues as the agency works to develop comprehensive solutions to manage stormwater and prevent flooding, while implementing emerging technologies to improve water quality and protect a river that is soaring in popularity. The MWRD is developing new systems to reduce nutrients in treated water, decreasing greenhouse gas emissions, conserving and reusing water, recovering renewable resources, and maintaining a tradition of reliability and resourcefulness.

The 2021-2025 Strategic Plan lays out the specific goals, strategies, and success measures that will guide the MWRD over the next five years. It was developed with significant engagement from the Board of Commissioners, MWRD leadership and staff, local governments, members of the public, and others. The implementation of the Strategic Plan will continue to prioritize collaboration - actively forming new partnerships and engaging with communities - to build a more resilient Cook County.



Budget Message / Highlights

Budget Overview

The District's \$1.2 billion 2022 Budget has been influenced by the global pandemic and the resulting economic volatility. Expenditure contraction in 2020 and slower than expected expenditure growth in 2021 coupled with strong revenue performance result in a strong financial position to begin 2022. Economically sensitive revenues, particularly User Charge and Personal Property Replacement Tax (PPRT), have over performed during the last two years. User Charge is expected to end 2021 with a \$3.0 million positive variance, while PPRT growth in 2021 and projected for 2022 is the primary factor leading to Corporate Fund growth in 2022. We do not anticipate that PPRT will remain these levels past 2022.

During 2021, the District was successful in advancing a statutory change to all the transfer of a broad range of revenues to the Retirement Fund. In the Corporate Fund, positive results in 2019, 2020, and projected for 2021 allow for a \$30.0 million transfer of budgetary reserves to the District's Retirement Fund to maintain the Retirement Fund's funded ratio. The District will take advantage of historically low interest rates to issue \$345 million in refunding bonds with an estimated savings of \$60 million. The District will also prepay \$43.0 million in State Revolving Fund loans at a taxpayer savings of \$12.7 million over 15 years.

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 operating funds to five percent or the change in the national Consumer Price Index, whichever is less, in the aggregate. The CPI-U is projected to end the year at approximately 4.5 percent, growth that has not been seen since 2007. However, the District plans an aggregate property tax levy increase of 3.6 percent, well below the statutory maximum.

The 2022 Corporate Fund Budget is \$429.2 million, an increase of \$29.9 million, or 7.5 percent, from the 2021 Adjusted Budget. Inflationary pressures, supply chain issues, and statutory changes have all impacted cost estimates for the District's 2022 Budget. Hiring, which slowed at the height of the pandemic, are beginning to return staffing to normal levels. Costs for processing chemicals and electricity, two of the District's largest non-personnel expenditures are expected to increase by \$1.8 million and \$10.2 million, respectively. The 27.0 percent year-over-year increase in the budget for electricity is driven by passage of an Illinois clean energy law and an increase in supply costs. To match the spike in PPRT revenue, the District will invest \$6.3 million in technology infrastructure, including phased upgrades to the distributed control systems controlling the water reclamation plants.

Initiatives guided by the District's new Strategic Plan are budgeted across all funds and are highlighted in each departmental budget narrative. In addition to contributing more than the statutory maximum to the Retirement Fund, the District is embarking on an aggressive but attainable path, to meet our strategic goals. Continued strong fiscal management and planning will be important to provide adequate funding. A complete Five-Year Financial Forecast for all funds can be found beginning on page 74.



The Office of Public Affairs offers virtual tours, seminars, and educational materials under the Strategic Plan Goal of Community Engagement to raise public awareness of the value of the District's work. The virtual tour is available at https://www.youtube.com/watch?v=__yXMrBYek4.

Budget Message / Highlights

Tax Levy, Tax Rate, and Appropriations

The overall 2022 tax levy required to finance the 2022 Budget is \$674.8 million, an increase of \$16.1 million, or 2.4 percent, from the 2021 Adjusted Budget. The increase is due to an aggregate 3.6 percent increase in the Corporate, Construction, Retirement, and Reserve Claim Funds. The Stormwater Management Fund Levy is increasing by \$5.0 million, or 9.4 percent, from 2021, while there is a decrease of \$1.9 million, or 0.8 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 \$13.6 million, or 5.0 percent, while the Retirement Fund levy has a decrease of \$0.7 million, or 0.9 percent. The Reserve Claim Fund levy is remaining flat at \$7.5 million and the Construction Fund levy is \$7.0 million, no change from the 2021 levy.

The overall tax rate for 2022, based on the most recent Equalized Assessed Valuation (EAV), is estimated to be 37.25 cents per \$100 of assessed valuation, a 0.18 cent decrease from the 2021 Adjusted Tax Rate. The allowance for loss in collection of property taxes is budgeted at 3.5 percent, no change from 2021. The budgeted loss will be maintained at this level, based on trends in the required refunds of prior property tax payments.

Overall appropriations for 2022 total \$1,189.9 million, a decrease of \$15.1 million, or 1.3 percent, from the 2021 Adjusted Budget. There is a decrease of \$102.5 million planned in the Capital Improvements Bond Fund, which is appropriated on an obligation basis and based on project schedules. There will be a decrease of \$16.6 million in the Stormwater Management Fund. An increase in the Bond Redemption & Interest Fund of \$45.3 million is attributable to the early repayment of five State Revolving Fund Loans. Due to strong revenue performance, the Corporate Fund will increase by \$29.9 million, or 7.5 percent. The Retirement Fund appropriation will increase by \$20.6 million and includes a \$30.0 million advance funding payment. The Reserve Claim Fund will increase by \$4.8 million, while the Construction Fund will increase by \$3.3 million. Explanations of these changes are provided in the following detailed Fund summaries.

<u>Levies</u>	<u>2022</u>	<u>2021 Adjusted</u>	<u>Increase (Decrease)</u>	<u>Percent Change</u>
Corporate Fund	\$ 284,500,000	\$ 270,880,900	\$ 13,619,100	5.0 %
Construction Fund	7,000,000	7,000,000	—	— %
Stormwater Management Fund	57,926,000	52,926,000	5,000,000	9.4 %
Retirement Fund	72,053,900	72,741,500	(687,600)	(0.9)%
Reserve Claim Fund	7,500,000	7,500,000	—	— %
Bond Redemption & Interest Fund	245,854,195	247,719,686	(1,865,491)	(0.8)%
TOTAL	\$ 674,834,095	\$ 658,768,086	\$ 16,066,009	2.4 %
<u>Appropriations</u>	<u>2022</u>	<u>2021 Adjusted</u>	<u>Increase (Decrease)</u>	<u>Percent Change</u>
Corporate Fund	\$ 429,185,500	\$ 399,326,700	\$ 29,858,800	7.5 %
Construction Fund	18,769,700	15,471,200	3,298,500	21.3 %
Capital Improvements Bond Fund	207,926,000	310,382,600	(102,456,600)	(33.0)%
Stormwater Management Fund	93,404,000	109,965,900	(16,561,900)	(15.1)%
Retirement Fund	118,754,000	98,127,000	20,627,000	21.0 %
Reserve Claim Fund	44,465,300	39,624,900	4,840,400	12.2 %
Bond Redemption & Interest Fund	277,438,287	232,125,850	45,312,437	19.5 %
TOTAL	\$ 1,189,942,787	\$ 1,205,024,150	\$ (15,081,363)	(1.3)%

Comparisons of the estimated taxes paid by the owner of a home with a market value of \$100,000 for 2022 as budgeted, and 2021 as adjusted for the 2020 EAV, are as follows:

	<u>2022 Budgeted</u>	<u>2021 Adjusted</u>	<u>Variance</u>	<u>Percent Change</u>
Estimated taxes for \$100,000 home	\$120.07	\$120.65	\$(0.58)	(0.48)%

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 2022. The total appropriation for the Corporate Fund in 2022 is \$429.2 million, an increase of \$29.9 million, or 7.5 percent, from the 2021 Adjusted Budget.

The 2022 tax levy for the Corporate Fund is \$284.5 million, an increase of \$13.6 million, or 5.0 percent, compared to the 2021 Adjusted Budget. In 2022, property taxes, personal property replacement tax (PPRT), 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 2022 is 15.69 cents, an increase of 0.30 cents from 2021 Adjusted Tax Rate. User charges, budgeted at \$38.0 million for 2022, 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. The Budget prepares the District for current economic conditions and inflationary pressures, reflecting growth in PPRT, an economically sensitive revenue, and projected cost increases for personnel, electricity, chemicals, and commodities.

The District serves 129 communities covering nearly all of Cook County, treating an average of 1.3 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.

The Tunnel and Reservoir Plan (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 383.

The 350 million gallon Majewski Reservoir was completed in 1998. In November 2015, the Thornton Composite Reservoir became operational with 7.9 billion gallons of storage. The McCook Reservoir, the last component of the TARP system, 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 \$140.0 million annually in flood reduction benefits to residents in its service area.



The McCook Reservoir is located along the Stevenson Expressway between the Des Plaines River and Chicago Sanitary and Ship Canal. It will serve 3.1 million people in 37 communities, including most of the City of Chicago.

Corporate Fund recommended appropriations support the 2021-2025 Strategic Plan, with specific initiatives detailed in each departmental narrative. Incorporated into the strategic goals and the 2022 budget are initiatives born from the impact of the COVID-19 pandemic including improved wellness programs to support employees, a continued focus on creating modern and mobile processes, and a focus on upgrading technology infrastructure for the Water Reclamation Plants.

In 2022, the District expects to collect and treat approximately 489.1 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 100.00 percent overall compliance with the National Pollutant Discharge Elimination System (NPDES) requirements in 2020. This compliance resulted in six Platinum Peak Performance Awards from the National Association of Clean Water Agencies. See page 34 for Collection, Treatment, and Solids Utilization data.

*Budget Message / Highlights***Collection, Treatment, and Solids Utilization for the Maintenance & Operations Department**

	2022 Budgeted	2021 Budgeted	2020 Actual	2021-2022 % Change
Total cost of collection (millions)	\$58.8	\$53.2	\$49.4	10.5 %
Total cost of treatment (millions)	\$92.6	\$82.5	\$67.4	12.3 %
Total cost of solids utilization (millions)	\$26.7	\$24.9	\$24.0	7.5 %

Number of full time equivalent employees:

Collection	248	245	245	1.2 %
Treatment	394	380	381	3.7 %
Solids Utilization	41	39	42	5.1 %

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:

	2022 Budgeted	2021 Budgeted	2020 Actual	2021-2022 % Change
Stickney WRP (million gallons)	271,300	290,000	254,708	(6.4)%
Calumet WRP (million gallons)	100,000	100,000	96,654	— %
O'Brien WRP (million gallons)	85,000	90,000	75,649	(5.6)%
Kirie WRP (million gallons)	16,600	16,600	14,532	— %
Egan WRP (million gallons)	9,050	9,050	8,956	— %
Hanover Park WRP (million gallons)	3,950	3,950	3,080	— %
Fox River Water Reclamation District (contract agreement)	2,200	2,200	1,999	— %
Lemont WRP (million gallons)	1,000	1,000	939	— %

Outputs:

Dry tons of biosolids utilized by area:

	2022 Budgeted	2021 Budgeted	2020 Actual	2021-2022 % Change
North Service Area	700	1,000	681	(30.0)%
Calumet Service Area	24,250	23,000	17,868	5.4 %
Stickney Service Area	78,000	76,000	0	2.6 %

Outcomes:

Achievement of water reclamation plant pollution permit requirements by plant:

	2020	2019	2018	2017
Stickney WRP	100.00 %	99.20 %	99.83 %	99.94 %
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

Stormwater Management Fund

The Stormwater Management Fund is utilized to plan, implement, and finance stormwater management activities throughout Cook County, including stream maintenance in areas that currently lie outside the District's boundaries. The fund consolidates the District's stormwater management activities 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 30 regional projects for design and construction.



Left picture: Stormwater can be conveyed to rain gardens, such as the one in Blue Island, from downspouts. They are typically designed to drain ponding water within 24 hours. Right picture: Local businesses and volunteers with the Central States Water Environment Association sprang to action to partner with students at Skinner North Elementary School in Chicago to construct a rain garden.

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.

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, with an additional five scheduled to open in 2021. Four green schoolyards are planned for construction in 2022. 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

Budget Message / Highlights

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 2022 Appropriation for the Stormwater Management Fund is \$93.4 million, a decrease of \$16.6 million, or 15.1 percent, over the 2021 Adjusted Budget and is attributed to an increase in expenditures in 2020, above initial estimates which reduced the assets available for appropriation. 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 2022 is 3.2 cents, a decrease of 0.19 cents from the 2021 Adjusted Tax Rate.

Capital Improvement Program:

Construction Fund and Capital Improvements Bond Fund

The District's overall Capital Improvement Program (CIP) includes 2022 project awards, land acquisition, support, future projects, and the construction value remaining on projects currently under construction. The 2022 CIP has a total estimated cost of \$901.3 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.

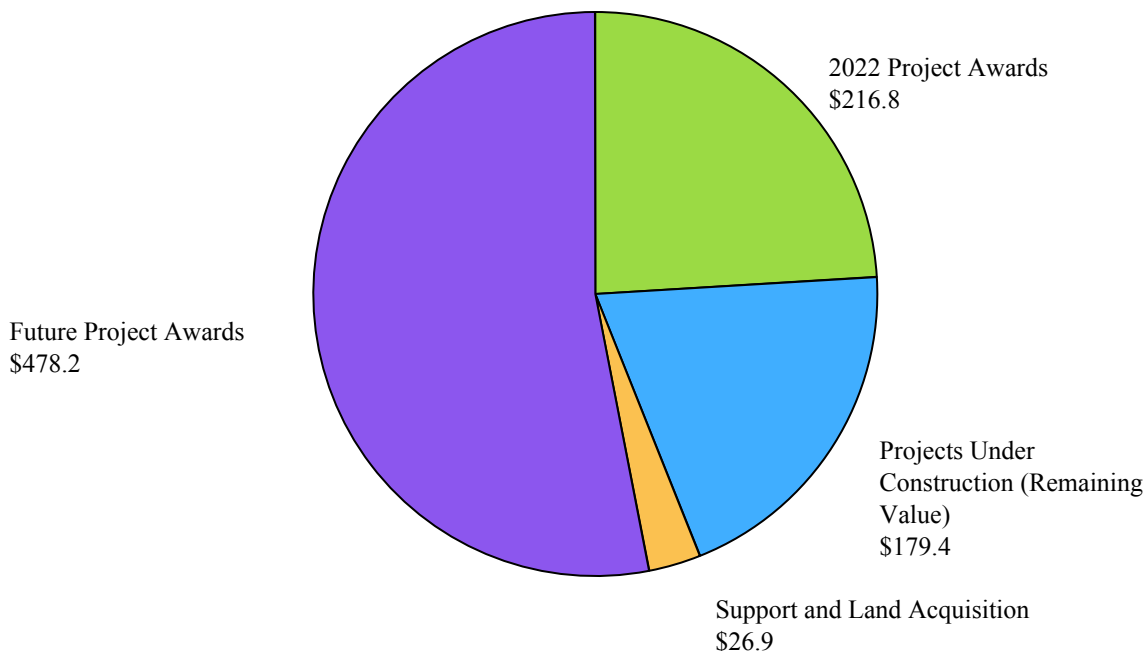
Projects under construction have been presented and authorized in previous budgets and are recognized in the annual budget as outstanding liabilities in the Capital Improvements Bond Fund (CIBF). In the Construction Fund, projects are re-appropriated. Future projects, not yet appropriated, are included 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.



Capital Improvement Program projects, such as the primary settling tanks replacement at the Stickney WRP, aim to proactively modernize aging infrastructure.

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.

Budget Message / Highlights**Capital Improvement Program (million \$)**

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 2022 totals \$18.8 million, an increase of \$3.3 million, or 21.3 percent, from the 2021 Adjusted Budget. Capital projects in the Construction Fund are primarily supported by property taxes. The 2022 tax levy planned for the Construction Fund is \$7.0 million, no change from the 2021 Adjusted Levy. A listing and description of proposed projects, projects under construction, and scheduled for 2022 award, can be found in the Capital Budget (Section V) of this budget document.

Capital Improvements Bond Fund

The 2022 appropriation for the Capital Improvements Bond Fund is \$207.9 million, a decrease of \$102.5 million, or 33.0 percent, from the 2021 Budget. The appropriation is based on the scheduled award of \$183.3 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 \$24.6 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 2022 award, can be found in the Capital Budget (Section V) of this budget document.

Budget Message / Highlights

Retirement Fund and OPEB Trust 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.

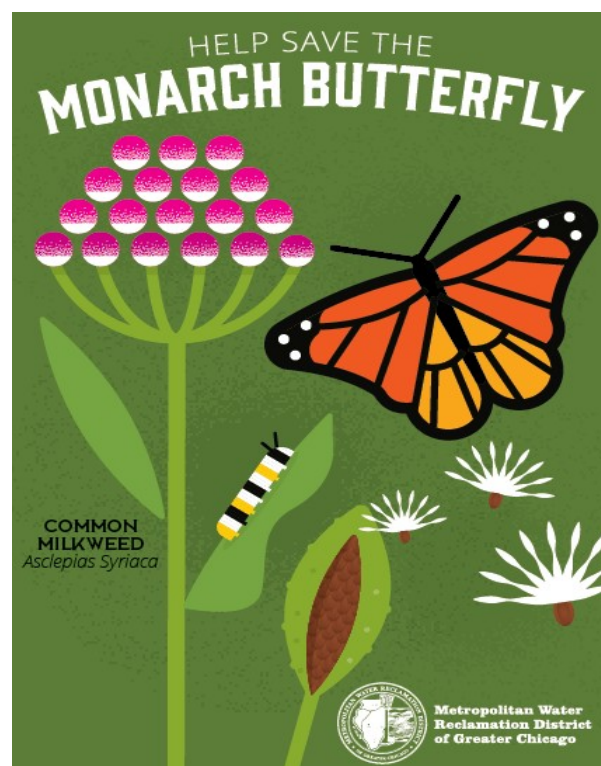
The District has addressed pension liabilities through both funding policies approved by the Board of Commissioners and supporting legislative changes for the Metropolitan Water Reclamation District Retirement Fund. In 2012, a statutory change increased the employee contributions by one percent per year 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 legislative change effective January 1, 2022 allows the District to identify surplus revenues to contribute to the Retirement Fund. The District identified funding for this purpose in both 2020 and 2021 that has been held in reserve pending legislative change. In 2022, the District will transfer \$30.0 million to the Retirement Fund to provide advance funding to maintain growth in the Retirement Fund's funded ratio, which is 57.3 percent funded as of December 31, 2020. The District's Funding Policy Goal for the Retirement Fund is to be 100 percent funded by 2050.

The 2022 appropriation for the Retirement Fund is \$118.8 million, an increase of \$20.6 million, compared to the 2021 Adjusted Budget. The 2022 total tax support for the Retirement Fund is \$90.4 million, which is comprised of \$18.4 million from the District's Personal Property Replacement Tax allocation and a \$72.1 million property tax levy. The property tax levy of \$72.1 million is a decrease of \$(0.7) million, or (0.9) percent, compared to the 2021 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.

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 2021 was \$5.0 million and the 2022 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 \$47.9 million as of December 31, 2020, based on an updated roll-forward calculation from the most recent actuarial valuation. 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.



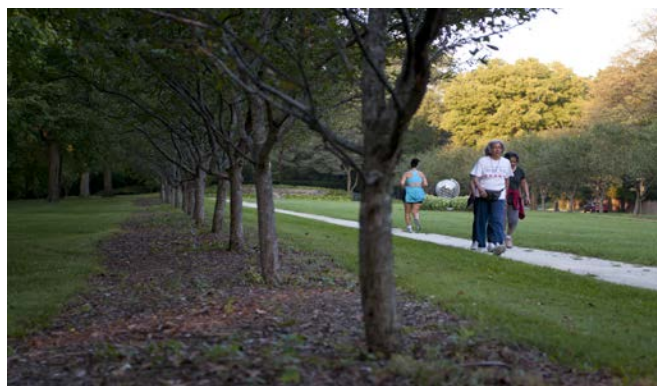
The District partnered with the Illinois Monarch Project in a bid to save monarch butterflies. Cook County residents can take an online pledge to help save monarch butterflies.

Budget Message / Highlights

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 \$85.4 million.

The 2022 appropriation of \$44.5 million is an increase of \$4.8 million, or 12.2 percent, from the 2021 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 2022. The District is levying against the last known EAV at the maximum rate allowed by state statute in 2022. 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 2022 Budget, the last known EAV (\$170.9 billion) is for the 2020 levy year.

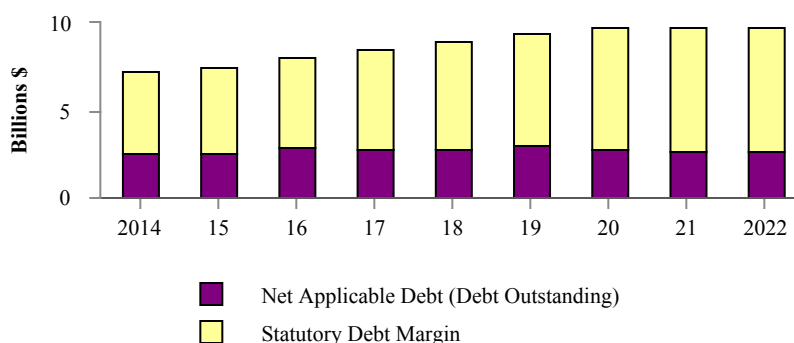


Ladd Arboretum provides a natural refuge where visitors can walk, jog, and cycle on winding trails, relax in a garden or enjoy a picnic.

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 1.1 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. In 2022, the District will pay the balance on five existing SRF loans totaling \$43.0 million with a projected savings of \$12.7 over 15 years.

The District expects to receive \$55.0 million in 2022 and approximately \$55.0 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.

Budget Message / Highlights

The 2022 appropriation for the Bond Redemption & Interest Fund totals \$277.4 million, an increase of \$45.3 million, or 19.5 percent, compared to the 2021 Adjusted Budget. A debt service graph is found on page 68 that displays debt service from 2014 through 2026 and one on page 540 that displays debt service from 2022 through retirement. The 2022 tax levy for this fund is \$245.9 million, a decrease of \$1.9 million, or 0.8 percent, from the 2021 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 2020 EAV is \$170.9 billion, setting the District's statutory debt limit at \$9.8 billion. Outstanding debt applicable to the debt limit as of December 31, 2019, totals \$2.6 billion. The debt margin is \$7.2 billion.

The 2022 debt service extension base limit is \$175.5 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 2021.

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

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.

Financial Policies, Objectives, and Accomplishments

Financial Policies, Objectives, and Accomplishments

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

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 if 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. 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

Financial Policies, Objectives, and Accomplishments

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.

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 or other legally available revenues 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 using 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 comply 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. For 2022, 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 identify 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 over committed financial obligations.

For the 37th consecutive year, the GFOA of the United States and Canada has presented the Distinguished Budget Presentation Award for the District's 2021 Annual Budget. The entire 2022 Budget is available at www.mwrd.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.

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. 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 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

Financial Policies, Objectives, and Accomplishments

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.

Investment activities are to incorporate sustainability considerations according to the revised Investment Policy and guidelines implemented in December 2019. An integration approach should be used, whereby sustainability criteria are combined 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 will be used to evaluate environmental, social, governance/leadership (ESG), human capital, and business model/innovation factors when assessing opportunities to invest in commercial paper. The District will also maximize opportunities to invest in government agency and municipal bond instruments, which are designed to support ESG and sustainability factors.

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).

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:

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	7,941,000
2016	5,892,000	2021	3,443,000 (Estimated)
		Total	\$ 95,089,000

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.

Financial Policies, Objectives, and Accomplishments

Bond Rating History

Fitch Ratings		Standard & Poor's Corporation		Moody's Investor Services	
2001-present	AAA	2020-present	AA	2015-present	Aa2
1999-2001	AA+	2016-2020	AA+	2013-2015	Aa1
1995-1999	AA	2006-2016	AAA	2002-2013	Aaa
		2001-2006	AA+	1999-2002	Aa1
		1969-2001	AA	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 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, 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 was 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. GASB 45 was superseded

Financial Policies, Objectives, and Accomplishments

by GASB 75. The OPEB Trust Fund implemented GASB 74 (for post-retirement plan) in 2017 and the District implemented GASB 75 (for employer) in 2018.

- 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 Comprehensive Annual Financial Report 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 Comprehensive Annual Financial Report for the year ended December 31, 2020, and for the MWRD Retiree Health Care Trust for the year ended December 31, 2020. This is the 46th consecutive year and 14th consecutive year that the District has received these prestigious awards, respectively. The Comprehensive Annual Financial Reports are available at www.mwrd.org. The external audit of the District's 2020 financial statements, completed on May 7, 2021, includes an unmodified opinion. In 2021, the Internal Audit Section completed 16 audits in addition to overseeing the applications to FEMA and Cook County seeking reimbursement for COVID-19 global pandemic related expenses.

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 Plan

In the fall of 2020, the Board of Commissioners and the Executive Team began working together to develop the 2021-2025 Strategic Plan. A Steering Committee, consisting of the District's leaders, was formed to oversee the effort. Outreach to staff, local governments, and members of the public was a critical part of the process to ensure the inclusion of a range of perspectives in the development of the Strategic Plan. The plan will be updated on a yearly basis and will be coordinated with the annual budget process, which will allow the consideration of updates that require additional resources during the budget process and will ensure that the updated Strategic Plan and annual Budget are aligned.

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 except for 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 considering external and self-imposed financial constraints. The end product of this process is the Annual Appropriation Ordinance and a Five-Year Financial Forecast.

The 2022-2026 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 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 2022 BUDGET

Executive Director's Budget Recommendations

Submitted to Board of Commissioners Tuesday, October 12, 2021

Board of Commissioners Holds a Study Session on the Capital

Improvement Program immediately following the Regular Board Meeting Thursday, October 21, 2021

Committee on Budget & Employment Hearings at 1:00 P.M. Thursday, November 4, 2021

(Friday, November 5, 2021, if necessary)

Committee on Budget & Employment Submits Tentative Budget

to Board of Commissioners for Public Display Thursday, November 18, 2021

Board of Commissioners Holds a Public Hearing

on the Budget at 2:00 P.M. Thursday, December 2, 2021

Board of Commissioners Adopts the Budget Thursday, December 9, 2021

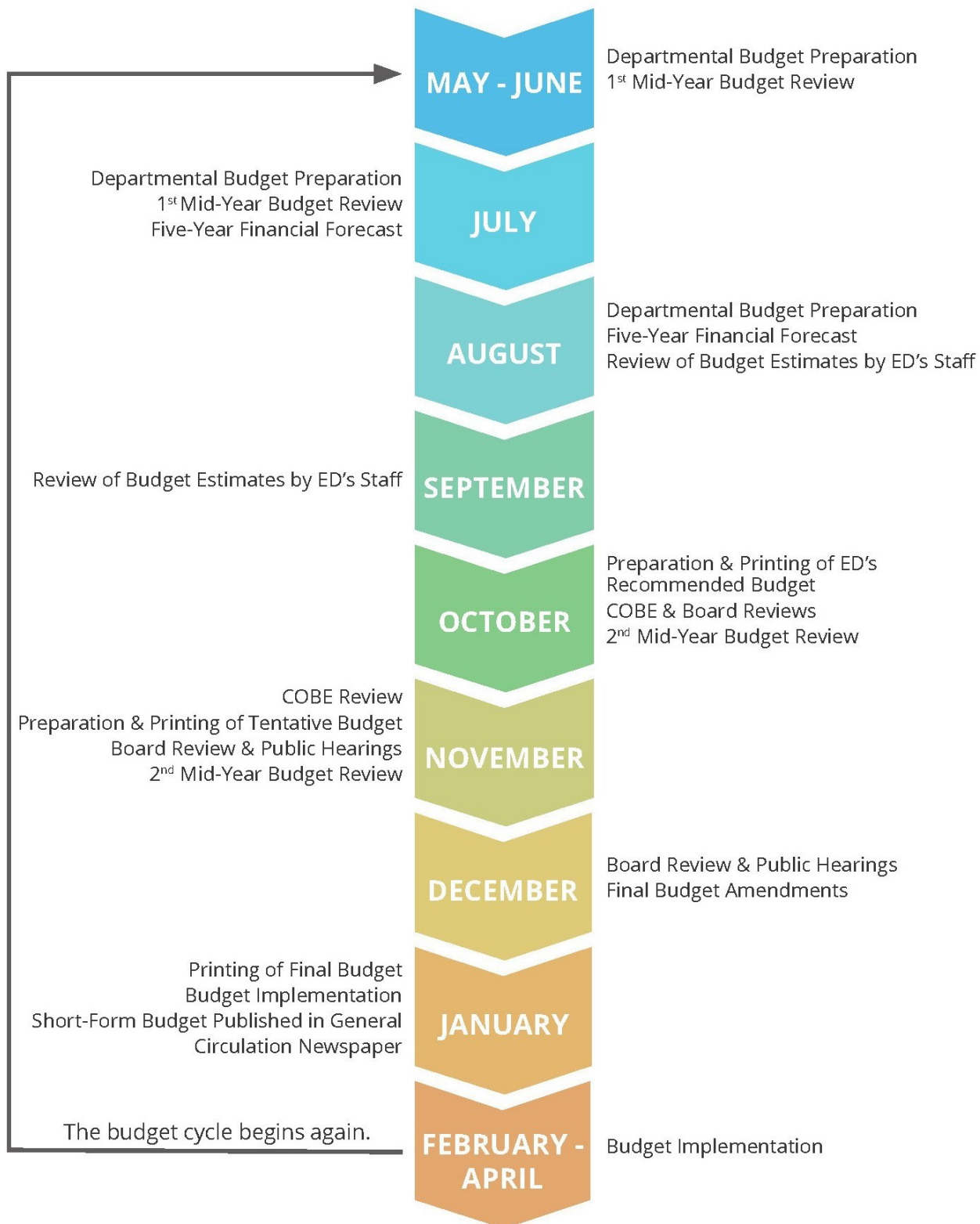
Board of Commissioners Amends the Adopted Budget Thursday, December 16, 2021



Learn the benefits of using sustainable resources like MWRD EQ Compost and Exceptional Quality Biosolids, green infrastructures, alternative landscaping methods to remove unwanted vegetation, and how you can add sustainable resources into your landscaping projects. Our experts will share their tips, best practices, and success stories. You'll even learn how we process our EQ Compost for beneficial reuse.

BUDGET CYCLE FOR 2021 - 2022

Each year, the District prepares and presents a complete financial plan for the budget year. The District monitors the revenues and expenditures on a regular basis. In accordance with the Illinois Compiled Statutes, the District maintains a balanced budget. The fiscal year begins on January 1 and ends on December 31.



COBE - Committee on Budget and Employment
ED - Executive Director

APPROPRIATION ORDINANCE NUMBER O21-003

**ANNUAL APPROPRIATION ORDINANCE OF THE
METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO
FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2022
AND ENDING DECEMBER 31, 2022**

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, 2022 and ending December 31, 2022.”

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, 2022 and ending December 31, 2022.

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 “#” followed by a number or “(AC)”, 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.

(AC). After a title, signifies that the positions is subject to appropriation control. It may be dropped at the discretion of the Executive Director based on operational requirements.

#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.

APPROPRIATION ORDINANCE NUMBER O21-003

**ANNUAL APPROPRIATION ORDINANCE OF THE
METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO
FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2022
AND ENDING DECEMBER 31, 2022
(CONTINUED)**

#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 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:

SECTION II

BUDGET AND FINANCIAL SUMMARIES, SCHEDULES, AND EXHIBITS

This section includes a broad overview of the 2022 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.

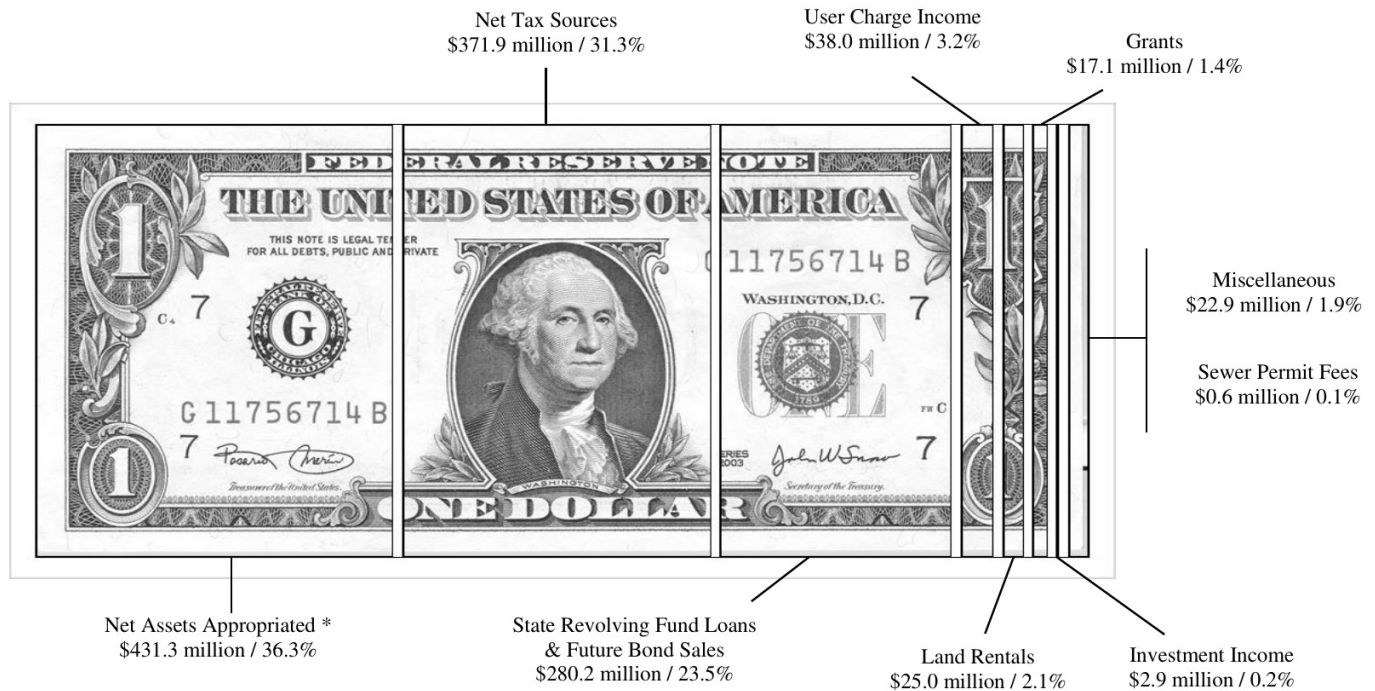
The comparison of budget and current year appropriations, tax levies, and tax rates by fund is one of the most comprehensive and most useful comparisons in the budget.

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 2022 and comparing it to previous years, this section also provides a projection of the future: the comprehensive Five-Year Financial Forecast for 2022 - 2026.

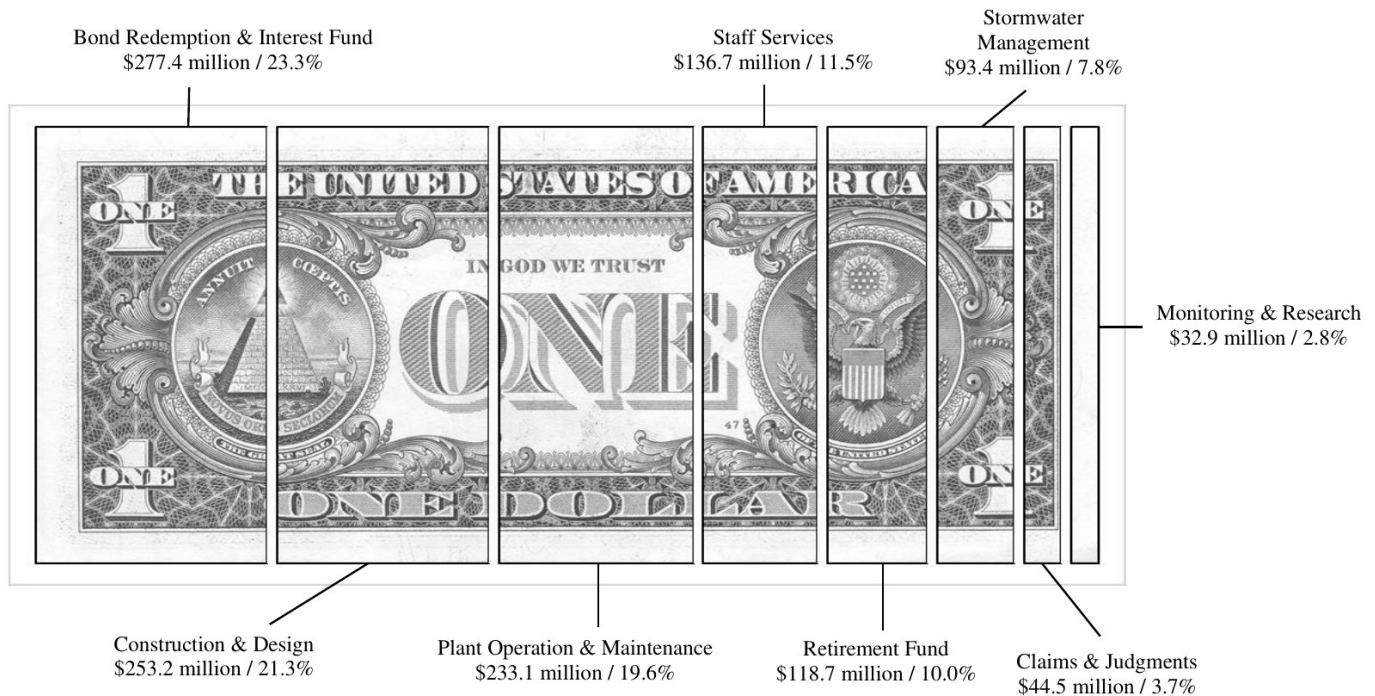
Where the Money Comes From; Where the Money Goes	55
Net Assets Appropriable	56
Estimated Tax Rate	57
Taxable Property (Equalized Assessed Valuation - Graph and Table)	58
Appropriations & Expenditures, Tax Levies, and Tax Rates	59
Comparative Statement of Appropriations, Tax Levies, and Tax Rates	60
Comparative Appropriations:	
by Major Object/Character of Expenditure (Graph)	62
by Major Object of Expenditure	63
by Character of Expenditure	64
by Department and Major Program	65
by Fund and Major Program (Graph)	66
by Program Objective and by Fund	67
Annual Debt Service (Graph)	68
Outstanding Bonds and Estimated Statutory Debt Margin	69
Account and Personnel Summary (Table and Graph)	71
Five-Year Financial Forecast, 2022 - 2026	74

WHERE THE MONEY COMES FROM: \$1,189.9 MILLION



* \$431.3 of the \$539.8 Net Assets Appropriable detailed in the analysis on the following page will be appropriated as revenue for 2022.

WHERE THE MONEY GOES: \$1,189.9 MILLION



SUMMARY OF NET ASSETS APPROPRIABLE**at January 1, 2022**

(In Millions)

FUND

CURRENT ASSETS	CORPORATE	CAPITAL IMPROVEMENTS BOND	CONSTRUCTION	STORMWATER MANAGEMENT	RETIREMENT	BOND REDEMPTION & INTEREST	RESERVE CLAIM	TOTAL
Cash & Investments	\$ 173.4	\$ 251.3	\$ 14.0	\$ 43.7	\$ —	\$ 90.1	\$ 37.4	\$ 609.9
Restricted Cash	—	—	—	—	—	—	—	—
Deposit with Escrow Agent	—	—	—	—	—	—	—	—
Taxes Receivable	262.7	—	6.7	51.3	70.2	239.9	7.3	638.0
Replacement Tax	16.0	—	—	—	18.6	—	—	34.6
Grants	—	—	—	—	—	—	—	—
State Revolving Fund	—	—	—	—	—	—	—	—
Loans Receivable	—	—	—	—	—	—	—	—
Due from Other Funds	—	—	—	—	—	—	—	—
Total	\$ 452.0	\$ 251.3	\$ 20.7	\$ 95.0	\$ 88.8	\$ 329.9	\$ 44.7	\$ 1,282.4

**CURRENT LIABILITIES,
DESIGNATIONS AND RESTRICTIONS**

Unpaid Bill and Contingent Liabilities	\$ 7.2	\$ 185.0	\$ 2.0	\$ 1.8	\$ —	\$ —	\$ 0.3	\$ 196.3
Due to Working Cash Funds	272.0	—	6.7	50.3	—	—	—	329.0
Liabilities for Restricted Assets	—	119.6	—	—	—	—	—	119.6
Principal and Interest	—	—	—	—	—	97.8	—	97.8
Total	\$ 279.2	\$ 304.6	\$ 8.7	\$ 52.1	\$ —	\$ 97.8	\$ 0.3	\$ 742.6
*Net Assets Appropriable	\$ 172.8	\$ (53.3)	\$ 12.1	\$ 42.9	\$ 88.8	\$ 232.1	\$ 44.4	\$ 539.8
Budget Reserve	\$ (108.5)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ (108.5)
Budget Reserve for Transfer to the Retirement Fund	\$ (30.0)	\$ —	\$ —	\$ —	\$ 30.0	\$ —	\$ —	\$ —
Net Assets Appropriated	\$ 34.4	\$ (53.3)	\$ 12.1	\$ 42.9	\$ 118.8	\$ 232.1	\$ 44.4	\$ 431.3
Equity Transfer	\$ —	\$ (36.0)	\$ —	\$ (9.2)	\$ —	\$ 45.2	\$ —	\$ —

* 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, 2022.

Gross Corporate Fund	15.69 ¢
Construction Fund	0.39
Stormwater Management Fund	3.20
Retirement Fund	3.97
Reserve Claim Fund	0.41
Subtotal	<u>23.66 ¢</u>

Bond Redemption & Interest Fund:

Capital Improvements Bonds - Series:

2016 Qualified Energy Conservation Limited Tax Series F	0.01 ¢
2009 Limited Tax Series	1.96
2011 Limited Tax Series B	1.61
2011 Unlimited Tax Series C	0.12
2014 Limited Tax Series C	0.14
2014 Unlimited Tax Series A	0.29
2014 Alternate Revenue Unlimited Tax Series B	0.19
2016 Alternate Revenue Unlimited Tax Series E	0.21
2016 Unlimited Tax Series C	0.09
2016 Limited Tax Series D	0.16

State Revolving Fund Bonds - Series:

Various	5.60 ¢
---------------	--------

Refunding Bonds - Series:

2007 Unlimited Tax Series B	0.28 ¢
2007 Limited Tax Series C	0.31
2016 Unlimited Tax Series A	2.26
2016 Limited Tax Series B	0.36

Subtotal Bond Redemption & Interest Fund	<u>13.59 ¢</u>
--	----------------

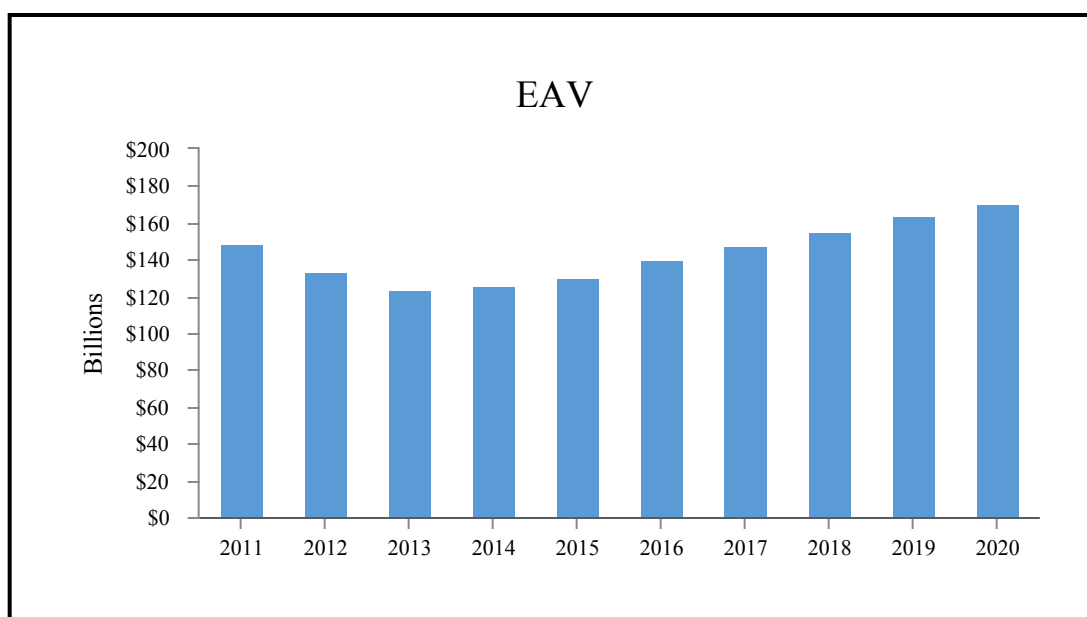
TOTAL ESTIMATED TAX RATE - 2022..... 37.25 ¢

TAXABLE PROPERTY WITHIN THE DISTRICT (Equalized Assessed Valuation)

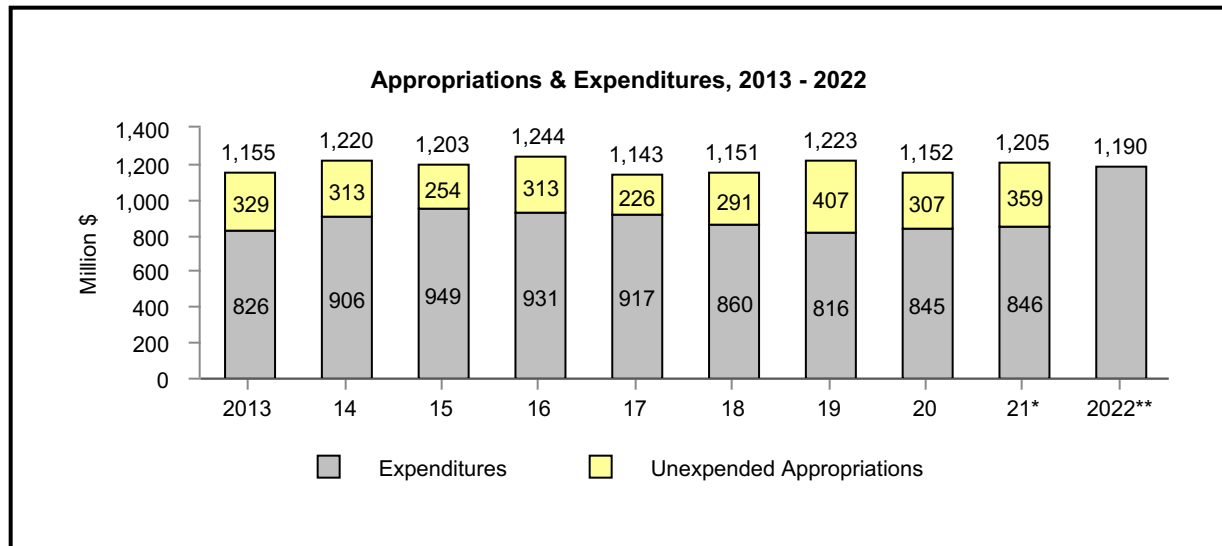
The equalized assessed valuation (EAV) of the Metropolitan Water Reclamation District increased 4.2 percent from 2019 to 2020, showing sustained growth for the fourth straight year. The boundaries of the District encompass 92 percent of the area of Cook County. The District is located in one of the strongest 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 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.



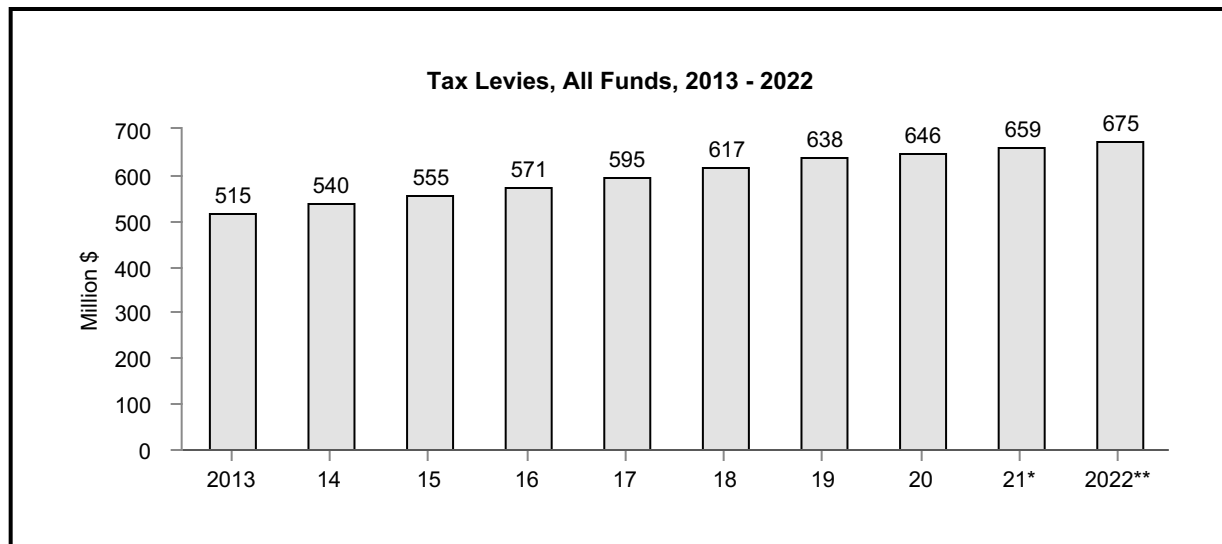
Year	Real Property	Railroad Property and Pollution Control Facilities	Total
2011	148.77 billion	275.01 million	149.05 billion
2012	133.11 billion	286.93 million	133.40 billion
2013	123.11 billion	311.53 million	123.42 billion
2014	125.43 billion	308.36 million	125.74 billion
2015	129.96 billion	344.38 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
2020	170.46 billion	431.03 million	170.89 billion



*Adjusted

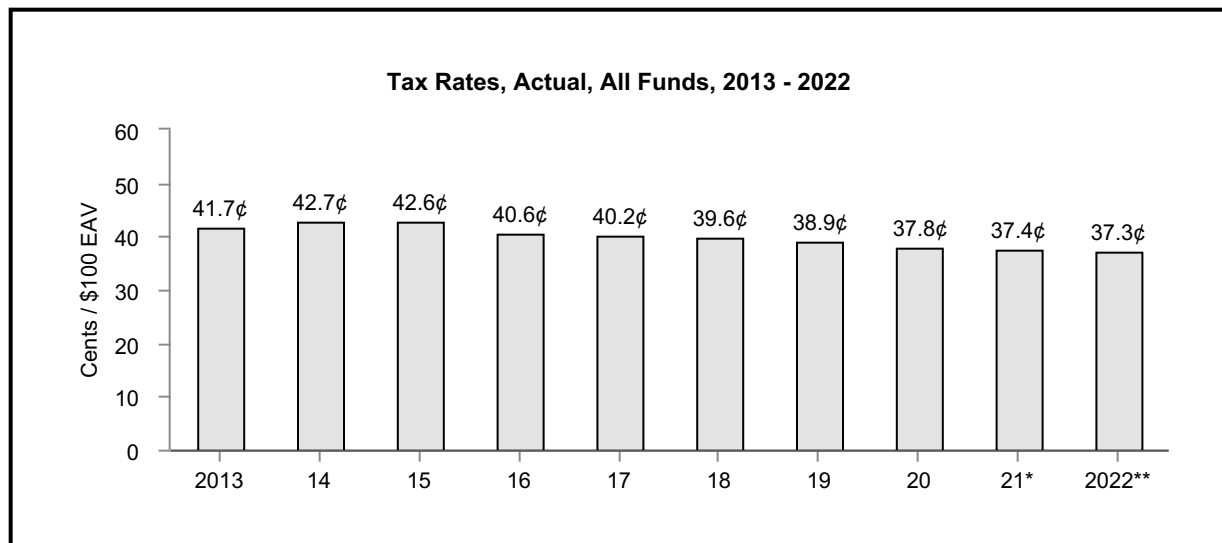
**Estimated

Note: Amounts are rounded.



*Adjusted

**Estimated



*Adjusted

**Estimated using 2020 EAV

COMPARATIVE STATEMENT OF APPROPRIATIONS AND TAX LEVIES

2022-2020 ALL FUNDS

APPROPRIATIONS	2022 **	2021 AS PASSED	2021 AS ADJUSTED *	2020 ACTUAL
FUND				
Corporate Fund	\$ 429,185,500	\$ 399,326,700	\$ 399,326,700	\$ 398,200,800
Construction Fund	18,769,700	15,471,200	15,471,200	18,044,400
Capital Improvements Bond Fund ***	207,926,000	310,382,600	310,382,600	244,547,400
Stormwater Management Fund	93,404,000	109,965,900	109,965,900	116,258,000
Retirement Fund	118,754,000	98,127,000	98,127,000	107,319,000
Reserve Claim Fund	44,465,300	39,624,900	39,624,900	34,395,000
Bond Redemption & Interest Fund	277,438,287	232,125,850	232,125,850	233,021,867
TOTAL	\$ 1,189,942,787	\$ 1,205,024,150	\$ 1,205,024,150	\$ 1,151,786,467
LEVIES				
Corporate Fund	\$ 284,500,000	\$ 270,880,900	\$ 270,880,900	\$ 267,104,254
Construction Fund	7,000,000	7,000,000	7,000,000	7,000,000
Stormwater Management Fund	57,926,000	52,926,000	52,926,000	52,926,000
Retirement Fund	72,053,900	72,741,500	72,741,500	72,227,600
Reserve Claim Fund	7,500,000	7,500,000	7,500,000	7,500,000
Subtotal	\$ 428,979,900	\$ 411,048,400	\$ 411,048,400	\$ 406,757,854
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	29,141,192	18,413,569	18,413,569	20,865,901
2011 Unlimited Tax Series C	2,142,416	2,142,416	2,142,416	2,142,417
2014 Limited Tax Series C	2,571,244	2,571,244	2,571,244	7,434,975
2014 Unlimited Tax Series A	5,181,348	5,181,348	5,181,348	5,181,348
2014 Alternate Revenue Unlimited Tax Series B ****	3,390,363	3,388,705	3,388,705	3,390,570
2016 Alternate Revenue Unlimited Tax Series E ****	3,755,182	3,756,477	3,756,477	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	2,916,322	2,917,099	2,917,099	1,036,270
State Revolving Fund Bonds - Series: Various	101,489,272	100,648,212	100,923,940	99,457,228
State Revolving Fund Stormwater Abatement****	—	—	—	(2,139,857)
Refunding Bonds - Series:				
2007 Unlimited Tax Series A	—	26,717,876	26,717,876	26,727,980
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	17,186,270	13,989,638
2016 Unlimited Tax Series A	40,975,648	14,555,959	14,555,959	14,555,959
2016 Limited Tax Series B	6,467,876	2,141,451	2,141,451	2,141,451
Subtotal Bond Redemption & Interest Fund	\$ 245,854,195	\$ 247,443,958	\$ 247,719,686	\$ 239,216,642
TOTAL	\$ 674,834,095	\$ 658,492,358	\$ 658,768,086	\$ 645,974,496
Abatement after the budget year ****	(11,221,870)	(11,221,507)	(11,221,507)	
Total (after planned abatement)	\$ 663,612,225	\$ 647,270,851	\$ 647,546,579	

NOTES: * As Adjusted reflects the 2020 EAV (\$170,892,723,661) estimated to increase 3.0 percent, plus any subsequent supplemental levies.

** 2022 reflects an estimated 3.0 percent increase in EAV from the 2021 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

2022-2020 ALL FUNDS

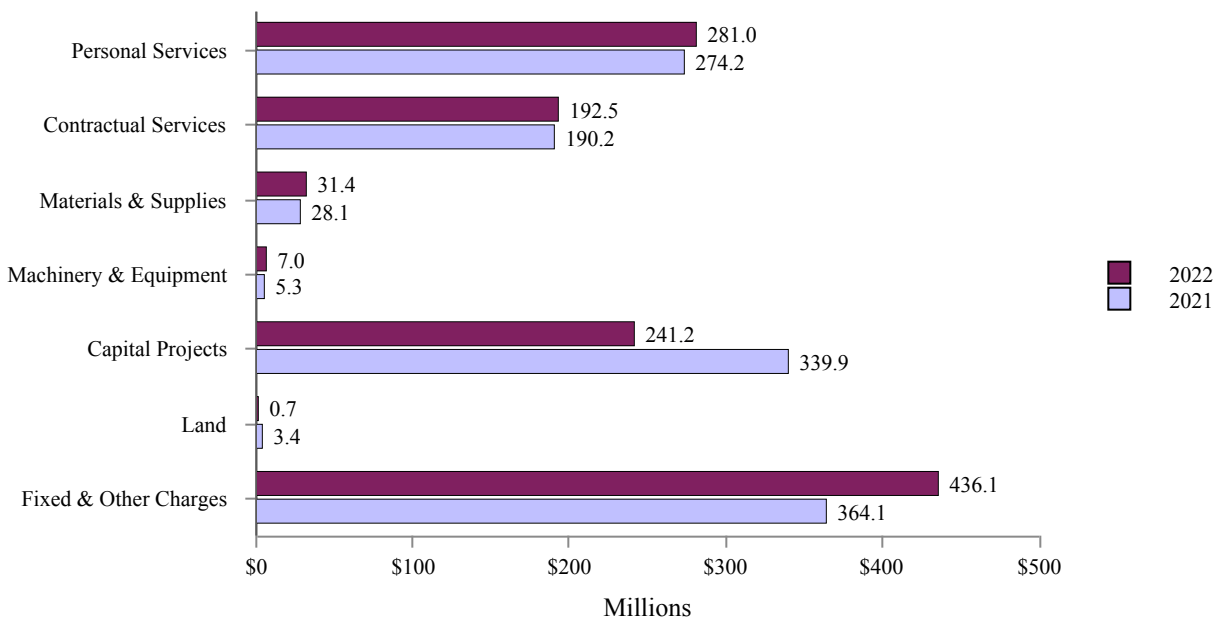
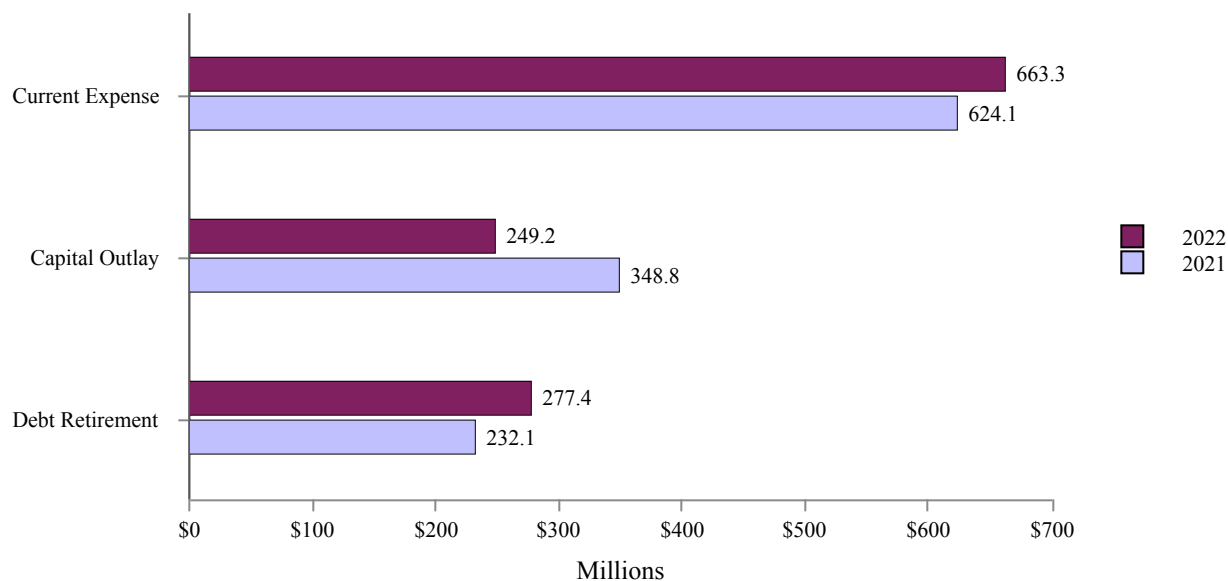
Per \$100 in Equalized Assessed Valuation (EAV)

FUND		2022 **	2021 AS PASSED	2021 AS ADJUSTED *	2020 ACTUAL
	tax rate limit				
Corporate Fund	41¢	15.69 ¢	15.56 ¢	15.39 ¢	15.60 ¢
Construction Fund	10¢	0.39	0.40	0.40	0.40
Stormwater Management Fund	5¢	3.20	3.04	3.01	3.10
Retirement Fund		3.97	4.18	4.13	4.20
Reserve Claim Fund	½ ¢	0.41	0.43	0.43	0.40
Subtotal		23.66 ¢	23.61 ¢	23.36 ¢	23.70 ¢
Bond Redemption & Interest Fund:					
Capital Improvements Bonds - Series:					
2016 Qualified Energy Conservation Limited Tax Series F		0.01 ¢	0.01 ¢	0.01 ¢	0.01 ¢
2009 Limited Tax Series		1.96	2.04	2.02	2.10
2011 Limited Tax Series B		1.61	1.06	1.05	1.20
2011 Unlimited Tax Series C		0.12	0.12	0.12	0.10
2014 Limited Tax Series C		0.14	0.15	0.15	0.40
2014 Unlimited Tax Series A		0.29	0.30	0.29	0.30
2014 Alternate Revenue Unlimited Tax Series B ***		0.19	0.19	0.19	0.20
2016 Alternate Revenue Unlimited Tax Series E ***		0.21	0.22	0.21	0.20
Alternate Revenue Abatement ***		—	—	—	(0.40)
2016 Unlimited Tax Series C		0.09	0.09	0.09	0.10
2016 Limited Tax Series D		0.16	0.17	0.17	0.10
State Revolving Fund Bonds - Series:					
Various		5.60	5.78	5.73	5.80
Refunding Bonds - Series:					
2007 Unlimited Tax Series A		—	1.54	1.52	1.60
2007 Unlimited Tax Series B		0.28	0.29	0.28	0.30
2007 Limited Tax Series C		0.31	0.32	0.31	0.30
2014 Limited Tax Series D		—	0.99	0.98	0.80
2016 Unlimited Tax Series A		2.26	0.84	0.83	0.90
2016 Limited Tax Series B		0.36	0.12	0.12	0.10
Subtotal Bond Redemption & Interest Fund		13.59 ¢	14.23 ¢	14.07 ¢	14.11 ¢
TOTAL		37.25 ¢	37.84 ¢	37.43 ¢	37.81 ¢

NOTES: * As Adjusted reflects the 2020 EAV (\$170,892,723,661) estimated to increase 3.0 percent, plus any subsequent supplemental levies.

** 2022 reflects an estimated 3.0 percent increase in EAV from the 2021 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

2022-2021 ALL FUNDS

ORGANIZATION or FUND	YEAR	TOTAL	PERSONAL SERVICES	CONTRACTUAL SERVICES	MATERIALS & SUPPLIES	MACHINERY & EQUIPMENT	CAPITAL PROJECTS	LAND	FIXED & OTHER CHARGES
Board of Commissioners	2022	\$ 5,422,400	\$ 4,380,300	\$ 1,014,100	\$ 28,000	\$ —	\$ —	\$ —	\$ —
	2021	\$ 5,244,100	\$ 4,326,600	\$ 892,000	\$ 25,500	\$ —	\$ —	\$ —	\$ —
General Administration	2022	23,340,400	15,809,900	6,130,400	285,600	1,114,500	—	—	—
	2021	20,425,800	12,913,600	5,944,300	315,700	1,252,200	—	—	—
Monitoring & Research	2022	32,888,200	29,814,500	1,608,100	624,000	841,600	—	—	—
	2021	33,002,000	29,753,100	1,446,300	560,900	1,241,700	—	—	—
Procurement & Materls. Management	2022	10,736,000	6,146,700	605,300	3,894,000	90,000	—	—	—
	2021	10,594,700	6,167,300	494,500	3,932,900	—	—	—	—
Human Resources	2022	63,235,700	56,847,700	6,037,700	320,300	30,000	—	—	—
	2021	61,210,600	55,744,900	5,177,700	282,000	6,000	—	—	—
Information Technology	2022	21,636,600	8,796,200	10,598,900	976,500	1,265,000	—	—	—
	2021	19,698,200	9,083,700	9,353,400	1,056,100	205,000	—	—	—
Law	2022	8,058,700	5,800,400	1,475,900	19,400	—	—	—	763,000
	2021	7,939,900	5,747,900	1,342,300	19,200	—	—	—	830,500
Finance	2022	3,958,000	3,426,000	516,000	16,000	—	—	—	—
	2021	3,901,000	3,427,000	457,500	16,500	—	—	—	—
Maint. & Operations:									
General Division	2022	14,176,500	11,422,700	2,207,300	546,500	—	—	—	—
	2021	13,745,300	11,274,600	1,790,600	497,100	183,000	—	—	—
North Service Area	2022	52,689,900	27,075,000	20,658,900	4,012,500	943,500	—	—	—
	2021	48,560,700	26,401,100	18,259,500	3,585,700	314,400	—	—	—
Calumet Service Area	2022	49,171,100	21,332,500	23,092,600	4,044,000	702,000	—	—	—
	2021	44,447,200	20,723,800	19,575,000	3,474,400	674,000	—	—	—
Stickney Service Area	2022	117,034,000	43,289,300	56,343,100	15,984,200	1,417,400	—	—	—
	2021	104,302,500	42,365,500	47,231,400	14,074,600	631,000	—	—	—
TOTAL Maintenance & Operations	2022	\$ 233,071,500	\$ 103,119,500	\$ 102,301,900	\$ 24,587,200	\$ 3,062,900	\$ —	\$ —	\$ —
	2021	\$ 211,055,700	\$ 100,765,000	\$ 86,856,500	\$ 21,631,800	\$ 1,802,400	\$ —	\$ —	\$ —
Engineering	2022	26,838,000	24,539,700	2,107,100	123,200	68,000	—	—	—
	2021	26,254,700	24,598,000	1,538,000	88,700	30,000	—	—	—
TOTAL Corporate Fund	2022	\$ 429,185,500	\$ 258,680,900	\$ 132,395,400	\$ 30,874,200	\$ 6,472,000	\$ —	\$ —	\$ 763,000
	2021	\$ 399,326,700	\$ 252,527,100	\$ 113,502,500	\$ 27,929,300	\$ 4,537,300	\$ —	\$ —	\$ 830,500
Construction Fund	2022	18,769,700	—	5,549,200	—	—	13,220,500	—	—
	2021	15,471,200	—	4,484,200	—	62,000	10,925,000	—	—
Capital Improvements Bond Fund	2022	207,926,000	—	5,993,500	—	—	200,982,500	300,000	650,000
	2021	310,382,600	—	17,787,600	—	—	290,302,400	750,000	1,542,600
Stormwater Management Fund	2022	93,404,000	12,314,000	48,560,700	565,800	540,000	27,036,500	400,000	3,987,000
	2021	109,965,900	11,692,500	54,417,300	128,200	665,000	38,622,900	2,640,000	1,800,000
Bond Redemption & Interest Fund	2022	277,438,287	—	—	—	—	—	—	277,438,287
	2021	232,125,850	—	—	—	—	—	—	232,125,850
Retirement Fund	2022	118,754,000	—	—	—	—	—	—	118,754,000
	2021	98,127,000	—	—	—	—	—	—	98,127,000
Reserve Claim Fund	2022	44,465,300	10,000,000	—	—	—	—	—	34,465,300
	2021	39,624,900	10,000,000	—	—	—	—	—	29,624,900
GRAND TOTAL	2022	\$ 1,189,942,787	\$ 280,994,900	\$ 192,498,800	\$ 31,440,000	\$ 7,012,000	\$ 241,239,500	\$ 700,000	\$ 436,057,587
	2021	\$ 1,205,024,150	\$ 274,219,600	\$ 190,191,600	\$ 28,057,500	\$ 5,264,300	\$ 339,850,300	\$ 3,390,000	\$ 364,050,850
PERCENTAGES	2022	100.0%	23.6%	16.2%	2.6%	0.6%	20.3%	0.1%	36.6%
	2021	100.0%	22.8%	15.8%	2.3%	0.4%	28.2%	0.3%	30.2%

Note: Percentages are rounded.

COMPARATIVE APPROPRIATIONS BY CHARACTER OF EXPENDITURE 2022-2021 ALL FUNDS

ORGANIZATION OR FUND	YEAR	TOTAL	CURRENT EXPENSE	CAPITAL OUTLAY	DEBT RETIREMENT
Board of Commissioners	2022	\$ 5,422,400	\$ 5,422,400	\$ —	\$ —
	2021	\$ 5,244,100	\$ 5,244,100	\$ —	\$ —
General Administration	2022	23,340,400	22,225,900	1,114,500	—
	2021	20,425,800	19,173,600	1,252,200	—
Monitoring & Research	2022	32,888,200	32,046,600	841,600	—
	2021	33,002,000	31,760,300	1,241,700	—
Procurement & Materials Management	2022	10,736,000	10,646,000	90,000	—
	2021	10,594,700	10,594,700	—	—
Human Resources	2022	63,235,700	63,205,700	30,000	—
	2021	61,210,600	61,204,600	6,000	—
Information Technology	2022	21,636,600	20,371,600	1,265,000	—
	2021	19,698,200	19,493,200	205,000	—
Law	2022	8,058,700	8,058,700	—	—
	2021	7,939,900	7,939,900	—	—
Finance	2022	3,958,000	3,958,000	—	—
	2021	3,901,000	3,901,000	—	—
Maintenance & Operations:					
General Division	2022	14,176,500	14,176,500	—	—
	2021	13,745,300	13,562,300	183,000	—
North Service Area	2022	52,689,900	51,746,400	943,500	—
	2021	48,560,700	48,246,300	314,400	—
Calumet Service Area	2022	49,171,100	48,469,100	702,000	—
	2021	44,447,200	43,773,200	674,000	—
Stickney Service Area	2022	117,034,000	115,616,600	1,417,400	—
	2021	104,302,500	103,671,500	631,000	—
TOTAL Maintenance & Operations	2022	\$ 233,071,500	\$ 230,008,600	\$ 3,062,900	\$ —
	2021	\$ 211,055,700	\$ 209,253,300	\$ 1,802,400	\$ —
Engineering	2022	26,838,000	26,770,000	68,000	—
	2021	26,254,700	26,224,700	30,000	—
TOTAL Corporate Fund	2022	\$ 429,185,500	\$ 422,713,500	\$ 6,472,000	\$ —
	2021	\$ 399,326,700	\$ 394,789,400	\$ 4,537,300	\$ —
Construction Fund	2022	18,769,700	5,549,200	13,220,500	—
	2021	15,471,200	4,484,200	10,987,000	—
Capital Improvements Bond Fund	2022	207,926,000	6,393,500	201,532,500	—
	2021	310,382,600	19,080,200	291,302,400	—
Stormwater Management Fund	2022	93,404,000	65,427,500	27,976,500	—
	2021	109,965,900	68,038,000	41,927,900	—
Bond Redemption & Interest Fund	2022	277,438,287	—	—	277,438,287
	2021	232,125,850	—	—	232,125,850
Retirement Fund	2022	118,754,000	118,754,000	—	—
	2021	98,127,000	98,127,000	—	—
Reserve Claim Fund	2022	44,465,300	44,465,300	—	—
	2021	39,624,900	39,624,900	—	—
GRAND TOTAL	2022	\$ 1,189,942,787	\$ 663,303,000	\$ 249,201,500	\$ 277,438,287
	2021	\$ 1,205,024,150	\$ 624,143,700	\$ 348,754,600	\$ 232,125,850
PERCENTAGES	2022	100%	56%	21%	23%
	2021	100%	52%	29%	19%

Note: Percentages are rounded.

2022 - 2021* 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	
	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Board of Commissioners	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 5.4	\$ 5.2	\$ 5.4	\$ 5.2
General Administration	—	—	—	—	—	—	—	—	—	—	23.3	20.4	23.3	20.4
Monitoring & Research	—	—	—	—	—	—	—	—	32.5	32.6	0.4	0.4	32.9	33.0
Procurement & Materials Management	—	—	—	—	—	—	—	—	—	—	10.7	10.6	10.7	10.6
Human Resources	—	—	—	—	—	—	—	—	—	—	63.2	61.2	63.2	61.2
Information Technology	—	—	—	—	—	—	—	—	—	—	21.6	19.7	21.6	19.7
Law	—	—	—	—	—	—	—	—	0.5	0.5	7.5	7.4	8.1	7.9
Finance	—	—	—	—	—	—	—	—	0.3	0.3	3.6	3.6	4.0	3.9
Maintenance & Operations	58.8	53.2	92.6	82.5	44.0	40.5	26.7	24.9	6.0	5.4	5.0	4.6	233.1	211.1
Engineering	5.0	5.3	8.4	8.8	6.6	6.4	0.2	0.3	4.2	3.1	2.4	2.3	26.8	26.3
Total Corporate Fund	\$ 63.8	\$ 58.5	\$ 101.0	\$ 91.3	\$ 50.5	\$ 47.0	\$ 27.0	\$ 25.2	\$ 43.6	\$ 41.8	\$ 143.3	\$ 135.6	\$ 429.2	\$ 399.3
Construction and Capital Improvements Bond Funds	\$ 21.7	\$ 52.0	\$ 94.2	\$ 117.9	\$ 33.4	\$ 23.2	\$ 1.5	\$ 3.4	\$ 74.7	\$ 127.2	\$ 1.2	\$ 2.2	\$ 226.7	\$ 325.9
Stormwater Management Fund	—	—	—	—	—	—	—	—	93.3	109.8	0.2	0.1	93.4	110.0
Miscellaneous (Debt Service, Retirement, and Reserve Funds)	—	—	—	—	—	—	—	—	—	—	440.7	369.9	440.7	369.9
GRAND TOTAL	\$ 85.5	\$ 110.4	\$ 195.3	\$ 209.2	\$ 83.9	\$ 70.1	\$ 28.5	\$ 28.6	\$ 211.6	\$ 278.8	\$ 585.3	\$ 507.9	\$ 1,189.9	\$ 1,205.0

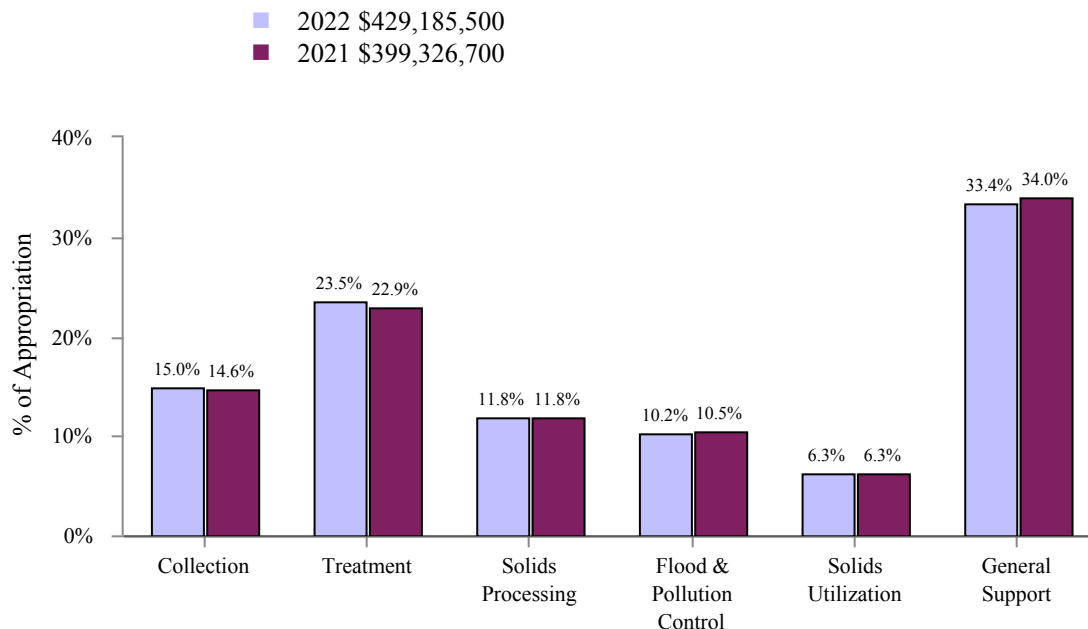
Notes: Totals are rounded.

*Adjusted Appropriation

APPROPRIATION DISTRIBUTION BY MAJOR PROGRAM

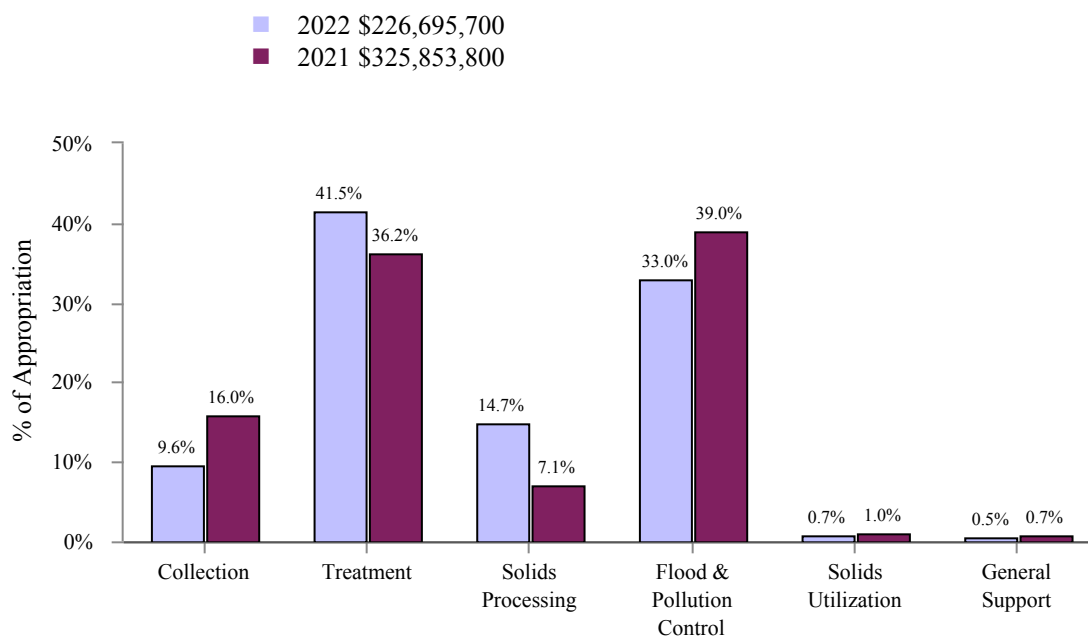
To comply with Illinois State Statute, it is necessary to prepare budget estimates and appropriate funds according to programs, as well as organizational units, performance principles, and unit cost data. The two charts on this page show the relationship of major objectives or functions within the Corporate, Construction, and Capital Improvements Bond Funds. The charts compare major program appropriations to the total fund appropriations for 2022 and 2021, as shown on the following page.

Corporate Fund



Note: Percentages are rounded.

Capital Improvements Bond & Construction Funds



Note: Percentages are rounded.

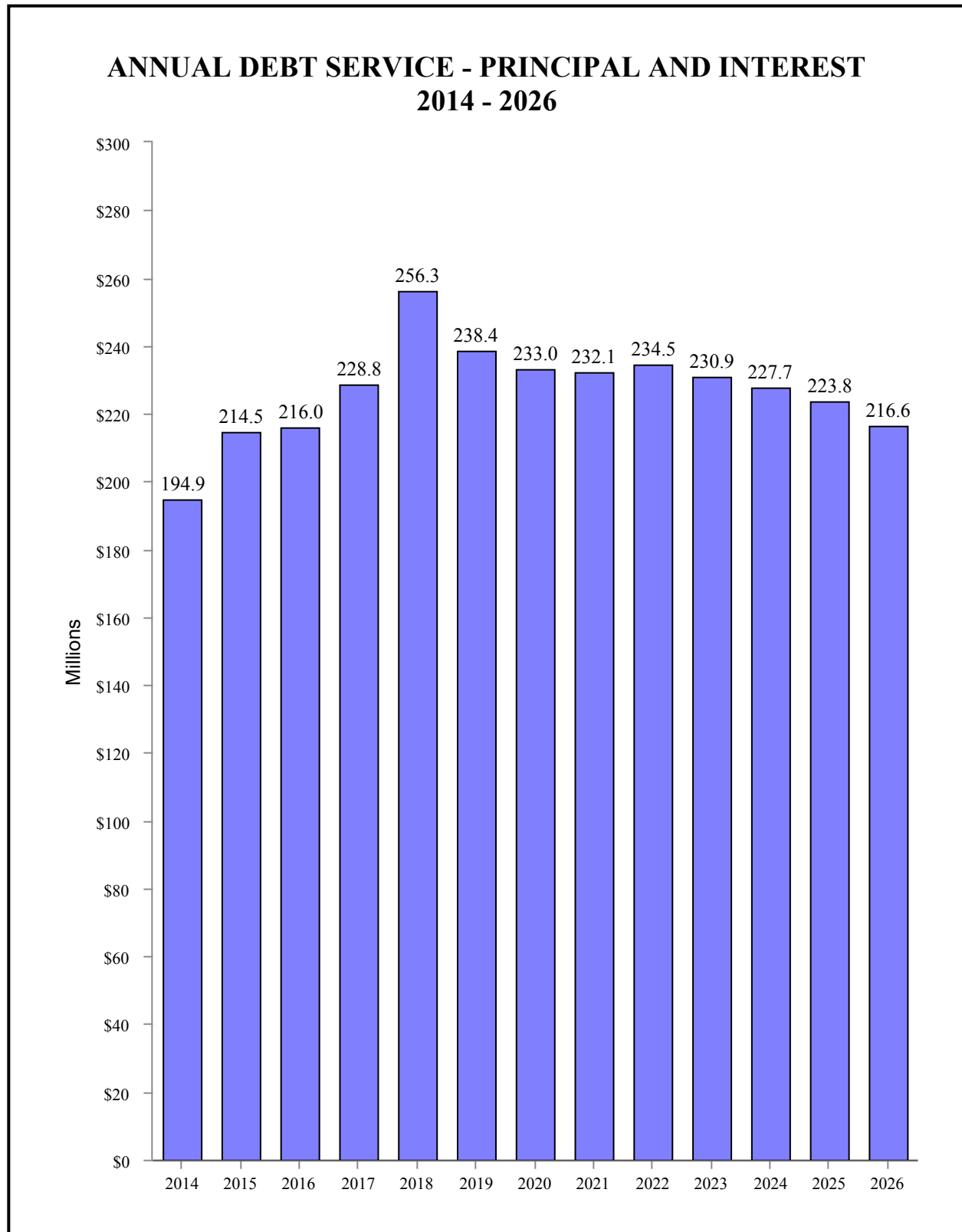
2022 - 2021 PROGRAM APPROPRIATION COMPARISON

ALL FUNDS

PROGRAM OBJECTIVE

NUMBER	NAME	2022 BUDGET	2021 BUDGET	DOLLAR INCREASE (DECREASE)	PERCENT INCREASE (DECREASE)	FTE POSITIONS	
						2022	2021
1000	Collection	\$ 85,463,263	\$ 110,430,795	\$ (24,967,532)	(22.6)	277	277
2000	Treatment	195,258,733	209,209,258	(13,950,525)	(6.7)	461	451
3000	Solids Processing	83,903,632	70,127,097	13,776,535	19.6	257	251
4000	Flood & Pollution Control	211,577,613	278,795,434	(67,217,821)	(24.1)	453	442
5000	Solids Utilization	28,460,009	28,606,732	(146,723)	(0.5)	42	41
7000	General Support (Debt, Retirement, Law, etc.)	585,279,537	507,854,834	77,424,703	15.2	481	478
TOTAL		\$ 1,189,942,787	\$ 1,205,024,150	\$ (15,081,363)	(1.3)	1,971	1,940

SUMMARY BY FUND	2022 BUDGET	2021 BUDGET	DOLLAR INCREASE (DECREASE)	PERCENT INCREASE (DECREASE)	FTE POSITIONS	
					2022	2021
Corporate Fund	\$ 429,185,500	\$ 399,326,700	\$ 29,858,800	7.5	1,871	1,844
Construction & Capital Improvements Bond Funds	226,695,700	325,853,800	(99,158,100)	(30.4)	—	—
Stormwater Management Fund	93,404,000	109,965,900	(16,561,900)	(15.1)	100	96
Retirement Fund	118,754,000	98,127,000	20,627,000	21.0	—	—
Bond Redemption & Interest Fund	277,438,287	232,125,850	45,312,437	19.5	—	—
Reserve Claim Fund	44,465,300	39,624,900	4,840,400	12.2	—	—
TOTAL	\$ 1,189,942,787	\$ 1,205,024,150	\$ (15,081,363)	(1.3)	1,971	1,940



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 76 and 84.

OUTSTANDING BONDS AND ESTIMATED STATUTORY DEBT MARGIN**December 31, 2021**

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%	204,005,000
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%	44,145,000
2014 Limited Tax Series C	2028	2.0% to 5.0%	49,625,000
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>\$ 1,143,275,000</u>
Refunding Bonds - Series:			
2007 Unlimited Tax Series A	2022	4.0% to 5.0%	\$ 24,555,000
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%	15,795,000
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>\$ 556,315,000</u>
State Revolving Fund Bonds - Series:			
97CC SRF L172031	2022	2.54%	\$ 1,175,945
97DD SRF L171152	2023	2.91%	2,004,773
01A SRF L172126	2024	2.57%	9,136,470
01B SRF L172127	2025	2.50%	12,842,898
01C SRF L172128	2026	2.50%	14,361,819
14F SRF L175342	2039	1.75%	72,955,675
16C SRF L175367	2039	1.76%	20,825,210
16D SRF L175460	2038	1.75%	6,714,435
14O SRF L175305	2038	1.75%	2,772,372
04A SRF L172485	2027	2.50%	8,746,604
04B SRF L172488	2027	2.50%	10,217,738
04C SRF L172493	2027	2.50%	882,049
04D SRF L172494	2027	2.50%	845,863
04E SRF L172495	2028	2.50%	3,085,628
04F SRF L172496	2031	—%	1,887,977
04G SRF L172611	2027	2.50%	1,374,136
04H SRF L172849	2029	2.50%	24,055,574
07A SRF L172625	2030	2.50%	21,096,914
07B SRF L172850	2031	2.50%	14,829,519
07C SRF L172770	2031	—%	31,666,667
07D SRF L172763	2030	2.50%	4,811,974
09A SRF L173074	2032	1.25%	26,061,383
09B SRF L173064	2031	—%	3,637,453
09C SRF L173063	2031	—%	1,063,593
09D SRF L174558	2032	2.30%	23,240,477
09E SRF L173005	2032	1.25%	21,276,019
09F SRF L174557	2032	1.25%	35,463,481
09G SRF L173075	2032	1.25%	16,601,021
09H SRF L173800	2031	—%	349,527
09I SRF L174675	2031	1.25%	5,637,127
12A SRF L174710	2034	2.30%	5,171,993
12B SRF L174712	2034	2.30%	4,429,411

OUTSTANDING BONDS AND ESTIMATED STATUTORY DEBT MARGIN**December 31, 2021**

BOND SERIES	DATE OF MATURITY	INTEREST RATES	AMOUNT PAYABLE
State Revolving Fund Bonds - Series (continued):			
12C SRF L174621	2036	2.00%	\$ 10,931,557
12D SRF L174988	2032	1.93%	18,974,866
12E SRF L174709	2035	1.93%	4,166,919
12F SRF L174989	2032	1.93%	38,860,304
12G SRF L174923	2038	1.93%	29,775,679
12H SRF L174924	2032	1.93%	17,215,099
12I SRF L175222	2037	2.21%	3,991,858
12J SRF L175172	2035	2.00%	1,978,556
12K SRF L174925	2036	2.00%	10,288,143
12L SRF L175161	2037	2.21%	30,608,994
12M SRF L175168	2038	2.21%	10,428,403
12N SRF L175164	2036	2.00%	2,222,883
12O SRF L175166	2036	2.00%	3,557,549
14A SRF L173076	2036	2.21%	64,230,481
14B SRF L175171	2036	2.21%	2,187,417
14C SRF L174559	2036	2.30%	16,090,494
14D SRF L175263	2038	1.86%	11,289,010
14E SRF L173062	2038	1.86%	38,461,811
14G SRF L175152	2038	1.86%	17,908,952
14H SRF L175355	2036	1.86%	995,185
14I SRF L175223	2038	1.86%	7,923,558
14J SRF L175219	2036	2.21%	3,514,351
14K SRF L175366	2038	1.86%	4,536,594
14L SRF L175368	2038	1.75%	4,743,324
14M SRF L175372	2038	2.22%	1,268,183
14N SRF L175371	2038	1.75%	1,207,875
14P SRF L175369	2038	1.56%	3,550,955
14Q SRF L175539	2040	1.76%	2,555,971
14R SRF L175517	2041	1.84%	34,815,410
16A SRF L174555	2038	1.75%	112,974,413
16B SRF L172129	2040	1.84%	3,500,010
16G SRF L174708	2041	2.00%	9,626,265
16H SRF L172130	2041	2.00%	9,628,566
16K SRF L172741	2040	2.00%	3,067,057
SUBTOTAL - State Revolving Fund Bonds:			\$ 946,298,416
TOTAL OUTSTANDING BONDS:			\$ 2,645,888,416

CALCULATION OF ESTIMATED STATUTORY DEBT MARGIN

Debt Applicable to Debt Limit:			
Outstanding Bonds	\$	2,645,888,416	
Less: Alternate Revenue Bonds Outstanding		(94,145,000)	
Bond Anticipation Notes - Principal		30,000,000	
Bond Anticipation Notes - Interest		500,000	
Capital Lease - Biosolids Facility		27,405,760	
Liabilities of Tax Financed Funds		3,000,000	\$ 2,612,649,176
Less Applicable Assets:			
Cash and Investments - Bond Redemption & Interest Fund	\$	(90,067,000)	
Interest on Bonds Payable in Next Twelve Months		106,444,185	\$ 16,377,185
NET DEBT APPLICABLE TO LIMIT:			\$ 2,629,026,361
Statutory Debt Limit 5.75% of 2020 EAV			\$ 9,826,331,611
Less Net Debt Applicable to Limit			2,629,026,361
ESTIMATED STATUTORY DEBT MARGIN:			\$ 7,197,305,249

ACCOUNT SUMMARY COMPARISON

2022 - 2021 ALL FUNDS

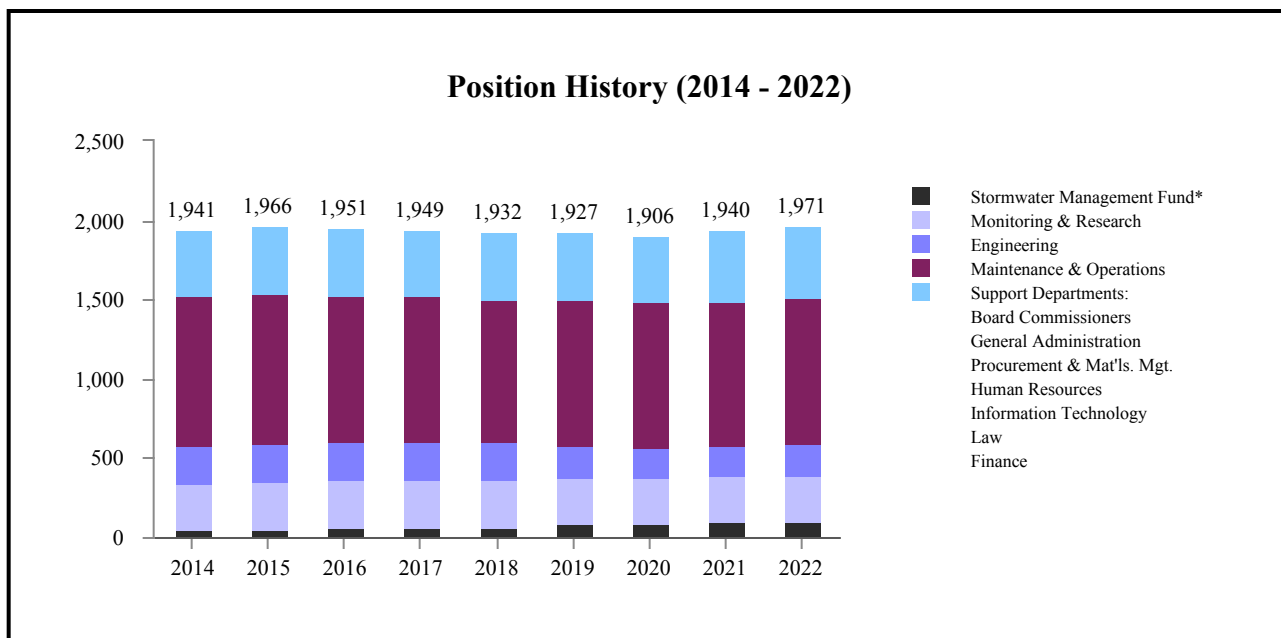
ORGANIZATION OR FUND	Account Appropriation		Increase (Decrease) 2022-2021	
	2022	2021	Dollars	Percent
Board of Commissioners	\$ 5,422,400	\$ 5,244,100	\$ 178,300	3.4
General Administration	23,340,400	20,425,800	2,914,600	14.3
Monitoring & Research	32,888,200	33,002,000	(113,800)	(0.3)
Procurement & Materials Management	10,736,000	10,594,700	141,300	1.3
Human Resources	63,235,700	61,210,600	2,025,100	3.3
Information Technology	21,636,600	19,698,200	1,938,400	9.8
Law	8,058,700	7,939,900	118,800	1.5
Finance	3,958,000	3,901,000	57,000	1.5
Maintenance & Operations:				
General Division	14,176,500	13,745,300	431,200	3.1
North Service Area	52,689,900	48,560,700	4,129,200	8.5
Calumet Service Area	49,171,100	44,447,200	4,723,900	10.6
Stickney Service Area	<u>117,034,000</u>	<u>104,302,500</u>	<u>12,731,500</u>	12.2
TOTAL Maintenance & Operations	\$ 233,071,500	\$ 211,055,700	\$ 22,015,800	10.4
Engineering	<u>26,838,000</u>	<u>26,254,700</u>	<u>583,300</u>	2.2
TOTAL Corporate Fund	\$ 429,185,500	\$ 399,326,700	\$ 29,858,800	7.5
Construction Fund	18,769,700	15,471,200	3,298,500	21.3
Capital Improvements Bond Fund	<u>207,926,000</u>	<u>310,382,600</u>	<u>(102,456,600)</u>	(33.0)
TOTAL Capital Budget	\$ 226,695,700	\$ 325,853,800	\$ (99,158,100)	(30.4)
Stormwater Management Fund	93,404,000	109,965,900	(16,561,900)	(15.1)
Bond Redemption & Interest Fund	277,438,287	232,125,850	45,312,437	19.5
Retirement Fund	118,754,000	98,127,000	20,627,000	21.0
Reserve Claim Fund	<u>44,465,300</u>	<u>39,624,900</u>	<u>4,840,400</u>	12.2
GRAND TOTAL	<u>\$1,189,942,787</u>	<u>\$1,205,024,150</u>	<u>\$ (15,081,363)</u>	(1.3)

PERSONNEL SUMMARY COMPARISON

2022 - 2020 ALL FUNDS

ORGANIZATION OR FUND	Proposed FTEs 2022	Budgeted FTEs 2021	Actual FTEs 2020	Increase (Decrease) 2022-2021	
				FTEs	Percent
Board of Commissioners	37	36	36	1	2.8
General Administration	124	123	119	1	0.8
Monitoring & Research	289	291	291	(2)	(0.7)
Procurement & Materials Management	61	61	58	—	—
Human Resources	96	93	83	3	3.2
Information Technology	68	70	61	(2)	(2.9)
Law	38	38	37	—	—
Finance	27	27	27	—	—
Maintenance & Operations:					
General Division	91	90	112	1	1.1
North Service Area	241	240	244	1	0.4
Calumet Service Area	194	193	188	1	0.5
Stickney Service Area	406	383	369	23	6.0
TOTAL Maintenance & Operations	932	906	913	26	2.9
Engineering	199	199	192	—	—
TOTAL Corporate Fund	1,871	1,844	1,817	27	1.5
Construction Fund	—	—	—	—	—
Capital Improvements Bond Fund	—	—	—	—	—
TOTAL Capital Budget	—	—	—	—	—
Stormwater Management Fund	100	96	89	4	4.2
Bond Redemption & Interest Fund	—	—	—	—	—
Retirement Fund	—	—	—	—	—
Reserve Claim Fund	—	—	—	—	—
GRAND TOTAL	1,971	1,940	1,906	31	1.6

PERSONAL SERVICE APPROPRIATIONS



*In 2022, 100 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 2014 to 2020, along with the budgeted positions for 2021 and 2022. Hiring slowed during the COVID-19 global pandemic but is expected to return to pre-pandemic levels by 2022.

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 2021 and 2022, and the actual expenditures for personal services in 2020. The District has introduced a number of initiatives in an effort to control cost increases, including active management of employee health benefit costs.

Personal Service Summary - All Funds					
				Increase (Decrease) 2022-2021	
	2020 Actual Exp.	2021 Adj. Approp.	2022 Budgeted	Dollars	Percent
Salaries of Regular Employees	\$ 189,750,466	\$ 201,113,200	\$ 205,242,400	\$ 4,129,200	2.1 %
Compensation Plan Adjustments	9,766,311	9,254,300	11,143,900	\$ 1,889,600	20.4 %
Social Security & Medicare Contributions	2,791,460	3,077,800	3,098,100	\$ 20,300	0.7 %
Employee Claims	2,672,095	10,100,100	10,100,000	\$ (100)	— %
Other Employee Personal Services*	646,618	2,319,900	2,589,900	\$ 270,000	11.6 %
Health & Life Insurance Premiums**	40,929,729	47,973,000	48,820,600	\$ 847,600	1.8 %
Total	\$ 246,556,679	\$ 273,838,300	\$ 280,994,900	\$ 7,156,600	2.6 %
* Includes Tuition, Training, and Nonbudgeted Salaries					
** Includes Other Postemployment Benefits Distribution					

FIVE-YEAR FINANCIAL FORECAST

2022 - 2026

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 Acting Administrative Services 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 12, 2021

SUBJECT: **FIVE-YEAR FINANCIAL FORECAST, 2022 - 2026**

Dear Sir:

I have reviewed the Five-Year Financial Forecast prepared for the fiscal years 2022 - 2026 and offer the following report and summary. Subject to your review and approval, this will be included in the 2022 Budget. These projections are a tool designed to aid the District in planning and controlling its financial position over a longer range than the 2022 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 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 CPI and the real estate market are primary drivers of the District's revenue. The global pandemic and resultant economic volatility has impacted the 2021 results as well as the 2022 budget, particularly the growth projected in the CPI. The 2022 budget anticipates revenue surplus, particularly related to over performance of the Personal Property Replacement Tax, a portion of which is identified as a one-time revenue. Therefore, the projections show a decline of 25.2 percent from 2022 to 2023. CPI is estimated to remain well above 2.0 percent through 2023, and return to the average rate of 2.0 percent from 2024 through 2026.

Inflationary pressures on expenditures are incorporated into the 2022 budget across all operating and capital funds but are expected to follow CPI in the subsequent years. Significantly, the budget for electricity is expected to increase in 2022 by \$10.1 million over the 2021 budget but expected to remain relatively flat in the subsequent years. Over the next decade evolving permit requirements will impact both capital and operating expenditures.

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. User charge revenues are projected to remain relatively flat due to changing use patterns.

EXPENDITURES: DEPARTMENTAL GUIDELINES AND METHODOLOGY

The Budget Office asked each department to project its needs for the years 2022 - 2026. 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 4.5 percent for 2021, 3.5 percent for 2022, and return to 3.0 percent for 2023-2026. New property is assumed to be 0.5 percent for 2022-2026;
- The Construction Fund levy is projected to remain stable at \$7.0 million from 2022-2026. Reserve Claim Fund Levy is also projected to remain flat at \$7.5 million. All available increases under the tax cap are planned to be realized in the Corporate Fund. In 2022, however, the aggregate levy subject to the tax cap is 3.6 percent, under the statutory maximum;
- The expenditure rate is expected to be 91.0 percent in 2022 and assumes that expenditure controls will be in place throughout the year. The expenditure rate is expected to return to 93.0 percent for 2023-2026;
- Tax collections will be 96.5 percent of what is levied allowing for loss in collections, Property Tax Appeals Board decisions, circuit court decisions, and other tax refunds;
- The annual Equalized Assessed Valuation (EAV) projection is based on the 2020 amount as provided by the Cook County Clerk, with estimated growth of 3.0 percent annually from 2022 - 2026;
- A Capital Improvements bond sale valued at \$155.0 million is planned for 2021. Additionally, a \$250.0 million is planned for 2024, although the District will explore the option for a Water Infrastructure Finance and Innovation Act loan for a portion of future project funding needs;
- The District is expecting to receive approximately \$55.0 million in 2022 and then \$70.0 million annually from 2023 - 2026 in State Revolving Fund loans.

APPROPRIATION FORECASTS

Total District appropriations are summarized in the exhibit on page 80 and detailed in Table I on page 81. 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 4.38 percent annually through 2026;
- Salaries, wages, and other personal services costs are projected to increase by 2.0 percent annually, which results in an increase of \$17.3 million over five years in the Corporate Fund and \$925,700 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 1.8 percent annually from 2022 through 2026. This relative stability of appropriations is attributed to revenue estimates, as well as planned control of growth and stability in staffing levels. The forecast for 2022 budget includes one-time technology infrastructure costs totaling \$6.3 million, minimizing increases between 2022 and 2023.

Inflationary pressures on expenditures are incorporated into 2022 budget across all operating and capital funds but are expected to follow CPI in the subsequent years. Significantly, the budget for electricity is expected to increase in 2022 by \$10.1 million over the 2021 Budget, and expected to remain relatively flat after the 27.0 percent increase in 2022. This increase is the result of two factors. First supply costs are expected to increase by approximately \$6.2 million, while recently passed Illinois clean energy legislation is expected to have an approximately \$4.0 million impact.

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 14.6 percent annually as the District will be required to meet stricter regulatory permit limits for phosphorus, with additional increases expected in 2027 as requirements are phased in.

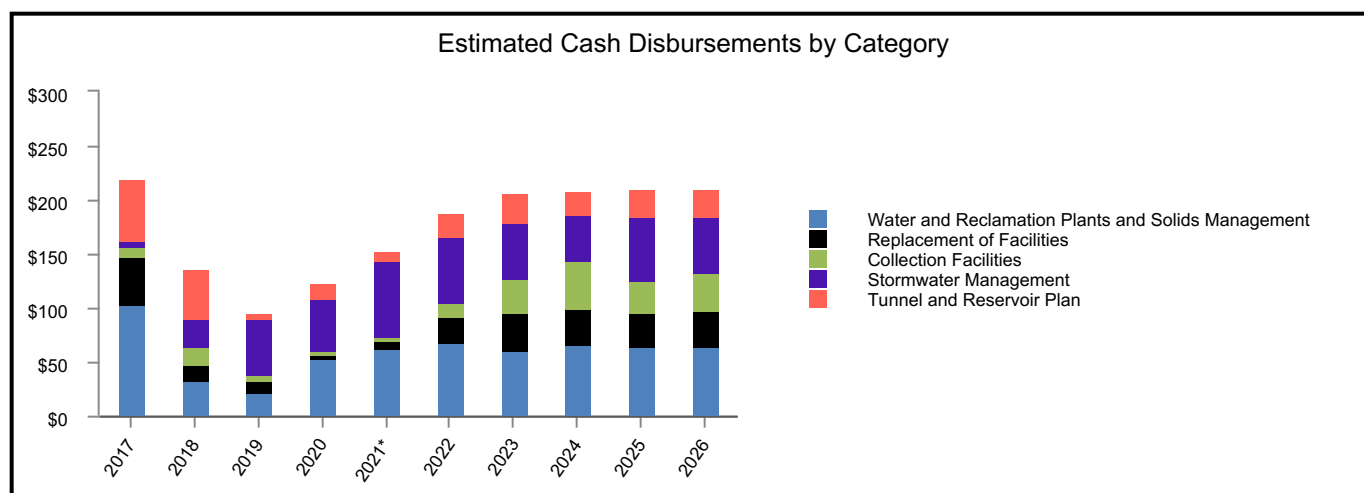
The forecast shows slow growth in computer system and communication costs. While newer systems may allow for cost savings in areas like server replacement, software maintenance costs are projected to continue to increase annually. This is an area where costs may grow faster than the current estimates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

The District's long-term benefits strategy continues to focus on rising health care costs. Employee and retiree benefits constitute approximately 9.8 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 2023 through 2026, 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 \$155.0 million in late 2021. The District is also exploring other funding possibilities including Water Infrastructure Finance and Innovation Act 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 2026. The table below shows the Estimated Cash Disbursements by Category for construction projects.



*Estimated 2021 Year-End

Retirement Fund

The 2022 appropriation for the Retirement Fund is \$118.8 million, an increase of \$20.6 million from 2021 to 2022 due to a planned \$30.0 million advance funding in 2022. The appropriation is expected to be stable from 2023 through 2026. Due to staffing levels during the pandemic, a slight decline is anticipated in 2023. 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 12.0 percent in 2015.

Debt Service Fund

Debt Service Fund appropriations will decrease slightly, an average of 9.7 percent annually over the next five years due primarily to the utilization of low-interest State Revolving Fund loans. During late 2021, the District plans a \$500.0 million bond sale, including \$155.0 million of general obligation bonds and \$345.0 million in refunding bonds, taking advantage of historically low interest rates. The full impacts of the refunding is not fully reflected in the forecast. 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 \$150.0 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 2022 and 2026, from \$44.5 million to \$52.5 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 2.3 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 4.3 percent annually from 2022 through 2026. Property tax revenues account for 64.0 percent of 2022 Corporate Fund projected revenue.

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 \$60.4 million for 2022, an increase of \$25.8 million from the 2021 Original Budget, or 74.7 percent.

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 \$40.0 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 2020, while the year-end projection for 2021 is \$40.0 million due to anticipated refunds for low production in 2020 during Illinois' Stay At Home Executive Order. Declines in 2022 and 2023 are expected due to receipt reconciliation.

Construction Fund

The tax levy for the Construction Fund is \$7.0 million in 2022 and projected to remain flat through 2026 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 2022 through 2026 is 1.5 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 \$10.0 million each year as the legislative changes were phased in. From 2022 through 2026, the property tax levy, PPRT distribution, and the appropriation are expected to be stable.

Reserve Claim Fund

The tax levy for the Reserve Claim Fund is projected to be \$7.5 million in 2022 and remain flat at \$7.5 million from 2023 through 2026.

Stormwater Management Fund

The Stormwater Management Fund levy is planned to increase by \$5.0 million annually over the next five years as the District plans to address local flooding issues using pay-as-you-go funding under the levy. Regional stormwater management projects

are being vetted for funding in 2022 and the following years. During 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 2022 tax levies for the District's Debt Service Fund are based on four refunding bonds, 10 Capital Improvements bonds, and 67 State Revolving Fund (SRF) loans. This information is expected to change after the late 2021 bond sale. 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 2022 through 2026 appears on page 84. The District's outstanding bonds and ability to issue additional bonds are presented on pages 538 - 542.

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 2022 to \$0.359 in 2026.

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 Fund, Program Distribution within Fund, and the Combined GAAP - Basis Balance Sheets for the General Corporate Fund.

The graphs on page 80, and the tables on page 81, summarize the projected appropriations, property tax rates, and tax levies for all funds for the years 2022 through 2026. Historical comparisons can be made by reviewing the actual appropriations, tax rates, and levies for the years 2013 through 2022 on page 59.

Table II, on page 82 provides detailed revenue and tax rate projections, as well as appropriations by department and major categories for the Corporate Fund for 2022 through 2026. Corporate Fund appropriations and expenditures for the years 2013 through 2022 can be found on page 123.

Projections for revenues, tax rates, and appropriations for the Construction Fund for the years 2022 through 2026, appear on page 83, and projected appropriable resources and appropriations for the Capital Improvements Bond Fund appear on page 84. The exhibits on page 85 present appropriation projections by major programs. A summary of actual and projected construction expenditures for both funds, for the years 2017 through 2026, can be found in the Capital Improvement Program Section, on page 338.

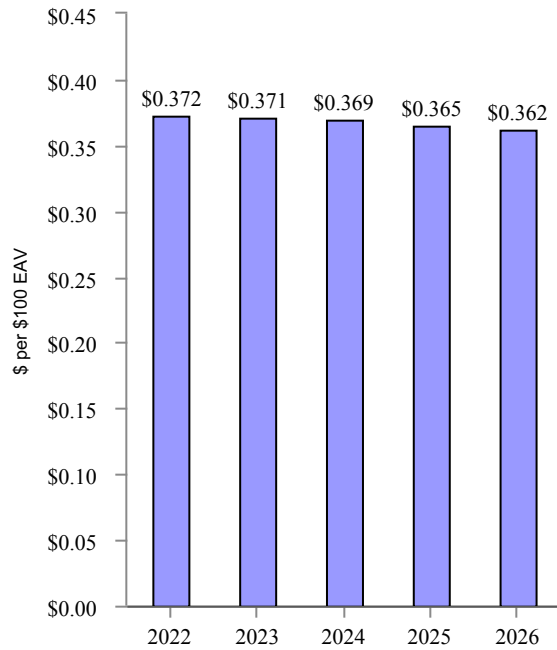
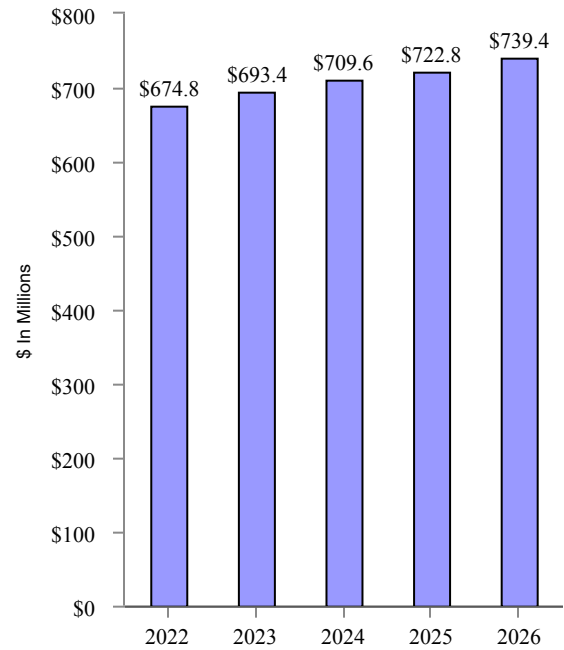
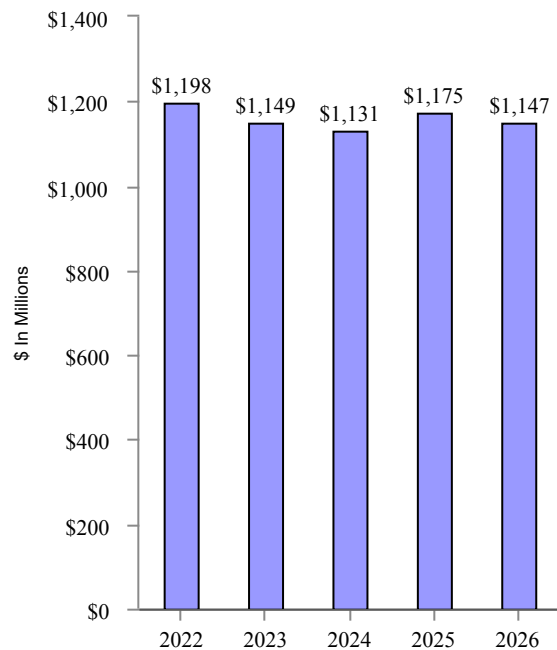
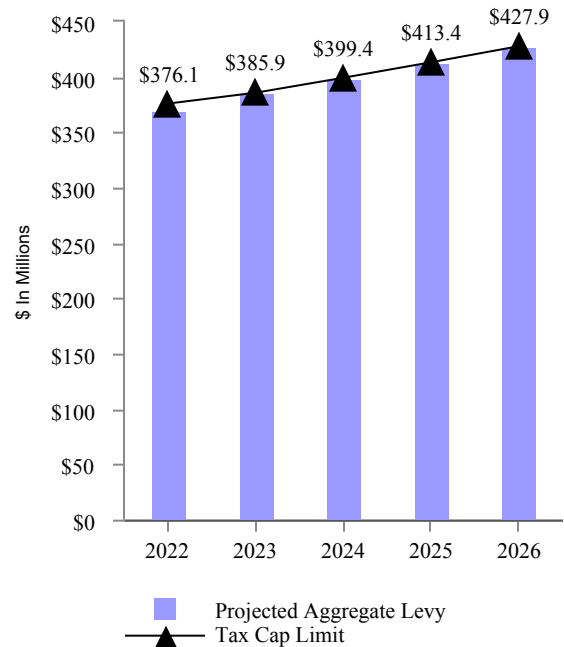
The balance sheet statement on page 86 is prepared on a GAAP basis of accounting and is included to show the effect on the General Corporate Fund, which is comprised of the Corporate, Corporate Working Cash, and Reserve Claim Funds. The total fund equity projection for 2022 is \$332.7 million.

Respectfully submitted,



Shellie A. Riedle
Acting Administrative Services Officer

FIVE-YEAR FINANCIAL FORECAST, 2022 - 2026

Projected Tax Rates**Projected Total Tax Levy****Projected Appropriation****Projected Aggregate Levy**

FIVE-YEAR FINANCIAL FORECAST, 2022 - 2026

TABLE I

ALL FUNDS					
Projected Tax Rates	2022	2023	2024	2025	2026
Corporate	\$ 0.1569	\$ 0.1599	\$ 0.1613	\$ 0.1631	\$ 0.1651
Construction	0.0039	0.0037	0.0036	0.0035	0.0034
Stormwater Management	0.0320	0.0337	0.0353	0.0368	0.0382
Debt Service	0.1356	0.1310	0.1259	0.1193	0.1145
Retirement	0.0397	0.0390	0.0388	0.0382	0.0375
Reserve Claim	0.0041	0.0040	0.0039	0.0038	0.0037
Total (\$ in cents)	\$ 0.3721	\$ 0.3713	\$ 0.3689	\$ 0.3648	\$ 0.3623
Percentage Change		(0.21)%	(0.65)%	(1.11)%	(0.68)%
Projected tax rate per \$100 Equalized Assessed Valuation (EAV). Assumes 2021 EAV of \$176.0 billion increasing 3.0% annually from 2022 - 2026.					
Projected Tax Levies	2022	2023	2024	2025	2026
Corporate	\$ 284,500	\$ 298,543	\$ 310,239	\$ 323,155	\$ 336,927
Construction	7,000	7,000	7,000	7,000	7,000
Stormwater Management	57,926	62,926	67,926	72,926	77,926
Debt Service- Existing	245,854	241,078	236,975	229,776	225,496
Debt Service- Proposed	—	3,500	5,250	6,650	8,050
Retirement	72,054	72,871	74,691	75,766	76,473
Reserve Claim	7,500	7,500	7,500	7,500	7,500
Total Levy (\$ in thousands)	\$ 674,834	\$ 693,418	\$ 709,581	\$ 722,773	\$ 739,372
Percentage Change	2.44 %	2.75 %	2.33 %	1.86 %	2.30 %
Aggregate Levy (\$ in thousands)	\$ 371,054	\$ 385,914	\$ 399,431	\$ 413,420	\$ 427,900
Percentage Change	3.61 %	4.00 %	3.50 %	3.50 %	3.50 %
Projected Annual Appropriations	2022	2023	2024	2025	2026
Corporate	\$ 429,186	\$ 439,576	\$ 449,207	\$ 452,157	\$ 460,253
Capital Improvements Bond	215,930	246,230	207,310	248,182	196,520
Construction	18,770	13,739	14,619	15,080	17,887
Stormwater Management	93,404	82,117	90,632	89,268	94,124
Debt Service- Existing	277,438	230,936	227,706	227,706	216,599
Debt Service- Proposed	—	2,231	4,464	958	16,898
Retirement	118,754	87,915	88,912	91,133	92,444
Reserve Claim	44,465	45,965	48,465	50,465	52,465
Total Appropriation (\$ in thousands)	\$ 1,197,947	\$ 1,148,709	\$ 1,131,315	\$ 1,174,949	\$ 1,147,191
Projected Positions	2022	2023	2024	2025	2026
Corporate	1,871	1,869	1,868	1,867	1,867
Stormwater Management	100	99	99	99	99
Total Positions	1,971	1,968	1,967	1,966	1,966

Note: Totals are rounded.

FIVE-YEAR FINANCIAL FORECAST, 2022 - 2026

TABLE II

CORPORATE FUND						% average annual change
Five-Year Revenue and Tax Rate Projections	2022	2023	2024	2025	2026	2022-2026
Property Taxes	\$ 274,543	\$ 288,094	\$ 299,381	\$ 311,844	\$ 325,135	4.32 %
Personal Property Replacement Tax	42,000	31,400	31,200	31,000	30,800	(6.79)%
User Charge	38,000	38,000	40,000	40,000	40,000	1.32 %
Investment Income	592	500	1,273	2,510	3,947	73.37 %
Land Rentals	24,500	25,500	26,000	26,500	27,000	2.46 %
Miscellaneous	14,689	9,982	10,332	10,693	11,068	(5.39)%
Net Assets Appropriable	172,479	171,951	156,621	147,044	149,086	(3.49)%
Budget Reserve	(137,616)	(125,851)	(115,600)	(117,435)	(126,782)	(1.79)%
Total Appropriable Resources (\$ in thousands)	\$ 429,186	\$ 439,576	\$ 449,207	\$ 452,157	\$ 460,253	1.76 %
Projected Equalized Assessed Valuation (EAV) (Based on 2020 EAV, assumes 3.0% increase for 2021 and then 3.0% increase annually)	\$ 181.30 billion	\$ 186.74 billion	\$ 192.34 billion	\$ 198.11 billion	\$ 204.05 billion	
Projected Tax Rate Cents per \$100 EAV	15.7 ¢	16.0 ¢	16.1 ¢	16.3 ¢	16.5 ¢	
Gross Levy - assumes 3.5% uncollectible.	\$ 284,500	\$ 298,543	\$ 310,239	\$ 323,155	\$ 336,927	
Projected Appropriations by Major Categories	2022	2023	2024	2025	2026	2022-2026
Employee Cost - Salaries	\$ 209,555	\$ 213,746	\$ 218,021	\$ 222,381	\$ 226,829	2.00 %
Employee Cost - Health Care	42,136	44,191	46,335	48,584	50,947	4.86 %
Other Postemployment Benefits Trust	5,000	5,000	5,000	5,000	5,000	— %
Professional Services	7,342	7,416	7,490	7,565	7,641	1.00 %
Energy Cost	50,602	51,108	51,619	52,135	52,657	1.00 %
Chemicals	13,036	19,174	21,347	21,372	21,372	14.63 %
Materials & Supplies	16,510	16,675	16,842	17,010	17,180	1.00 %
Solids Disposal	13,164	13,295	13,428	13,563	13,698	1.00 %
Contracted Solids Disposal	4,500	4,996	5,205	5,421	5,644	5.87 %
Computer Systems & Telecommunications	15,366	13,219	13,352	13,485	13,620	(2.74)%
Repairs to Structures & Equipment	25,507	23,739	23,152	17,804	17,459	(8.61)%
Contractual Services	21,369	21,798	22,069	22,354	22,576	1.38 %
Machinery & Equipment	4,336	4,379	4,423	4,467	4,512	1.00 %
Real Estate Taxes	763	840	924	1,016	1,118	10.02 %
Total (\$ in thousands)	\$ 429,186	\$ 439,576	\$ 449,207	\$ 452,157	\$ 460,253	1.76 %
Projected Appropriations by Department	2022	2023	2024	2025	2026	2022-2026
Board of Commissioners	\$ 5,454	\$ 5,491	\$ 5,581	\$ 5,647	\$ 5,712	1.16 %
General Administration	21,063	20,671	21,590	21,437	21,533	0.58 %
Monitoring & Research	33,087	33,594	34,510	35,028	35,491	1.77 %
Procurement & Materials Management	10,800	10,685	10,866	11,009	11,129	0.76 %
Human Resources	63,604	68,184	72,337	76,344	80,272	5.99 %
Information Technology	21,755	20,960	21,471	21,756	21,947	0.25 %
Law	8,106	8,615	8,842	9,030	9,223	3.29 %
Finance	3,981	4,072	4,172	4,187	4,271	1.78 %
Engineering	26,996	27,613	28,039	28,178	28,519	1.38 %
Maintenance & Operations	234,340	239,691	241,799	239,541	242,156	0.83 %
Total (\$ in thousands)	\$ 429,186	\$ 439,576	\$ 449,207	\$ 452,157	\$ 460,253	1.76 %
Projected Appropriation Distribution by Program	2022	2023	2024	2025	2026	2022-2026
1000 Collection	\$ 63,970	\$ 62,401	\$ 62,706	\$ 62,459	\$ 63,092	(0.3)%
2000 Treatment	100,561	102,349	103,938	101,808	102,315	0.44 %
3000 Solids Processing	50,715	52,537	53,242	53,121	54,234	1.70 %
4000 Flood & Pollution Control	43,641	42,865	43,689	44,000	44,553	0.53 %
5000 Solids Disposal	27,099	29,855	29,903	30,425	30,993	3.49 %
7000 General Support	143,200	149,569	155,729	160,344	165,066	3.6 %
Total (\$ in thousands)	\$ 429,186	\$ 439,576	\$ 449,207	\$ 452,157	\$ 460,253	1.76 %

Note: Totals are rounded.

FIVE-YEAR FINANCIAL FORECAST, 2022 - 2026

TABLE III

CONSTRUCTION FUND					
Five-Year Revenue and Tax Rate Projections	2022	2023	2024	2025	2026
Property Taxes	\$ 6,755	\$ 6,755	\$ 6,755	\$ 6,755	\$ 6,755
Investment Income & Miscellaneous Revenue	13	50	97	172	259
Net Assets Appropriable	12,002	9,385	8,095	7,473	7,200
Total Revenue & Appropriable Resources (\$ in thousands)	\$ 18,770	\$ 16,190	\$ 14,947	\$ 14,400	\$ 14,214
Projected Equalized Assessed Valuation (EAV)	\$ 181.30	\$ 186.74	\$ 192.34	\$ 198.11	\$ 204.05
(Based on 2020 EAV, assumes 3.0% increase for 2021 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 ¢	0.3 ¢
Gross Levy - assumes 3.5% uncollectible rate.	7,000	7,000	7,000	7,000	7,000
Projected Appropriations	2022	2023	2024	2025	2026
Capital Projects	\$ 10,455	\$ 13,339	\$ 13,233	\$ 12,222	\$ 8,282
Professional Services	8,315	2,851	1,714	2,178	5,932
Total (\$ in thousands)	\$ 18,770	\$ 16,190	\$ 14,947	\$ 14,400	\$ 14,214
Projected Appropriation Distribution by Program	2022	2023	2024	2025	2026
1000 Collection	\$ 2,717	\$ 1,141	\$ 1,818	\$ 1,127	\$ 2,537
2000 Treatment	5,773	6,341	8,464	7,951	4,903
3000 Solids Processing	1,300	650	2,338	2,605	1,124
4000 Flood & Pollution Control	2,125	3,637	958	945	2,682
5000 Solids Disposal	4,618	1,590	(309)	641	3,462
7000 General Support	2,238	380	1,350	1,811	3,178
Total (\$ in thousands)	\$ 18,770	\$ 13,739	\$ 14,619	\$ 15,080	\$ 17,887
STORMWATER MANAGEMENT FUND					
Five-Year Revenue and Tax Rate Projections	2022	2023	2024	2025	2026
Property Taxes	\$ 55,899	\$ 60,724	\$ 65,549	\$ 70,374	\$ 75,199
Investment Income & Miscellaneous Revenue	63	144	366	722	1,135
Sewer Permit Fees	600	700	800	900	1,000
Grants	4,000	2,000	2,000	2,000	2,000
Net Assets Appropriable	42,015	29,373	32,742	26,096	25,613
Equity Transfer (Debt Service for Alternate Revenue Bonds)	(9,173)	(10,823)	(10,824)	(10,823)	(10,822)
Total Revenue & Appropriable Resources (\$ in thousands)	\$ 93,404	\$ 82,117	\$ 90,632	\$ 89,268	\$ 94,124
Projected EAV	\$ 181.30	\$ 186.74	\$ 192.34	\$ 198.11	\$ 204.05
(Based on 2020 EAV, assumes 3.0% increase for 2021 and then 3.0% annually)	billion	billion	billion	billion	billion
Projected Tax Rate Cents per \$100 of EAV	3.2 ¢	3.4 ¢	3.5 ¢	3.7 ¢	3.8 ¢
Gross Levy - assumes 3.5% uncollectible rate.	\$ 57,926	\$ 62,926	\$ 67,926	\$ 72,926	\$ 77,926
Projected Appropriations	2022	2023	2024	2025	2026
Employee Cost - Salaries	\$ 11,231	\$ 11,455	\$ 11,684	\$ 11,918	\$ 12,156
Employee Cost - Health Care	920	961	1,002	1,046	1,092
Professional Services	12,619	12,258	11,338	14,959	14,622
Intergovernmental Agreements	33,398	30,000	27,000	25,000	25,000
Contractual Services	3,646	1,243	3,409	3,597	3,907
Capital Projects	29,672	25,518	35,131	31,449	35,882
Other Charges	1,918	682	1,067	1,300	1,464
Total (\$ in thousands)	\$ 93,404	\$ 82,117	\$ 90,632	\$ 89,268	\$ 94,124
Projection Appropriation Distribution by Program	2022	2023	2024	2025	2026
4000 Flood & Pollution Control	\$ 93,404	\$ 82,117	\$ 90,632	\$ 89,268	\$ 94,124
Total (\$ in thousands)	\$ 93,404	\$ 82,117	\$ 90,632	\$ 89,268	\$ 94,124

Note: Totals are rounded.

FIVE-YEAR FINANCIAL FORECAST, 2022 - 2026

TABLE IV

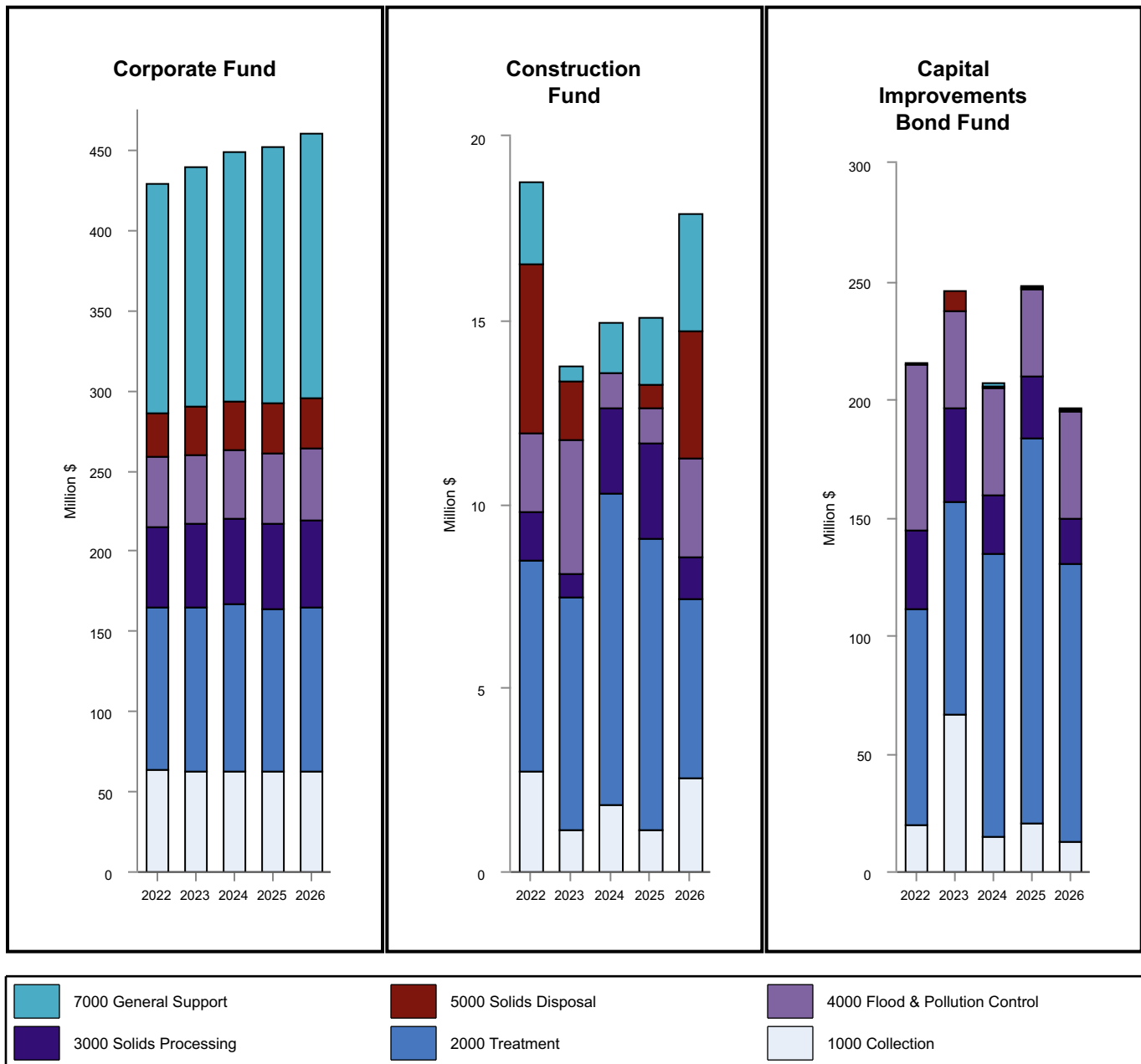
CAPITAL IMPROVEMENTS BOND FUND*					
Appropriable Resources (Cash)	2022	2023	2024	2025	2026
Bond Sales - Limited	\$ —	\$ —	\$ 25,000	\$ —	\$ —
Bond Sales - Unlimited	—	—	225,000	—	—
Bond Sales - Unlimited Stormwater Management	—	—	—	—	—
State Revolving Loan Fund Receipts	55,000	70,000	70,000	70,000	70,000
Investment Income & Grant Revenue	14,947	12,229	14,008	16,072	17,974
Beginning Cash	266,397	243,855	126,084	260,092	146,165
Total Assets Appropriable (\$ in thousands)	\$ 336,344	\$ 326,084	\$ 460,092	\$ 346,165	\$ 234,139
Expenditures	\$ 92,490	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
Ending Cash (\$ in thousands)	\$ 243,855	\$ 126,084	\$ 260,092	\$ 146,165	\$ 34,139
Projected Appropriations by Major Categories	2022	2023	2024	2025	2026
Professional Consulting Services	\$ 15,145	\$ 3,695	\$ 10,517	\$ 8,182	\$ 9,592
Capital Projects	199,985	242,150	195,105	239,072	185,865
Other Charges	800	385	1,688	927	1,063
Total (\$ in thousands)	\$ 215,930	\$ 246,230	\$ 207,310	\$ 248,182	\$ 196,520
Projected Appropriation Distribution by Program	2022	2023	2024	2025	2026
1000 Collection	\$ 19,603	\$ 66,910	\$ 14,788	\$ 20,228	\$ 13,048
2000 Treatment	92,065	89,573	119,829	163,770	117,729
3000 Solids Processing	32,715	40,225	25,238	25,651	18,938
4000 Flood & Pollution Control	70,345	40,795	45,307	37,163	45,307
5000 Solids Disposal	500	8,388	789	732	789
7000 General Support	703	339	1,358	639	708
Total (\$ in thousands)	\$ 215,930	\$ 246,230	\$ 207,310	\$ 248,182	\$ 196,520
*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					
EXISTING DEBT	2022	2023	2024	2025	2026
January 1 Debt	\$ 2,694,934	\$ 2,622,376	\$ 2,562,956	\$ 2,749,938	\$ 2,679,015
Annual Current Debt Retirement	(127,558)	(128,055)	(128,888)	(129,083)	(126,101)
Net Debt	\$ 2,567,376	\$ 2,494,321	\$ 2,434,068	\$ 2,620,855	\$ 2,552,915
PROPOSED FUTURE DEBT	2022	2023	2024	2025	2026
Annual Sale of Bonds:					
Capital Bonds - Limited	\$ —	\$ —	\$ 25,000	\$ —	\$ —
Capital Bonds - Unlimited	—	—	225,000	—	—
Alternate Bonds - Unlimited Stormwater	—	—	—	—	—
State Revolving Fund Bond Issues	55,000	70,000	70,000	70,000	70,000
Future Debt Retirement	—	(1,365)	(4,130)	(11,840)	(19,745)
Proposed New Debt (\$ in thousands)	\$ 55,000	\$ 68,635	\$ 315,870	\$ 58,160	\$ 50,255
PROJECTED DEBT OUTSTANDING	2022	2023	2024	2025	2026
Gross Levy for Existing Debt	\$ 245,854	\$ 241,078	\$ 236,975	\$ 229,776	\$ 225,496
Gross Levy for Future Debt	\$ —	\$ 3,500	\$ 5,250	\$ 6,650	\$ 8,050
Total Debt Levy	\$ 245,854	\$ 244,578	\$ 242,225	\$ 236,426	\$ 233,546
Tax Rate (cents)	13.6 ¢	13.1 ¢	12.6 ¢	11.9 ¢	11.4 ¢
Projected Stormwater Alternate Revenue Abatement**	\$ (9,173)	\$ (10,823)	\$ (10,824)	\$ (10,823)	\$ (10,822)
Projected Levy After Abatement	\$ 236,681	\$ 233,755	\$ 231,401	\$ 225,603	\$ 222,724
Projected Equalized Assessed Valuation (EAV)***	\$ 181.30	\$ 186.74	\$ 192.34	\$ 198.11	\$ 204.05
	billion	billion	billion	billion	billion
**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 Fund					

Note: Totals are rounded.

***Assumes a 3.0% increase in 2021, and then 3.0% increase annually.

FIVE-YEAR FINANCIAL FORECAST, 2022 - 2026

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, 2022 - 2026

Combined GAAP Balance Sheets - General Corporate Fund

(in Thousands)

Assets	2022	2023	2024	2025	2026
Cash	\$ 29,867	\$ 30,464	\$ 31,073	\$ 31,694	\$ 32,328
Prepaid Insurance	6,335	6,462	6,591	6,723	6,857
Investments	243,575	248,447	253,416	258,484	263,654
Receivables:					
Property Taxes	292,000	306,043	317,739	330,655	344,427
Less Allowance for Uncollectible Taxes	(10,220)	(10,712)	(11,121)	(11,573)	(12,055)
Net Property Taxes Receivable	281,780	295,331	306,618	319,082	332,372
Personal Property Replacement Tax	42,000	31,400	31,200	31,000	30,800
User Charges	3,673	3,746	3,821	3,897	3,975
Miscellaneous	685	699	713	727	742
Due from Stormwater Management Fund					
Restricted Deposits					
Inventories	37,603	38,355	39,122	39,904	40,702
Total Assets	\$ 603,518	\$ 623,504	\$ 641,354	\$ 660,511	\$ 680,630
Liabilities and Fund Equity					
Liabilities:					
Deferred Tax Revenue	\$ 244,049	\$ 246,489	\$ 248,954	\$ 251,444	\$ 253,958
Accounts Payable and Other Liabilities	26,724	26,190	25,666	25,153	25,656
Total Liabilities	\$ 270,773	\$ 272,679	\$ 274,620	\$ 276,597	\$ 279,614
Fund Equity:					
Fund Balances					
Prepaid Insurance	\$ 6,335	\$ 6,462	\$ 6,591	\$ 6,723	\$ 6,857
Non-spendable - Inventory	37,603	38,355	39,122	39,904	40,702
Restricted - Working Cash	290,650	296,463	302,392	308,440	314,609
Real Estate Escrow	2,407	2,409	2,412	2,414	2,416
Reserve Claim	35,973	36,692	37,426	38,175	38,939
Deposits					
Unassigned:					
Unassigned	(40,223)	(29,556)	(21,209)	(11,742)	(2,507)
Total Fund Equity	\$ 332,745	\$ 350,825	\$ 366,734	\$ 383,914	\$ 401,016
Total Liabilities and Fund Equity	\$ 603,518	\$ 623,504	\$ 641,354	\$ 660,511	\$ 680,630

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.

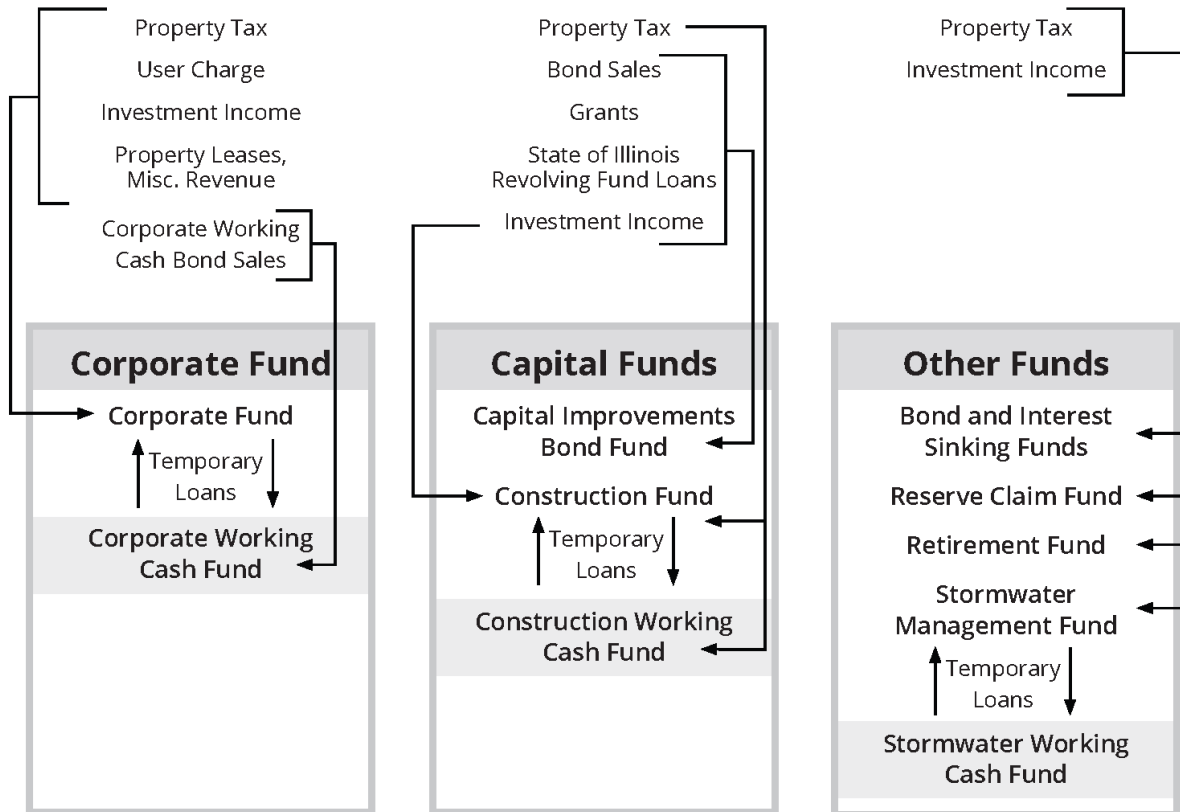
The financial statements are first presented in summary, with an overall financial narrative, then with summary statements of revenue and expenditures for 2020 through the Budget Year 2022. Consolidated statements of taxes receivable, providing historical data on tax levies, are included in this section. 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.

Financial Narrative	87
Summary of Revenue, Expenditures, and Net Assets Appropriable, 2022 - 2020	91
Summary of 2022 Estimated Assets Appropriable for All Funds	95
Combined Balance Sheets, 2020 - 2019	96
Appropriation for Liabilities, 2022 - 2021	98
Taxes Receivable, 2021 and Prior Years, Including Estimate for 2022	99
Personal Property Replacement Taxes Receivable, 2022 and Prior Years, Including Estimate for 2022	100
Corporate Fund: Financial Narrative	101
Revenue Graphs, 2015 - 2022	103
Estimated Balance Sheet, 2022 - 2021	104
Appropriable Revenue, 2022 - 2019	105
Financing, 2022 - 2017	106
Corporate Working Cash Fund:	
Estimated Balance Sheet, 2022 - 2021	107
Revenues, 2022 - 2019	107
Capital Funds: Financial Narrative	108
Capital Improvements Bond Fund:	
Estimated Balance Sheet, 2022 - 2021	110
Appropriable Revenue, 2022 - 2019	111
Construction Fund:	
Estimated Balance Sheet, 2022 - 2021	112
Financing, 2022 - 2017, and Appropriable Revenue, 2022 - 2019	113
Construction Working Cash Fund:	
Estimated Balance Sheet, 2022 - 2021	114
Revenues, 2022 - 2019	114
Other Funds: Financial Narrative	115
Stormwater Management Fund:	
Estimated Balance Sheet, 2022 - 2021	116
Financing, 2022 - 2017 and Appropriable Revenue, 2022 - 2019	117
Stormwater Working Cash Fund:	
Estimated Balance Sheet, 2022 - 2021	118
Appropriable Revenue, 2022 - 2019	118
Bond Redemption & Interest Fund:	
Estimated Balance Sheet, 2022 - 2021	119
Appropriable Revenue, 2022 - 2019	120
Reserve Claim Fund:	
Estimated Balance Sheet, 2022 - 2021	121
Appropriable Revenue, 2022 - 2019	121
Retirement Fund:	
Estimated Balance Sheet, 2022 - 2021	122
Appropriable Revenue, 2022 - 2019	122

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 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 complies 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, regarding 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 92 - 94 of the 2022 Budget and similar summaries in prior years' budgets. This section contains a summary of all District funds.

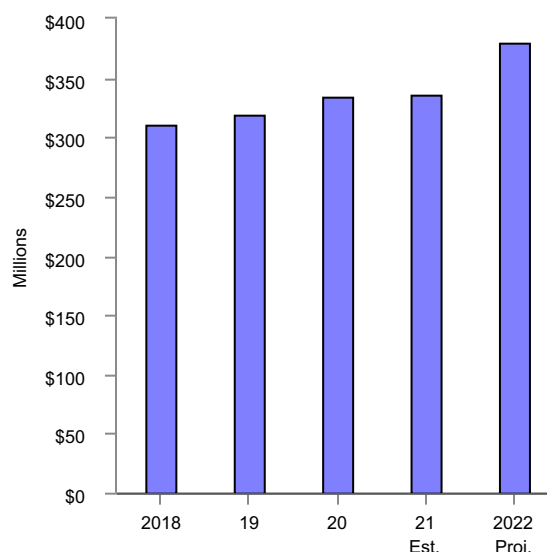
TAX SOURCES

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, except for the District's Capital Improvements Bond Fund, derive their revenues primarily from property taxes. Approximately 65.0 percent of the 2022 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 2022 are detailed on page 99. 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 2022 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 \$60.4 million for 2022, an increase of \$25.8 million from the 2021 Original Budget, or 74.7 percent. Beginning in 2021, PPRT, along with all corporate income taxes for the State of Illinois began to over-perform, particularly in light of estimates that had been revised downward in early 2020.

Exhibit 1 presents revenue from net tax sources for the years 2018 - 2022. 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 2021 CPI increase is projected to be 4.5 percent for the 2022 levies, while a 0.5 percent increase is projected for new development and newly annexed properties. The 2022 property tax levy subject to the tax cap is 3.6 percent, below the projected tax cap. The Stormwater Management Fund and the payment of bond principal and interest are exempt from the tax cap extension limitations.

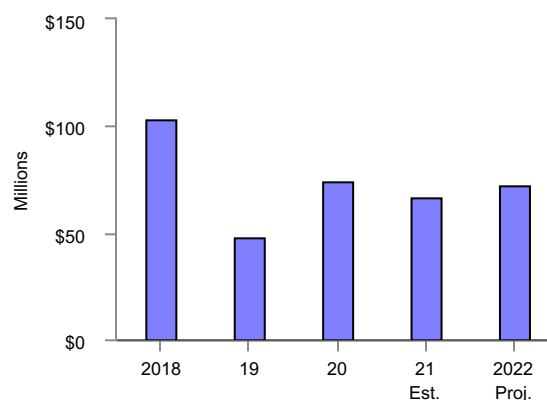
Exhibit 1 - Net Tax Sources



GRANTS AND LOANS

Federal and state grants and loans contribute to finance the District's capital programs. For 2022, \$55.0 million in Wastewater/Stormwater State Revolving Fund (SRF) loan revenue and \$17.1 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 applications to the Federal Emergency Management Agency for reimbursement of costs associated with the COVID-19 global pandemic and received 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 2018 - 2022. The District anticipates receiving an annual allocation of up to \$55 million in SRF loans in each of the next four years.

Exhibit 2 - Grants and Loans



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 \$500 million bond sale in late 2021, with \$155 million in new general obligation bonds and \$345 million in refunding bonds to take advantage of the historically low interest rates. 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 108 provides a more detailed discussion. The statement of outstanding bonds and statutory debt margin on pages 69 and 70 shows the District's strong position. The Five-Year Financial Forecast on pages 76 and 84 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 2022 are \$38.0 million, an increase of \$1 million from the 2021 budget.

Land rentals, investment income, sewer permit fees, connection impact fees, and other revenues will provide an estimated \$51.4 million in 2022. 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 2022. Interest rates on short-term securities are expected to remain low during 2022. Investments are predominately short-term in nature. Sewer permit revenue estimates are based on anticipated projects and 2021 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

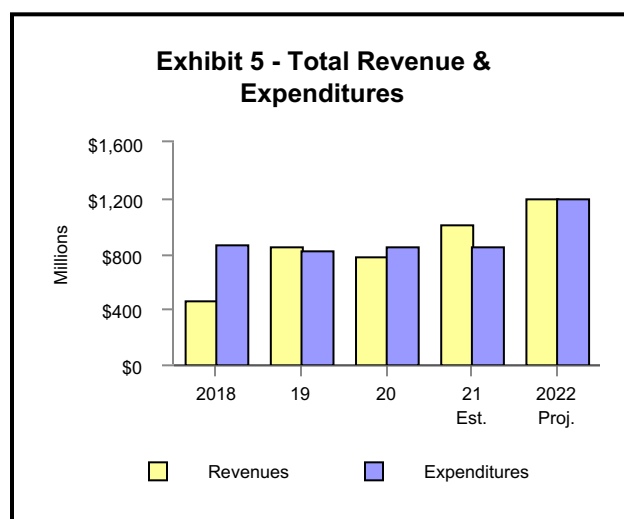
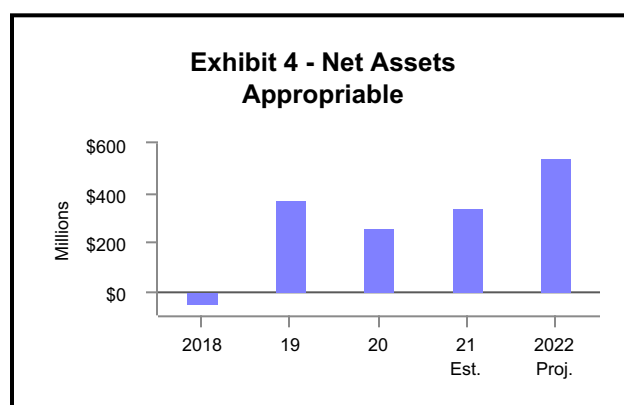
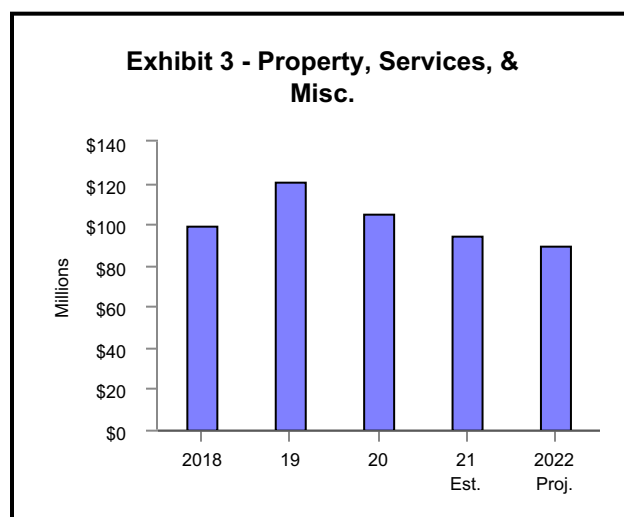
Exhibit 4 shows the trend in net assets appropriable, which is primarily impacted by bond sales, expenditures for capital projects, and the reservation of future years' principal and interest payments in the debt service funds. Net assets appropriable have been used to reduce future years' taxes. Beginning in 2005, a portion of the projected Corporate Fund net assets was left unappropriated to maintain a fiscally sound fund balance. The negative amount in 2018 is 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.

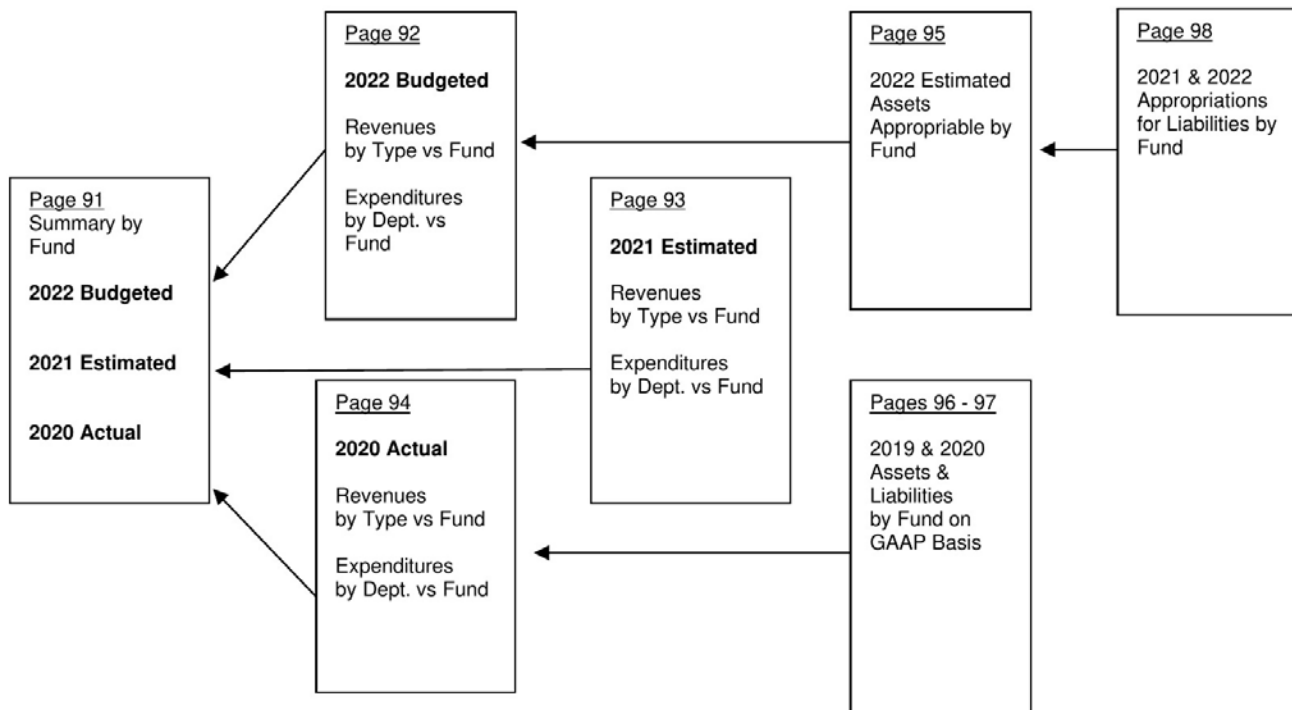
The 2022 Budget includes a \$30.0 million equity transfer from the Corporate Fund and is the result of holding one-time revenues, primarily excess Tax Increment Financing Surplus distributions from the City of Chicago, in reserve until a statutory change is effective to allow the transfer. Within the Corporate Fund, the 2022 Budget includes technology replacement projects matching of \$6.9 million one-time revenues with one time expenditures. However, a projected \$10.2 million increase in electricity costs are projected to be recurring operational costs and are reflected in the five-year forecast.

For 2022, a portion of the Corporate Fund projected net assets will remain unappropriated to ensure a fiscally responsible fund balance.



SUMMARY FINANCIAL STATEMENTS

Summary financial statements presented on pages 91 - 94 provide comparisons of revenues and expenditures for all funds for the years 2020 - 2022. These statements provide a financial summarization by fund of the 2022 Budget as proposed, the estimated status at 2021 fiscal year-end, and the actual results of operations for fiscal year 2020. The relationships among the pages are diagrammed below.



The table of taxes receivable on page 99 provides detailed data on property tax levies and tax receipts from 2017 to 2021. While 2017 through 2019 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 2017 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 101 - 122.

ALL FUNDS**SUMMARY OF REVENUE, EXPENDITURES, AND NET ASSETS APPROPRIABLE (b)
2022 BUDGETED, 2021 ESTIMATED, AND 2020 ACTUAL**

(In Thousands)

	FUND							
	CORPORATE	CAPITAL IMPROVEMENTS BOND	CONSTRUCTION	STORMWATER MANAGEMENT	RETIREMENT (d)	BOND REDEMPTION & INTEREST (d)	RESERVE CLAIM (d)	TOTAL
2022 BUDGETED								
Net Assets Appropriable	\$ 172,828.7	\$ (53,279.7)	\$ 12,056.7	\$ 42,914.0	\$ 88,754.0	\$ 232,148.9	\$ 44,391.3	\$ 539,813.9
Net Assets Appropriated	\$ 34,362.5	\$ (53,279.7)	\$ 12,056.7	\$ 42,914.0	\$ 88,754.0	\$ 232,148.9	\$ 44,391.3	\$ 401,347.7
Revenue	394,823.0	261,205.7	6,713.0	50,490.0	30,000.0	45,289.4	74.0	788,595.1
Appropriation	\$ 429,185.5	\$ 207,926.0	\$ 18,769.7	\$ 93,404.0	\$ 118,754.0	\$ 277,438.3	\$ 44,465.3	\$ 1,189,942.8
2021 ESTIMATED								
Beginning Net Assets Appropriable as adjusted (c)	\$ 137,517.6	\$ (215,142.3)	\$ 13,620.7	\$ 47,280.0	\$ 88,127.0	\$ 226,040.7	\$ 41,720.4	\$ 339,164.1
Revenue	362,972.0	224,653.2	6,713.0	44,974.8	—	6,085.2	103.0	645,501.2
Adjustment for 2021 receipts (a)	27,187.4	—	(86.6)	1,061.2	—	—	—	28,162.0
Expenditures	(354,848.3)	(107,570.7)	(8,190.4)	(50,402.0)	(88,127.0)	(232,125.9)	(4,709.0)	(845,973.3)
Ending Net Assets Appropriable	\$ 172,828.7	\$ (98,059.8)	\$ 12,056.7	\$ 42,914.0	\$ —	\$ —	\$ 37,114.4	\$ 166,854.0
2020 ACTUAL								
Beginning Net Assets Appropriable as adjusted (c)	\$ 118,857.0	\$ (276,044.1)	\$ 14,516.3	\$ 50,980.5	\$ 87,319.0	\$ 225,651.9	\$ 36,706.2	\$ 257,986.8
Revenue	365,304.9	70,507.7	6,775.4	49,127.4	20,000.0	4,370.0	391.9	516,477.3
Expenditures	(346,644.4)	(94,904.9)	(7,671.0)	(52,827.9)	(107,319.0)	(233,021.9)	(2,651.5)	(845,040.6)
Ending Net Assets Appropriable	\$ 137,517.6	\$ (300,441.2)	\$ 13,620.7	\$ 47,280.0	\$ —	\$ (3,000.0)	\$ 34,446.6	\$ (70,576.3)
Adjusted NAA 1/1/2021	\$ 164,705.0		\$ 13,534.1	\$ 48,341.2				
Adjustment (a)	\$ 27,187.4		\$ (86.6)	\$ 1,061.2				

(a) Adjustment to NAA required due to current 2021 estimate on collection of property tax levies and PPRT. See the Balance Sheets and Appropriable Revenue statements 01/01/2021 for the Corporate (pages 104 - 105), Construction (pages 112 - 113), and Stormwater Management (pages 116 - 117) Funds. The adjustment is reflected in the 2021 revenues.

(b) This statement is a summary presentation of pages 92 - 94, 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

2022 BUDGETED

(In Thousands)

	FUND							
	CORPORATE	CAPITAL IMPROVEMENTS BOND*	CONSTRUCTION	STORMWATER MANAGEMENT	RETIREMENT	BOND REDEMPTION & INTEREST	RESERVE CLAIM	TOTAL
REVENUE								
Net Assets Appropriable	\$ 172,828.7	\$ (53,279.7)	\$ 12,056.7	\$ 42,914.0	\$ 88,754.0	\$ 232,148.9	\$ 44,391.3	\$ 539,813.9
Reserve for Transfer to Retirement Fund	(30,000.0)	—	—	—	30,000.0	—	—	—
Budget Reserve	(108,466.2)	—	—	—	—	—	—	(108,466.2)
Net Property Taxes	274,542.5	—	6,755.0	55,898.6	—	—	—	337,196.1
Personal Property Replacement Tax	42,000.0	—	—	—	—	—	—	42,000.0
Working Cash Borrowings Adjustment	(6,342.5)	—	(55.0)	(898.6)	—	—	—	(7,296.1)
Bond Sales (Present & Future)	—	225,223.8	—	—	—	—	—	225,223.8
Grants (Federal & State)	75.0	12,977.3	—	4,000.0	—	—	—	17,052.3
Investment Income	592.0	1,970.0	13.0	63.0	—	151.0	74.0	2,863.0
State Revolving Fund Loans	—	55,000.0	—	—	—	—	—	55,000.0
Property & Services	25,000.0	—	—	600.0	—	—	—	25,600.0
User Charge	38,000.0	—	—	—	—	—	—	38,000.0
TIF Differential Fee & Impact Fee	14,800.0	—	—	—	—	—	—	14,800.0
Equity Transfer for Stormwater Bond Payment	—	—	—	(9,173.0)	—	9,173.0	—	—
Equity Transfer	—	(35,965.4)	—	—	—	35,965.4	—	—
Resource Recovery	511.0	—	—	—	—	—	—	511.0
Miscellaneous	5,645.0	2,000.0	—	—	—	—	—	7,645.0
TOTAL REVENUE	\$ 429,185.5	\$ 207,926.0	\$ 18,769.7	\$ 93,404.0	\$ 118,754.0	\$ 277,438.3	\$ 44,465.3	\$ 1,189,942.8
EXPENDITURES								
Board of Commissioners	\$ 5,422.4	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 5,422.4
General Administration	23,340.4	—	—	—	—	—	—	23,340.4
Monitoring & Research	32,888.2	—	—	—	—	—	—	32,888.2
Procurement & Materials Mgmt.	10,736.0	—	—	—	—	—	—	10,736.0
Human Resources	63,235.7	—	—	—	—	—	—	63,235.7
Information Technology	21,636.6	—	—	—	—	—	—	21,636.6
Law	8,058.7	—	—	—	—	—	—	8,058.7
Finance	3,958.0	—	—	—	—	—	—	3,958.0
Engineering	26,838.0	207,926.0	18,769.7	—	—	—	—	253,533.7
Maintenance & Operations	233,071.5	—	—	—	—	—	—	233,071.5
Stormwater Management Fund	—	—	—	93,404.0	—	—	—	93,404.0
Retirement Fund	—	—	—	—	118,754.0	—	—	118,754.0
Bond Redemption & Interest Fund	—	—	—	—	—	277,438.3	—	277,438.3
Reserve Claim Fund	—	—	—	—	—	—	44,465.3	44,465.3
TOTAL EXPENDITURES	\$ 429,185.5	\$ 207,926.0	\$ 18,769.7	\$ 93,404.0	\$ 118,754.0	\$ 277,438.3	\$ 44,465.3	\$ 1,189,942.8

* 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.

ALL FUNDS

SUMMARY OF REVENUE AND EXPENDITURES

2021 ESTIMATED

(In Thousands)

	FUND							
	CORPORATE	CAPITAL IMPROVEMENTS BOND*	CONSTRUCTION	STORMWATER MANAGEMENT	RETIREMENT	BOND REDEMPTION & INTEREST	RESERVE CLAIM	TOTAL
REVENUE								
Net Assets Appropriable	\$ 137,517.6	\$ (215,142.3)	\$ 13,620.7	\$ 47,280.0	\$ 88,127.0	\$ 226,040.7	\$ 41,720.4	\$ 339,164.1
Adjustment for Receipts	27,187.4	—	(86.6)	1,061.2	—	—	—	28,162.0
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)	—	155,000.0	—	—	—	—	—	155,000.0
Grants (Federal & State)	495.4	11,327.3	—	—	—	—	—	11,822.7
Investment Income	753.0	1,330.0	13.0	33.0	—	124.0	103.0	2,356.0
State Revolving Fund Loans	—	55,000.0	—	—	—	—	—	55,000.0
Property & Services	24,503.8	—	—	600.0	—	—	—	25,103.8
User Charge	40,000.0	—	—	—	—	—	—	40,000.0
TIF Differential Fee & Impact Fee	19,327.2	—	—	—	—	—	—	19,327.2
Equity Transfer for Stormwater Bond Payment	—	—	—	(5,961.2)	—	5,961.2	—	—
Resource Recovery	350.0	—	—	—	—	—	—	350.0
Miscellaneous	5,042.6	1,995.9	—	3.0	—	—	—	7,041.5
TOTAL REVENUE	\$ 527,677.0	\$ 9,510.9	\$ 20,247.1	\$ 93,316.0	\$ 88,127.0	\$ 232,125.9	\$ 41,823.4	\$ 1,012,827.3
EXPENDITURES								
Board of Commissioners	\$ 4,698.6	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 4,698.6
General Administration	17,832.4	—	—	—	—	—	—	17,832.4
Monitoring & Research	30,247.1	—	—	—	—	—	—	30,247.1
Procurement & Materials Mgmt.	9,711.1	—	—	—	—	—	—	9,711.1
Human Resources	51,603.6	—	—	—	—	—	—	51,603.6
Information Technology	17,532.9	—	—	—	—	—	—	17,532.9
Law	6,535.9	—	—	—	—	—	—	6,535.9
Finance	3,484.4	—	—	—	—	—	—	3,484.4
Engineering	22,989.6	107,570.7	8,190.4	—	—	—	—	138,750.7
Maintenance & Operations	190,212.7	—	—	—	—	—	—	190,212.7
Stormwater Management Fund	—	—	—	50,402.0	—	—	—	50,402.0
Retirement Fund	—	—	—	—	88,127.0	—	—	88,127.0
Bond Redemption & Interest Fund	—	—	—	—	—	232,125.9	—	232,125.9
Reserve Claim Fund	—	—	—	—	—	—	4,709.0	4,709.0
TOTAL EXPENDITURES	\$ 354,848.3	\$ 107,570.7	\$ 8,190.4	\$ 50,402.0	\$ 88,127.0	\$ 232,125.9	\$ 4,709.0	\$ 845,973.3

* 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.

ALL FUNDS

SUMMARY OF REVENUE AND EXPENDITURES

2020 ACTUAL

(In Thousands)

	FUND							
	CORPORATE	CAPITAL IMPROVEMENTS BOND*	CONSTRUCTION	STORMWATER MANAGEMENT	RETIREMENT	BOND REDEMPTION & INTEREST	RESERVE CLAIM	TOTAL
REVENUE								
Net Assets Appropriable	\$ 118,857.0	\$ (276,044.1)	\$ 14,516.3	\$ 50,980.5	\$ 87,319.0	\$ 228,651.9	\$ 36,706.2	\$ 260,986.8
Adjustment for Receipts	(2,900.2)	—	(63.7)	620.1	—	—	—	(2,343.8)
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	—	—	—	—	—	—	—	—
Grants (Federal & State)	72.1	15,456.9	—	316.4	—	—	—	15,845.4
Investment Income	1,881.6	2,572.4	124.9	526.0	—	771.0	391.0	6,266.9
State Revolving Fund Loans	—	58,329.6	—	—	—	—	—	58,329.6
Property & Services	24,389.2	—	—	957.7	—	—	—	25,346.9
User Charge	45,901.0	—	—	—	—	—	—	45,901.0
TIF Differential Fee & Impact Fee	18,520.1	—	—	—	—	—	—	18,520.1
Equity Transfer for Stormwater Bond Payment	—	—	—	(3,599.0)	—	3,599.0	—	—
Equity Transfer to Retirement Fund**	—	(9,000.0)	—	—	20,000.0	(3,000.0)	—	8,000.0
Resource Recovery	364.8	—	—	—	—	—	—	364.8
Miscellaneous	5,876.4	3,148.8	14.2	6.2	—	—	0.9	9,046.5
TOTAL REVENUE	\$ 484,162.0	\$ (205,536.4)	\$ 21,291.7	\$ 100,107.9	\$ 107,319.0	\$ 230,021.9	\$ 37,098.1	\$ 774,464.2
EXPENDITURES								
Board of Commissioners	\$ 4,490.3	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 4,490.3
General Administration	17,397.5	—	—	—	—	—	—	17,397.5
Monitoring & Research	29,614.8	—	—	—	—	—	—	29,614.8
Procurement & Materials Mgmt.	8,621.6	—	—	—	—	—	—	8,621.6
Human Resources	51,144.5	—	—	—	—	—	—	51,144.5
Information Technology	15,694.1	—	—	—	—	—	—	15,694.1
Law	6,120.6	—	—	—	—	—	—	6,120.6
Finance	3,535.6	—	—	—	—	—	—	3,535.6
Engineering	22,869.3	94,904.9	7,671.0	—	—	—	—	125,445.2
Maintenance & Operations	187,156.0	—	—	—	—	—	—	187,156.0
Stormwater Management Fund	—	—	—	52,827.9	—	—	—	52,827.9
Retirement Fund	—	—	—	—	107,319.0	—	—	107,319.0
Bond Redemption & Interest Fund	—	—	—	—	—	233,021.9	—	233,021.9
Reserve Claim Fund	—	—	—	—	—	—	2,651.5	2,651.5
TOTAL EXPENDITURES	\$ 346,644.3	\$ 94,904.9	\$ 7,671.0	\$ 52,827.9	\$ 107,319.0	\$ 233,021.9	\$ 2,651.5	\$ 845,040.5

* 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.

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 2022

DESCRIPTION	FUND							
	CORPORATE	CAPITAL IMPROVEMENTS BOND	CONSTRUCTION	STORMWATER MANAGEMENT	RETIREMENT	BOND REDEMPTION & INTEREST	RESERVE CLAIM	TOTAL
2022 Revenue	\$ 394,823,000	\$ 297,171,072	\$ 6,713,000	\$ 59,663,000	\$ —	\$ 151,000	\$ 74,000	\$ 758,595,072
Resources Available at 01/01/2022	452,042,893	251,316,000	20,728,900	95,014,048	88,754,000	329,921,609	44,666,300	1,282,443,750
Total Resources	\$ 846,865,893	\$ 548,487,072	\$ 27,441,900	\$ 154,677,048	\$ 88,754,000	\$330,072,609	\$ 44,740,300	\$ 2,041,038,822
Liabilities and Designations at 01/01/2022	(279,214,232)	(304,595,669)	(8,672,200)	(52,100,048)	—	(97,772,725)*	(275,000)	(742,629,874)
Equity Transfer	(30,000,000)	(35,965,403)	—	(9,173,000)	30,000,000	45,138,403	—	—
Budget Reserve	(108,466,161)	—	—	—	—	—	—	(108,466,161)
ASSETS APPROPRIABLE	\$ 429,185,500	\$ 207,926,000	\$ 18,769,700	\$ 93,404,000	\$118,754,000	\$277,438,287	\$ 44,465,300	\$ 1,189,942,787

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

GAAP Basis Statement From 2020 Comprehensive Annual Financial Report - Exhibit A-1

Governmental Funds Balance Sheets / Statements of Net Assets

December 31, 2020 (with comparative amounts for prior year)

	(in thousands of dollars)					
	General Corporate Fund		Debt Service Fund		Capital Improvement Bond Funds	
	2020	2019	2020	2019	2020	2019
Assets and deferred outflows of resources						
Assets:						
Cash	\$ 28,707	\$ 7,449	\$ 1,636	\$ 1,641	\$ 42,472	\$ 39,914
Certificates of deposit	55,650	63,984	—	15,008	305	88,748
Investments (note 4)	178,467	172,490	89,659	70,391	181,430	134,292
Prepaid expenses	6,089	5,825	—	—	—	—
Taxes receivable, net (note 5)	264,366	252,901	230,821	234,517	—	—
Other receivables, net (note 5)	4,189	2,643	—	—	24,636	8,021
Due from other funds (note 12)	298	224	—	—	—	—
Restricted deposits	458	436	—	—	32,137	33,009
Inventories	36,143	35,056	—	—	—	—
Capital assets not being depreciated/amortized (note 6)	—	—	—	—	—	—
Capital assets being depreciated/amortized, net (note 6)	—	—	—	—	—	—
Total assets	574,367	541,008	322,116	321,557	280,980	303,984
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	\$ 574,367	\$ 541,008	\$ 322,116	\$ 321,557	\$ 280,980	\$ 303,984
Liabilities, deferred inflows of resources, and fund balances/net position						
Liabilities:						
Accounts payable and other liabilities (note 5)	\$ 27,826	\$ 27,047	\$ —	\$ —	\$ 26,884	\$ 25,456
Due to Pension Trust Fund (note 12)	—	—	—	—	—	—
Due to other funds (note 12)	—	—	—	—	—	—
Accrued interest payable	—	—	—	—	—	—
Unearned Revenue (note 5)	8,807	9,513	—	—	32,137	33,009
Long-term liabilities: (note 11)						
Due within one year	—	—	—	—	—	—
Due in more than one year	—	—	—	—	—	—
Total liabilities	36,633	36,560	—	—	59,021	58,465
Deferred inflows of resources:						
Unavailable tax revenue (note 5)	239,241	226,589	208,855	210,122	—	—
Other unavailable revenue (note 5)	—	—	—	—	953	951
Deferred inflows for pension and OPEB related amounts	—	—	—	—	—	—
Total deferred inflows of resources	239,241	226,589	208,855	210,122	953	951
Fund balances:						
Nonspendable:						
Prepaid insurance	6,089	5,825	—	—	—	—
Inventories	36,143	35,056	—	—	—	—
Restricted for:						
Deposits	458	436	—	—	—	—
Working cash	279,364	284,425	—	—	—	—
Reserve claims	34,576	29,765	—	—	—	—
Debt service	—	—	113,261	111,435	—	—
Capital projects	—	—	—	—	61,924	77,335
Assigned	—	—	—	—	159,082	167,233
Unassigned (Deficit)	(58,137)	(77,648)	—	—	—	—
Total fund balances	298,493	277,859	113,261	111,435	221,006	244,568
Total liabilities, deferred inflows, and fund balances	\$ 574,367	\$ 541,008	\$ 322,116	\$ 321,557	\$ 280,980	\$ 303,984
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	
2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
\$ —	\$ —	\$ 3,210	\$ 1,959	\$ 76,025	\$ 50,963	\$ —	\$ —	\$ 76,025	\$ 50,963
—	—	11,026	27,745	66,981	195,485	—	—	66,981	195,485
—	—	66,679	56,049	516,235	433,222	—	—	516,235	433,222
—	—	—	74	6,089	5,899	—	—	6,089	5,899
76,719	75,736	55,836	58,408	627,742	621,562	—	—	627,742	621,562
—	—	746	1,061	29,571	11,725	—	—	29,571	11,725
—	—	—	—	298	224	(298)	(224)	—	—
—	—	—	—	32,595	33,445	—	—	32,595	33,445
—	—	—	—	36,143	35,056	—	—	36,143	35,056
—	—	—	—	—	—	6,103,652	6,039,214	6,103,652	6,039,214
—	—	—	—	—	—	1,647,786	1,660,838	1,647,786	1,660,838
76,719	75,736	137,497	145,296	1,391,679	1,387,581	7,751,140	7,699,828	9,142,819	9,087,409
—	—	—	—	—	—	3,318	3,845	3,318	3,845
—	—	—	—	—	—	326,512	369,064	326,512	369,064
—	—	—	—	—	—	329,830	372,909	329,830	372,909
\$ 76,719	\$ 75,736	\$ 137,497	\$ 145,296	\$ 1,391,679	\$ 1,387,581	\$ 8,080,970	\$ 8,072,737	\$ 9,472,649	\$ 9,460,318
\$ —	\$ —	\$ 9,127	\$ 8,171	\$ 63,837	\$ 60,674	\$ —	\$ —	\$ 63,837	\$ 60,674
13,648	13,859	—	—	13,648	13,859	94,204	73,587	107,852	87,446
—	—	298	224	298	224	(298)	(224)	—	—
—	—	—	—	—	—	16,473	17,476	16,473	17,476
—	—	—	—	40,944	42,522	—	—	40,944	42,522
—	—	—	—	—	—	76,891	153,710	76,891	153,710
—	—	—	—	—	—	4,135,261	4,287,289	4,135,261	4,287,289
13,648	13,859	9,425	8,395	118,727	117,279	4,322,531	4,531,838	4,441,258	4,649,117
63,071	61,877	50,518	52,332	561,685	550,920	(561,685)	(550,920)	—	—
—	—	—	—	953	951	(953)	(951)	—	—
—	—	—	—	—	—	206,039	74,641	206,039	74,641
63,071	61,877	50,518	52,332	562,638	551,871	(356,599)	(477,230)	206,039	74,641
—	—	—	74	6,089	5,899	(6,089)	(5,899)	—	—
—	—	—	—	36,143	35,056	(36,143)	(35,056)	—	—
—	—	—	—	458	436	(458)	(436)	—	—
—	—	59,096	60,680	338,460	345,106	(338,460)	(345,106)	—	—
—	—	—	—	34,576	29,765	(34,576)	(29,765)	—	—
—	—	—	—	113,261	111,435	(113,261)	(111,435)	—	—
—	—	18,458	23,889	80,382	101,224	(80,382)	(101,224)	—	—
—	—	—	—	159,082	167,233	(159,082)	(167,233)	—	—
—	—	—	(74)	(58,137)	(77,723)	58,137	77,723	—	—
—	—	77,554	84,569	710,314	718,431	(710,314)	(718,431)	—	—
\$ 76,719	\$ 75,736	\$ 137,497	\$ 145,296	\$ 1,391,679	\$ 1,387,581				
Net position:									
Net investment in capital assets						5,035,623	4,950,141	5,035,623	4,950,141
Restricted for corporate working cash						279,364	284,425	279,364	284,425
Restricted for reserve claim						15,227	9,194	15,227	9,194
Restricted for debt service						305,643	304,084	305,643	304,084
Restricted for capital projects						66,728	57,835	66,728	57,835
Restricted for construction working cash						21,960	22,713	21,960	22,713
Restricted for stormwater working cash						37,136	37,967	37,136	37,967
Unrestricted (Deficit)						(936,329)	(929,799)	(936,329)	(929,799)
Total net position						\$ 4,825,352	\$ 4,736,560	\$ 4,825,352	\$ 4,736,560

Notes reference the 2020 Comprehensive Annual Financial Report of the District - Available on the internet at www.mwrd.org

APPROPRIATION FOR LIABILITIES - BY FUND **JANUARY 1, 2022 AND 2021**

CORPORATE FUND	2022	2021
Unpaid Bills:		
Accrued Salaries & Wages	\$ 2,242,000	\$ 2,782,000
Personal Services - Other	1,900,000	3,100,000
Payroll Withholding & Miscellaneous	600,000	843,000
Contractual Services	2,472,232	16,000,000
Due to Corporate Working Cash Fund	272,000,000	256,100,000
Designated for Future Claims Liabilities	—	—
Total Liabilities of Corporate Fund	\$ 279,214,232	\$ 278,825,000
CONSTRUCTION FUND		
Unpaid Bills:		
Contracts Payable	\$ 1,472,200	\$ 2,500,000
Contractual Services	500,000	—
Machinery & Equipment	—	—
Due to Construction Working Cash Fund	6,700,000	6,700,000
Total Liabilities of Construction Fund	\$ 8,672,200	\$ 9,200,000
CAPITAL IMPROVEMENTS BOND FUND		
Unpaid Bills:		
Contractual Services	\$ —	\$ 10,000,000
Contracts Payable	185,000,000	185,357,100
Total Liabilities of Capital Improvements Bond Fund	\$ 185,000,000	\$ 195,357,100
RESERVE CLAIM FUND		
Accounts Payable & Other Liabilities	\$ 275,000	\$ 275,000
BOND REDEMPTION & INTEREST FUND		
Future Payment of Principal & Interest	\$ 97,772,725	\$ 112,866,563
STORMWATER MANAGEMENT FUND		
Accrued Salaries & Wages	\$ —	\$ 132,042
Vouchers Payable	500,048	4,500,000
Contracts Payable	1,300,000	—
Due to Stormwater Working Cash Fund	50,300,000	26,500,000
Total Liabilities of Stormwater Management Fund	\$ 52,100,048	\$ 31,132,042
TOTAL LIABILITIES JANUARY 1, 2022 AND 2021	\$ 623,034,205	\$ 627,655,705

**STATEMENT OF TAXES RECEIVABLE FOR 2021 AND PRIOR YEARS AT JANUARY 1, 2022
INCLUDING THE ESTIMATED COLLECTIONS FOR THE YEAR 2022**

YEAR FUND		TAX EXTENSION	COLLECTED THRU 12/31/21	%	UNCOLLECTED AT 12/31/21	RESERVE \$	%	ESTIMATED NET TAXES RECEIVABLE	CASH ESTIMATED IN 2022
2021	Corporate	\$ 270,880,900	\$ —	— %	\$ 270,880,900	\$ 9,480,832	3.5 %	\$ 261,400,069	\$ 264,108,878
	Bond Redemption & Interest	247,719,686	—	— %	247,719,686	8,670,189	3.5 %	239,049,497	241,526,694
	Retirement	72,741,500	—	— %	72,741,500	2,545,953	3.5 %	70,195,500	70,195,500
	Construction	7,000,000	—	— %	7,000,000	245,000	3.5 %	6,755,000	6,825,000
	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	\$ 658,768,086	\$ —	— %	\$ 658,768,086	\$ 23,056,883	3.5 %	\$ 635,711,155	\$ 641,571,421
2020	Corporate	\$ 267,104,254	\$ 260,426,648	97.5 %	\$ 6,677,606	\$ 9,348,649	3.5 %	—	\$ 2,938,147
	Bond Redemption & Interest	239,216,641	233,236,225	97.5 %	5,980,416	8,372,582	3.5 %	—	2,631,383
	Retirement	72,227,600	70,421,910	97.5 %	1,805,690	2,527,966	3.5 %	—	—
	Construction	7,000,000	6,825,000	97.5 %	175,000	245,000	3.5 %	—	77,000
	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	\$ 645,974,495	\$ 629,825,133	97.5 %	\$ 16,149,362	\$ 22,609,107	3.5 %	—	\$ 6,311,216
2019	Corporate	\$ 255,557,993	\$ 251,980,181	98.6 %	\$ 3,577,812	\$ 8,944,530	3.5 %	—	\$ (1,788,906)
	Bond Redemption & Interest	243,048,461	239,645,783	98.6 %	3,402,678	8,506,696	3.5 %	—	(1,701,339)
	Retirement	71,565,400	69,060,611	96.5 %	2,504,789	2,504,789	3.5 %	—	—
	Construction	7,600,000	7,493,600	98.6 %	106,400	266,000	3.5 %	—	(53,200)
	Stormwater Management	52,926,000	52,185,036	98.6 %	740,964	1,852,410	3.5 %	—	(370,482)
	Reserve Claim	7,500,000	7,395,000	98.6 %	105,000	262,500	3.5 %	—	(52,500)
	Total	\$ 638,197,854	\$ 627,760,211	98.4 %	\$ 10,437,643	\$ 22,336,925	3.5 %	—	\$ (3,966,427)
2018	Corporate	\$ 241,153,834	\$ 238,018,834	98.7 %	\$ 3,135,000	\$ 8,440,384	3.5 %	—	\$ (1,688,077)
	Bond Redemption & Interest	238,732,075	235,628,558	98.7 %	3,103,517	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	11,547,900	98.7 %	152,100	409,500	3.5 %	—	(81,900)
	Stormwater Management	47,826,000	47,204,262	98.7 %	621,738	1,673,910	3.5 %	—	(334,782)
	Reserve Claim	6,000,000	5,922,000	98.7 %	78,000	210,000	3.5 %	—	(42,000)
	Total	\$ 616,946,106	\$ 607,352,054	98.4 %	\$ 9,594,052	\$ 21,593,114	3.5 %	—	\$ (3,817,883)
2017	Corporate	\$ 224,824,731	\$ 220,103,412	97.9 %	\$ 4,721,319	\$ 7,868,866	3.5 %	—	\$ (674,474)
	Bond Redemption & Interest	232,751,026	227,863,254	97.9 %	4,887,772	8,146,286	3.5 %	—	(698,253)
	Retirement	73,438,135	71,602,182	97.5 %	1,835,953	2,570,335	3.5 %	—	—
	Construction	17,000,000	16,643,000	97.9 %	357,000	595,000	3.5 %	—	(51,000)
	Stormwater Management	40,856,008	39,998,032	97.9 %	857,976	1,429,960	3.5 %	—	(122,568)
	Reserve Claim	5,900,000	5,776,100	97.9 %	123,900	206,500	3.5 %	—	(17,700)
	Total	\$ 594,769,900	\$ 581,985,980	97.9 %	\$ 12,783,920	\$ 20,816,947	3.5 %	—	\$ (1,563,995)
Prior	Corporate								\$ (224,825)
Years'	Bond Redemption & Interest								(232,751)
Levies	Retirement								—
	Construction								(17,000)
	Stormwater Management								(40,856)
	Reserve Claim								(5,900)
	Total								\$ (521,332)
RECAPITULATION BY FUND									
	Corporate	\$ 1,259,521,712	\$ 970,529,075		\$ 288,992,637	\$ 44,083,260		\$ 261,400,069	\$ 262,670,743
	Bond Redemption & Interest	1,201,467,889	936,373,820		265,094,069	42,051,376		239,049,497	239,854,609
	Retirement	361,506,832	280,115,203		81,391,629	12,652,739		70,195,500	70,195,500
	Construction	50,300,000	42,509,500		7,790,500	1,760,500		6,755,000	6,698,900
	Stormwater Management	247,460,008	190,990,180		56,469,828	8,661,100		51,073,590	51,316,348
	Reserve Claim	34,400,000	26,405,600		7,994,400	1,204,000		7,237,500	7,276,900
	Total	\$ 3,154,656,441	\$ 2,446,923,377		\$ 707,733,064	\$ 110,412,975		\$ 635,711,155	\$ 638,013,000

**STATEMENT OF PERSONAL PROPERTY REPLACEMENT TAXES
RECEIVABLE FOR 2022 AND PRIOR YEARS AT JANUARY 1, 2022
INCLUDING THE ESTIMATED COLLECTIONS FOR THE YEAR 2022**

LEVY YEAR	FUND	BUDGETED RECEIVABLE	ACTUAL/ESTIMATED COLLECTED THROUGH 2021	CASH ESTIMATED IN 2022
2022	Corporate	\$ 42,000,000	\$ —	\$ —
	Retirement	18,383,000	—	—
	Construction	—	—	—
	Total	\$ 60,383,000	\$ —	\$ —
2021	Corporate	\$ 16,000,000	\$ —	\$ 16,000,000
	Retirement	18,558,500	—	18,558,500
	Construction	—	—	—
	Total	\$ 34,558,500	\$ —	\$ 34,558,500
2020	Corporate	\$ 19,000,000	\$ 44,387,400	\$ —
	Retirement	18,427,400	18,427,400	—
	Construction	—	—	—
	Total	\$ 37,427,400	\$ 62,814,800	\$ —
2019	Corporate	\$ 15,000,000	\$ 22,527,719	\$ —
	Retirement	18,258,400	18,258,400	—
	Construction	—	—	—
	Total	\$ 33,258,400	\$ 40,786,119	\$ —
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	\$ —

NOTE: Personal Property Replacement Taxes are recorded as collected against the prior year's tax estimate. For example, collections in 2022 will be recorded against the 2021 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 2022 Budget is \$429.2 million, an increase of \$29.9 million, or 7.5 percent, from the 2021 Adjusted Budget. Property taxes are the major source of revenue for the Corporate Fund. In 2022, the net property tax levy will provide 64.0 percent of the fund's revenue. The property tax levy for 2022 is \$284.5 million, an increase of \$13.6 million, or 5.0 percent, from the 2021 Adjusted Levy.

The Corporate Fund allocation of Personal Property Replacement Tax (PPRT) revenue is budgeted at \$42.0 million for 2022, an increase of \$26.0 million compared to the 2021 Budget of \$16.0 million. During early 2020, PPRT estimates were revised downward in response to the COVID-19 global pandemic, but 2021 receipts have outperformed expectations and receipts are expected to continue to be strong throughout 2022. The District projects revenue received in 2021 to be \$44.4 million, a \$28.6 million positive variance. The PPRT year-end estimates and 2022 projections are the principal factor impacting 2022 projected Corporate Fund revenue. The State of Illinois FY2022 PPRT allocation includes a one-time increase due to internal reconciliation and lower than anticipated tax refunds in FY2021. Furthermore, because PPRT is an economically sensitive revenue that is also subject to diversion by the State of Illinois to support other state-wide initiatives, PPRT revenues are expected to decline after 2022. Actual performance, however, will be monitored closely and adjusted in the future to be reflective of economic and policy direction. PPRT is 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, changes in tax laws, and the impacts of the pandemic. 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 \$84.6 million, a decrease of \$3.5 million or 4.0 percent from the 2021 Budget, which can be attributed to a \$4.2 million decrease in expected TIF surplus revenue offset by a \$1.0 million increase in User Charge revenues. Overall, 2021 non-tax revenue is projected to end the year at \$90.5 million, exceeding the 2021 Budget by \$2.3 million, or 2.6 percent.

The Corporate Fund receives significant funding from user charge revenue, estimated at \$38.0 million in 2022, an increase of \$1.0 million from the 2021 Budget. The state economy significantly impacts the food processing and metal finishing industries, two major categories of user charge payers. Another major segment of user charge payers is government-operated airports and water filtration facilities. The revenues from these sources are affected by weather conditions rather than the general economy. The 2021 year-end estimated revenue is \$40.0 million, a \$3.0 million positive variance to the 2021 Budget.

User charge rates and revenues parallel changes in the District's operations, maintenance, and replacement 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 operations, maintenance, and replacement 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 2022, land rental revenue is budgeted at \$25.0 million, flat to the 2021 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 2022 at \$0.6 million, a decrease of \$0.3 million from the 2021 Original Budget as short-term interest rates are projected to remain near zero until 2023.

2020 and 2021 Projected Year-End Results

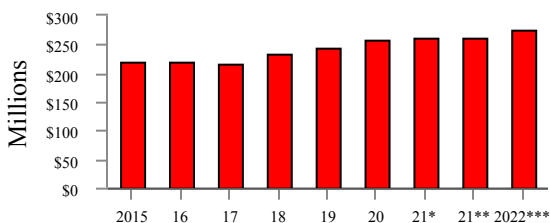
The Corporate Fund ended 2020 with a positive cash flow. Expenditures declined from 2019 attributed primarily to lower than expected employee health care costs as elective procedures were postponed for most of the year due to the COVID-19 global pandemic and the expenditure for electricity, a factor of both favorable weather conditions and pricing. Expenditures totaled \$346.6 million compared to \$353.1 million in 2019. The 2020 revenue collections ended the year slightly above the 2020 budget, with receipts of \$365.3 million, creating a positive cash flow of \$18.65 million. Similarly, 2021 is projecting year-end expenditures of \$354.8 million, while revenues are projecting year-end collections of \$390.2 million primarily due to the over performance of PPRT disbursements. These positive year-end results will allow the District to include a \$30.0 million transfer to the Retirement Fund in 2022 to provide advance funding to maintain growth in the Retirement Fund's funded ratio, after a legislative change allowing the transfer of surplus revenue is effective on January 1, 2022.

The District maintains a strong fund balance to maintain financial stability and sustain the District through economic uncertainties. For 2022, a portion amounting to \$108.5 million of the projected net assets will remain unappropriated to provide for a fiscally responsible fund balance. Of the projected \$172.8 million net appropriable assets, \$30 million will be transferred to the Retirement Fund as discussed above and \$34.4 million of the projected net assets will be appropriated. Investment in technology infrastructure will offset the spike in PPRT revenue.

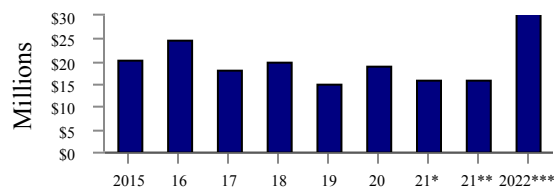
The 2022 Budget prepares the District for inflationary pressures higher than they have been in over a decade. Supply chain issues, coupled with increased demand for construction materials, and the resulting price increases have been considered in the 2022 budget. The cost for electricity is expected to increase by \$10.2 million due to both pricing and the impact of state legislation. Investment in technology infrastructure will offset the revenue spike expected from the economically sensitive PPRT revenue for 2022.

Corporate Working Cash Fund

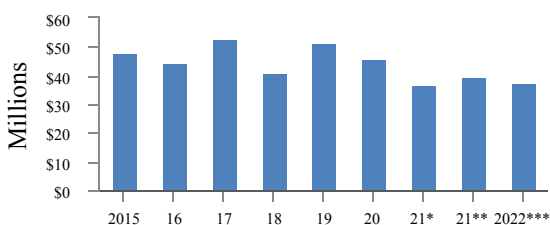
The Corporate Working Cash Fund is used to provide short-term financing to the Corporate Fund. As the property tax levy for one year is not collected until the next year, short-term financing of the current year tax levy is necessary. The District is authorized to sell Working Cash Bonds and is authorized to extend a property tax levy to meet these needs, but neither a tax levy nor bond sale is planned for 2022. The estimated amount the District will allocate as available for loan in 2022 is \$310.2 million, or 95.0 percent, of the maximum.

REVENUE - CORPORATE FUND (BUDGETARY BASIS)**Net Property Tax Levy**

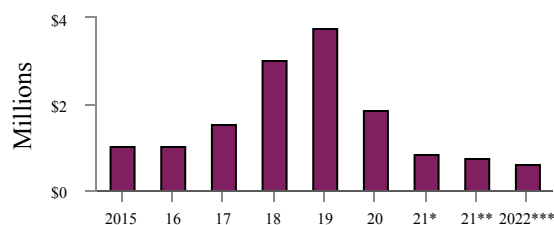
The property tax levy is the primary source of revenue for the Corporate Fund. In 2022, the levy will grow by 5.0 percent from the 2021 Levy.

Personal Property Replacement Tax

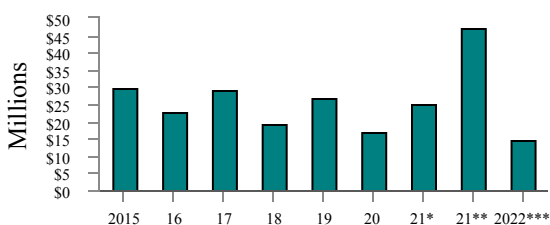
Budgeted PPRT allocations, received from the State, are economically sensitive. The increase in 2022 reflects over performance of PPRT disbursements.

User Charge

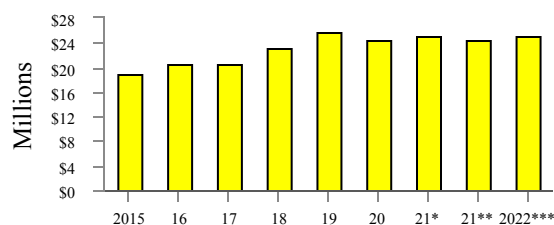
The growth in the food processing and chemical industries has been offset by improvements in processing and reduced discharges. 2022 anticipates refunds from reduced industrial activity during the COVID-19 global pandemic.

Investment Income

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

Other

TIF surplus distributions have been the driving factor of the remaining non-tax revenue. The primary factor in 2021, however, is an adjustment for PPRT receipts above the budgeted amount.

Land Rentals

In 2022, land rental revenue is expected to remain unchanged. Land rentals have continued to gradually increase since 2015.

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.

2015-2020 actual

* 2021 as budgeted

** 2021 adjusted estimated

*** 2022 estimate

CORPORATE FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2022 AND 2021

	ASSETS			
	2022		2021	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 173,372,150	\$ 173,372,150	\$ 132,761,882	\$ 132,761,882
Taxes Receivable	261,400,069	262,670,743	257,129,365	258,436,234
Replacement Tax	16,000,000	16,000,000	19,000,000	19,000,000
Total Current Assets	\$ 450,772,219	\$ 452,042,893	\$ 408,891,247	\$ 410,198,116
LIABILITIES & FUND EQUITY				
CURRENT LIABILITIES				
Unpaid Bills:				
Accrued Salaries & Wages	\$ 2,242,000	\$ 2,242,000	\$ 2,782,000	\$ 2,782,000
Security & Bid Deposits	1,900,000	1,900,000	3,100,000	3,100,000
Payroll Withholding & Miscellaneous	600,000	600,000	843,000	843,000
Contractual Services	2,472,232	2,472,232	16,000,000	16,000,000
Due to Corporate Working Cash Fund	272,000,000	272,000,000	256,100,000	256,100,000
Total Current Liabilities	\$ 279,214,232	\$ 279,214,232	\$ 278,825,000	\$ 278,825,000
Total Liabilities		\$ 279,214,232		\$ 278,825,000
ASSETS APPROPRIABLE FOR 2022 & 2021				
Net Assets Appropriable		\$ 172,828,661		\$ 131,373,116
Reserve for Transfer to Retirement Fund		(30,000,000)		(10,000,000)
Budget Reserve		(108,466,161)		(87,201,416)
Net Assets Appropriated		\$ 34,362,500		\$ 34,171,700
Estimated Revenue		394,823,000		365,155,000
Total Assets Appropriable		\$ 429,185,500		\$ 399,326,700
FUND EQUITY				
Undesignated	\$ 171,557,987		\$ 130,066,247	
Total Fund Equity	\$ 171,557,987		\$ 130,066,247	
Total Liabilities & Fund Equity	\$ 450,772,219		\$ 408,891,247	

CORPORATE FUND

APPROPRIABLE REVENUE

2022 - 2019

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2022 BUDGET	2021 ADJUSTED	2021 BUDGET	2020	2019
Revenue from Property Taxes					
Gross Tax Levy	\$ 284,500,000	\$ 270,880,900	\$ 270,880,900	\$ 266,455,300	\$ 254,574,100
Less Allowance for Uncollectible Taxes	(9,957,500)	(9,480,832)	(9,480,832)	(9,325,936)	(8,910,094)
Net Property Taxes	\$ 274,542,500	\$ 261,400,068	\$ 261,400,068	\$ 257,129,364	\$ 245,664,006
Revenue from Personal Property					
Replacement Tax	\$ 42,000,000	\$ 16,000,000	\$ 16,000,000	\$ 19,000,000	\$ 15,000,000
Net Tax Sources	\$ 316,542,500	\$ 277,400,068	\$ 277,400,068	\$ 276,129,364	\$ 260,664,006
Adjustment to match working cash borrowings	(6,342,500)	(4,900,069)	(4,900,069)	(4,929,365)	(4,564,007)
Working Cash Financing at 95% of Gross Tax Sources	\$ 310,200,000	\$ 272,500,000	\$ 272,500,000	\$ 271,200,000	\$ 256,100,000
Investment Income	\$ 592,000	\$ 753,000	\$ 860,000	\$ 1,881,610	\$ 3,761,348
Land Rentals	25,000,000	24,500,000	25,000,000	24,337,168	25,760,486
Federal & State Grants	75,000	495,400	75,000	72,069	—
Sewer Service Agreement Revenue	1,750,000	1,400,000	1,750,000	1,723,132	2,874,044
User Charge	38,000,000	40,000,000	37,000,000	45,901,043	51,783,405
Resource Recovery	511,000	350,000	600,000	364,782	784,568
Lockport Electrical Energy Generation	825,000	1,000,000	800,000	1,110,422	1,336,555
Miscellaneous (details below)	17,870,000	21,973,600	22,070,000	21,614,891	17,928,574
Subtotal	\$ 84,623,000	\$ 90,472,000	\$ 88,155,000	\$ 97,005,117	\$ 104,228,980
Adjustment to Net Assets Available for Projected Receipts	—	27,187,400	—	(2,900,200)	4,703,500
Equity Transfer	—	—	4,500,000	—	4,200,000
GRAND TOTAL	\$ 394,823,000	\$ 390,159,400	\$ 365,155,000	\$ 365,304,917	\$ 369,232,480
<hr/>					
TIF Surplus Distribution	\$ 14,800,000	\$ 19,327,200	\$ 19,000,000	\$ 18,295,058	\$ 10,609,409
TIF Differential Fee	—	—	—	225,000	225,000
Land Sales	—	3,800	—	52,000	3,073,329
Claims & Damage Settlements	—	40,300	—	415,264	22,324
Scrap Sales	50,000	50,000	50,000	38,902	69,389
Sales of Automobiles	20,000	50,000	20,000	19,452	35,669
Interest on Taxes - Cook County Treasurer	—	2,300	—	30,153	52,114
Other	3,000,000	2,500,000	3,000,000	2,539,062	3,841,340
Total	\$ 17,870,000	\$ 21,973,600	\$ 22,070,000	\$ 21,614,891	\$ 17,928,574

CORPORATE FUND FINANCING**2022 - 2017**

	ESTIMATED			ACTUAL			
	2022 (1)	2021 REVISED	2021 ORIGINAL	2020	2019	2018	2017
BORROWINGS							
Working Cash Loans Current Year	\$ 310,200,000	\$ 191,300,000	\$ 272,500,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000
Working Cash Loans Prior Year	—	—	—	—	—	—	—
Total Borrowings	\$ 310,200,000	\$ 191,300,000	\$ 272,500,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000
REPAYMENTS							
Working Cash Loans Repaid							
Current	\$ 191,300,000	\$ 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	\$ 191,300,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000	\$ 190,000,000

(1) FINANCING LIMITATION**2022**

(In Millions)

Property Tax Levy	\$ 284.5
Personal Property Replacement Tax	42.0
Total	\$ 326.5
* Borrowing Limitation	95.0 %
Total Available for Financing	\$ 310.2
* Statutory limitation is 100%	

CORPORATE WORKING CASH FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2022 AND 2021
AND ESTIMATED AMOUNTS AVAILABLE FOR 2022 AND 2021

	ASSETS			
	2022		2021	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 87,619,500	\$ 87,619,500	\$ 94,000,000	\$ 94,000,000
Due from Corporate Fund	191,300,000	191,300,000	190,000,000	190,000,000
Total Current Assets	<u>\$ 278,919,500</u>	<u>\$ 278,919,500</u>	<u>\$ 284,000,000</u>	<u>\$ 284,000,000</u>
FUND EQUITY				
Estimated Revenue & Other Financing Sources		\$ 1,111,000		\$ 817,000
Equity Transfer to Retirement Fund		\$ —		\$ (6,000,000)
ASSETS AVAILABLE FOR 2022 AND 2021		<u>\$ 280,030,500</u>		<u>\$ 278,817,000</u>
FUND EQUITY				
	<u>\$ 278,919,500</u>		<u>\$ 284,000,000</u>	

CORPORATE WORKING CASH FUND
REVENUES
2022 - 2019

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2022 BUDGET	2021 ADJUSTED	2021 BUDGET	2020	2019
Revenue from Money & Property					
Investment Income	\$ 1,111,000	\$ 960,000	\$ 817,000	\$ 1,383,000	\$ 1,946,312
Revenue from Miscellaneous Sources	—	—	—	—	—
Equity Transfer to Retirement Fund	—	—	—	(6,000,000)	—
TOTAL	<u>\$ 1,111,000</u>	<u>\$ 960,000</u>	<u>\$ 817,000</u>	<u>\$ (4,617,000)</u>	<u>\$ 1,946,312</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 2022 revenue sources include 11.0 percent from property taxes, grants, investment income or other miscellaneous revenues. Low-interest Wastewater and Stormwater State Revolving Fund (SRF) loans account for 25.6 percent of 2022 revenues, while General Obligation and Alternate Revenue Bonds account for 63.4 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.

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 2022 appropriation is \$207.9 million, a decrease of \$102.5 million from the 2021 Adjusted Budget, or 33.0 percent. The appropriation varies by the scheduled awards of major projects.

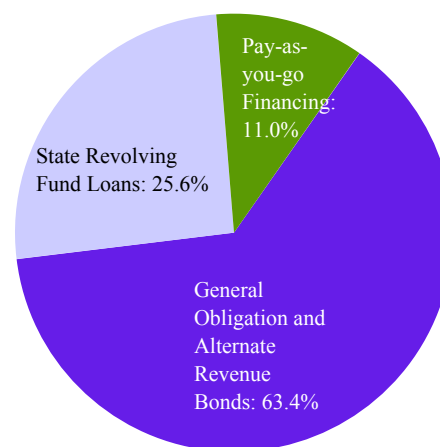
The CIBF balance sheet on page 110 estimates the net assets appropriable for 2022 at (\$53.3) million and (\$126.8) million for 2021. The CIBF balance sheet estimated negative net assets appropriable for 2022 and 2021 are a result of accounting for the full value of the contract awards as a liability, 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 74 - 86 presents detailed projections of the financial aspects of the capital program into the near 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 2021 levy year is \$175.5 million and \$183.4 million for the 2022 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 1.11 percent. The District expects to receive an allocation of \$55.0 million in 2022 and \$55.0 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 77.2 percent of construction cost financing for projects currently under

**2022 Capital Improvement Program
Revenue Sources**



construction and those with projected 2022 construction contract award dates. For 2021 and 2022, 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.

During 2022, the District intends to pay the remaining balance on five SRF loans, which will be partially funded by \$35.0 million of accumulated BABs subsidy, which will be transferred to the Bond Redemption and Interest Fund for the purpose of the prepayment.

Construction Fund

The 2022 tax levy for the Construction Fund remains flat to the 2021 levy at \$7.0 million. The fund will also be supported by existing assets appropriable to fund capital projects. The 2022 appropriation is \$18.8 million, an increase of \$3.3 million, or 21.3 percent, from the 2021 Adjusted Budget. Two factors contribute to the increased appropriation. First, the District anticipated decreased tax revenue based on meeting the tax cap that were not realized. Secondly, project timing results in funding that is allocated to particular projects, but expenditures may actually take place over multiple years.

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 \$21.9 million. 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 2022, there is \$4.6 million budgeted for projects currently under construction and \$12.6 million for projects scheduled for award in 2022.

CAPITAL IMPROVEMENTS BOND FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2022 AND 2021

	ASSETS			
	2022		2021	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 251,316,000	\$ 251,316,000	\$ 236,943,685	\$ 236,943,685
Total Current Assets	<u>\$ 251,316,000</u>	<u>\$ 251,316,000</u>	<u>\$ 236,943,685</u>	<u>\$ 236,943,685</u>
LIABILITIES & FUND EQUITY				
CURRENT LIABILITIES				
Unpaid Bills:				
Contractual Services	\$ —	\$ —	\$ 10,000,000	\$ 10,000,000
Contracts Payable	185,000,000	185,000,000	185,357,100	185,357,100
Total Current Liabilities	<u>\$ 185,000,000</u>	<u>\$ 185,000,000</u>	<u>\$ 195,357,100</u>	<u>\$ 195,357,100</u>
Designated for Future Claims Liabilities	119,595,669	119,595,669	168,400,000	168,400,000
Total Liabilities & Designations	<u>\$ 304,595,669</u>	<u>\$ 304,595,669</u>	<u>\$ 363,757,100</u>	<u>\$ 363,757,100</u>
ASSETS APPROPRIABLE				
Net Assets Appropriable		<u>\$ (53,279,669)</u>		<u>\$ (126,813,415)</u>
Net Assets Appropriated		\$ (53,279,669)		\$ (126,813,415)
Estimated Revenue		297,171,072		441,696,015
Equity Transfer to B&I Fund		(35,965,403)		—
Equity Transfer		—		(4,500,000)
Total Assets Appropriable		<u>\$ 207,926,000</u>		<u>\$ 310,382,600</u>
FUND EQUITY	<u>\$ (53,279,669)</u>		<u>\$ (126,813,415)</u>	
Total Liabilities & Fund Equity	<u>\$ 251,316,000</u>		<u>\$ 236,943,685</u>	

CAPITAL IMPROVEMENTS BOND FUND

APPROPRIABLE REVENUE

2022 - 2019

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2022 BUDGET	2021 ADJUSTED	2021 BUDGET	2020	2019
Revenue from Money & Property					
Bond Sales (Present & Future)	\$ 225,223,772	\$ 155,000,000	\$ 354,089,015	\$ —	\$ —
Investment Income	1,970,000	1,330,000	1,135,000	2,572,400	6,572,300
Subtotal	\$ 227,193,772	\$ 156,330,000	\$ 355,224,015	\$ 2,572,400	\$ 6,572,300
Revenue from Miscellaneous Sources					
Federal & State Grants	\$ 12,977,300	\$ 11,327,300	\$ 14,472,000	\$ 15,456,900	\$ 17,101,994
State Revolving Fund Loans	55,000,000	55,000,000	70,000,000	58,329,600	30,551,200
Miscellaneous	2,000,000	1,995,900	2,000,000	3,148,800	2,423,521
Subtotal	\$ 69,977,300	\$ 68,323,200	\$ 86,472,000	\$ 76,935,300	\$ 50,076,715
Total Revenue	\$ 297,171,072	\$ 224,653,200	\$ 441,696,015	\$ 79,507,700	\$ 56,649,015
Other Financing Sources (Uses)					
Equity Transfer to B&I Fund	\$ (35,965,403)	\$ —	\$ —	\$ —	\$ —
Equity Transfer to Corporate Fund	\$ —	\$ —	\$ (4,500,000)	\$ —	\$ (4,200,000)
Equity Transfer to Retirement Fund	\$ —	\$ —	\$ —	\$ (9,000,000)	\$ —
GRAND TOTAL	\$ 261,205,669	\$ 224,653,200	\$ 437,196,015	\$ 70,507,700	\$ 52,449,015

CONSTRUCTION FUND

ESTIMATED BALANCE SHEET

JANUARY 1, 2022 AND 2021

	ASSETS			
	2022		2021	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 14,030,000	\$ 14,030,000	\$ 13,284,700	\$ 13,284,700
Taxes Receivable	6,755,000	6,698,900	4,761,600	4,638,500
Total Current Assets	<u>\$ 20,785,000</u>	<u>\$ 20,728,900</u>	<u>\$ 18,046,300</u>	<u>\$ 17,923,200</u>
LIABILITIES & FUND EQUITY				
CURRENT LIABILITIES				
Unpaid Bills:				
Contracts Payable	\$ 1,472,200	\$ 1,472,200	\$ 2,500,000	\$ 2,500,000
Contractual Services	500,000	500,000	—	—
Due to:				
Construction Working Cash Fund	6,700,000	6,700,000	6,700,000	6,700,000
Total Current Liabilities	<u>\$ 8,672,200</u>	<u>\$ 8,672,200</u>	<u>\$ 9,200,000</u>	<u>\$ 9,200,000</u>
Total Liabilities		<u>\$ 8,672,200</u>		<u>\$ 9,200,000</u>
ASSETS APPROPRIABLE FOR 2022 AND 2021				
Net Assets Appropriable		<u>\$ 12,056,700</u>		<u>\$ 8,723,200</u>
Net Assets Appropriated		\$ 12,056,700		\$ 8,723,200
Estimated Revenue		6,713,000		6,748,000
Total Assets Appropriable		<u>\$ 18,769,700</u>		<u>\$ 15,471,200</u>
FUND EQUITY				
Undesignated		12,112,800		8,846,300
Total Fund Equity		<u>\$ 12,112,800</u>		<u>\$ 8,846,300</u>
Total Liabilities & Fund Equity		<u>\$ 20,785,000</u>		<u>\$ 18,046,300</u>

CONSTRUCTION FUND FINANCING**2022 - 2017**

	ESTIMATED			ACTUAL			
	2022 (1)	2021 REVISED	2021 ORIGINAL	2020	2019	2018	2017
BORROWINGS							
Working Cash Loans	\$ 6,700,000	\$ 6,700,000	\$ 6,700,000	\$ 6,700,000	\$ 7,200,000	\$ 11,100,000	\$ 12,000,000
Total Borrowings	\$ 6,700,000	\$ 6,700,000	\$ 6,700,000	\$ 6,700,000	\$ 7,200,000	\$ 11,100,000	\$ 12,000,000
REPAYMENTS							
Working Cash Loans Repaid							
Current	\$ 6,700,000	\$ 6,700,000	\$ 6,700,000	\$ 7,200,000	\$ 11,100,000	\$ 12,000,000	\$ 12,000,000
Prior Year	—	—	—	—	—	—	—
Total Repayments	\$ 6,700,000	\$ 6,700,000	\$ 6,700,000	\$ 7,200,000	\$ 11,100,000	\$ 12,000,000	\$ 12,000,000

(1) FINANCING LIMITATION**2022**

(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****2022 - 2019**

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2022 BUDGET	2021 ADJUSTED	2021 BUDGET	2020	2019
Revenue from Property Taxes					
Gross Tax Levy	\$ 7,000,000	\$ 7,000,000	\$ 7,000,000	\$ 7,000,000	\$ 7,600,000
Less: Allowance for Uncollectible Taxes	(245,000)	(245,000)	(245,000)	(245,000)	(266,000)
Net Property Taxes	\$ 6,755,000	\$ 6,755,000	\$ 6,755,000	\$ 6,755,000	\$ 7,334,000
Adjustment to Match Working Cash Borrowings	(55,000)	(55,000)	(55,000)	(55,000)	(134,000)
Working Cash Financing (Maximum 95% of Gross Tax Sources)	\$ 6,700,000	\$ 6,700,000	\$ 6,700,000	\$ 6,700,000	\$ 7,200,000
Connection Impact Fees	—	—	—	—	—
Investment Income	13,000	13,000	28,000	124,900	468,587
Miscellaneous	—	—	20,000	14,200	75,982
User Charge	—	—	—	—	—
Equity Transfer from Capital Improvements Bond Fund	—	—	—	—	—
Subtotal	\$ 13,000	\$ 13,000	\$ 48,000	\$ 139,100	\$ 544,569
Adjustment to Net Assets Available for Projected Receipts	—	(86,600)	—	(63,700)	(3,976,700)
Total	\$ 6,713,000	\$ 6,626,400	\$ 6,748,000	\$ 6,775,400	\$ 3,767,869

CONSTRUCTION WORKING CASH FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2022 AND 2021
AND ESTIMATED AMOUNTS AVAILABLE FOR 2022 AND 2021

	ASSETS			
	2022		2021	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 15,166,100	\$ 15,166,100	\$ 11,500,000	\$ 11,500,000
Due from Construction Fund	6,700,000	6,700,000	6,700,000	6,700,000
Total Current Assets	<u>\$ 21,866,100</u>	<u>\$ 21,866,100</u>	<u>\$ 18,200,000</u>	<u>\$ 18,200,000</u>
	FUND EQUITY			
Estimated Revenue & Other Financing Sources		\$ 55,000		\$ 103,000
Equity Transfer to Retirement Fund		—		—
ASSETS APPROPRIABLE FOR 2022 & 2021		<u>\$ 21,921,100</u>		<u>\$ 18,303,000</u>
FUND EQUITY	<u>\$ 21,866,100</u>		<u>\$ 18,200,000</u>	

CONSTRUCTION WORKING CASH FUND
REVENUES
2022 - 2019

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2022 BUDGET	2021 ADJUSTED	2021 BUDGET	2020	2019
Revenue from Money & Property					
Investment Income	\$ 55,000	\$ 79,000	\$ 103,000	\$ 164,000	\$ 273,877
Equity Transfer to Retirement Fund	—	—	—	(1,000,000)	—
TOTAL	<u>\$ 55,000</u>	<u>\$ 79,000</u>	<u>\$ 103,000</u>	<u>\$ (836,000)</u>	<u>\$ 273,877</u>

OTHER FUNDS FINANCIAL NARRATIVE

The Stormwater Management Fund was established in 2005 to fund stormwater management activities including operational costs and pay-as-you-go capital projects. The 2022 property tax levy for the Stormwater Management Fund is \$57.9 million, an increase of \$5.0 million from the 2021 Adjusted Budget. An equity transfer to the Bond Redemption & Interest Fund is planned in the amount of \$9.2 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. Details of this fund's purpose and \$93.4 million appropriation for 2022 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 2022 property tax levy for the B&I Fund is \$245.9 million, a decrease of \$1.9 million, or 0.8 percent, from the 2021 Adjusted Budget. Appropriations and tax levies are adjusted for new bond sales or State Revolving Fund loans. In 2022, the District plans to pay off the balance on five state revolving fund loans in the amount of \$43.0 million resulting in \$12.7 million savings in interest payments over 15 years. The 2022 appropriation for this fund is \$277.4 million, an increase of \$45.3 million, or 19.5 percent from the 2021 Original Budget. The District is planning a \$500.0 million bond sale in late 2021 that will result in \$155.0 million in new bonds and \$345.0 million in refunding bonds. The refunding bonds are expected to result in a total savings in interest payments of \$60.0 million.

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 is reflective of low interest rates for 2021 with a projected year-end of \$0.1 million, while the 2022 estimate is \$0.2 million, an increase of \$0.1 million from the 2021 Original Budget. An equity transfer from the Stormwater Management Fund of \$9.2 million will be used for the principal and interest on two bonds and two State Revolving Fund loans, and an abatement in a corresponding amount is anticipated. A detailed presentation on the B&I Fund is found on pages 538 - 542.

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. For 2022, 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 2022 appropriation for this fund is \$44.5 million, an increase of \$4.8 million, or 12.2 percent, from the 2021 Adjusted Budget. The maximum fund balance that can be accumulated is 0.05 percent of the last known EAV. For the 2022 Budget, using the last known EAV of 2020, the maximum accumulation is estimated at \$85.4 million. The allowance for accounts payable and estimated liabilities is estimated at \$0.3 million. A detailed presentation of this fund begins on page 535.

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 amount, as certified by the Retirement Fund Board, are levied by the District and appropriated when received. The property tax levy for 2022 is \$72.1 million, a decrease of \$687,600 from the 2021 Adjusted Levy. The levy is calculated based on a statutory multiplier of 4.19 times employee contributions made two years prior, or 2020 and 2019, respectively. Additionally, \$18.4 million from Personal Property Replacement Tax is allocated to the Retirement Fund for 2022. Since hiring slowed during the 2020 pandemic, employee contributions decreased from 2019 to 2020. Staffing levels are expected to return to pre-pandemic levels by 2022, resulting in expected increases to the retirement fund levy in 2024.

The appropriable resources and appropriation consist of the collection of the previous year's property tax levy plus personal property replacement tax receipts. The 2021 appropriation included a planned equity transfer of \$10.0 million to the Retirement Fund to provide advance funding to maintain growth in the Retirement Fund's funded ratio, pending legislative authority to make such a transfer. While the legislative initiative to amend the District's statute (70 ILCS 2605/5.9) was successful, the effective date of the legislation is January 1, 2022. The 2022 appropriation is \$118.8 million, an increase of \$20.63 million, or 21.02 percent, from the 2021 Adjusted Budget and includes an anticipated \$30.0 million transfer of excess revenue from the Corporate Fund, including surplus revenues identified and reserved from 2019 and 2020, as well as projected for 2022. An expanded presentation on the Retirement Fund is shown on pages 543 - 545.

STORMWATER MANAGEMENT FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2022 AND 2021

	ASSETS			
	2022		2021	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 43,697,700	\$ 43,697,700	\$ 39,243,880	\$ 39,243,880
Taxes Receivable	51,073,590	51,316,348	51,073,590	51,427,300
Total Current Assets	\$ 94,771,290	\$ 95,014,048	\$ 90,317,470	\$ 90,671,180
	LIABILITIES & FUND EQUITY			
CURRENT LIABILITIES				
Unpaid Bills:				
Accrued Salaries & Wages	\$ —	\$ —	\$ 132,042	\$ 132,042
Contracts Payable	1,300,000	1,300,000	—	—
Vouchers Payable	500,048	500,048	4,500,000	4,500,000
Due to:				
Stormwater Working Cash Fund	50,300,000	50,300,000	26,500,000	26,500,000
Total Current Liabilities	\$ 52,100,048	\$ 52,100,048	\$ 31,132,042	\$ 31,132,042
Designated for Future Claims Liabilities		\$ —		\$ —
Total Current Liabilities and Designations		\$ 52,100,048		\$ 31,132,042
ASSETS APPROPRIABLE FOR 2022 & 2021				
Net Assets Appropriable		\$ 42,914,000		\$ 59,539,138
Net Assets Appropriated		\$ 42,914,000		\$ 59,539,138
Equity Transfer to Bond and Interest Fund		(9,173,000)		(5,961,600)
Estimated Revenue		59,663,000		56,388,000
Total Assets Appropriable		\$ 93,404,000		\$ 109,965,538
FUND EQUITY	\$ 42,671,242		\$ 59,185,428	
Total Liabilities & Fund Equity	\$ 94,771,290		\$ 90,317,470	

STORMWATER MANAGEMENT FUND FINANCING**2022 - 2017**

	ESTIMATED				ACTUAL		
	2022 (1)	2021 REVISED	2021 ORIGINAL	2020	2019	2018	2017
BORROWINGS							
Working Cash Loans	\$ 55,000,000	\$ 26,500,000	\$ 50,300,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000
Total Borrowings	\$ 55,000,000	\$ 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	\$ 26,500,000
Prior Year	—	—	—	—	—	—	—
Total Repayments	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000	\$ 26,500,000

(1) FINANCING LIMITATION**2022**

(In Millions)

Property Tax Levy	\$ 57.9
Personal Property Replacement Tax	—
Total	\$ 57.9
* Borrowing Limitation	95.0 %
Total Available for Financing	\$ 55.0

* Statutory limitation is 100%

STORMWATER MANAGEMENT FUND**APPROPRIABLE REVENUE****2022 - 2019**

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2022 BUDGET	2021 ADJUSTED	2021 BUDGET	2020	2019
Revenue from Property Taxes					
Gross Tax Levy	\$ 57,926,000	\$ 52,926,000	\$ 52,926,000	\$ 52,926,000	\$ 52,926,000
Less: Allowance for Uncollectible Taxes	(2,027,410)	(1,852,410)	(1,852,410)	(1,852,410)	(1,852,410)
Net Property Taxes	\$ 55,898,590	\$ 51,073,590	\$ 51,073,590	\$ 51,073,590	\$ 51,073,590
Adjustment to Match Working Cash Borrowings	(898,590)	(773,590)	(773,590)	(773,590)	(773,590)
Working Cash Financing at 95% of Gross Tax Sources	\$ 55,000,000	\$ 50,300,000	\$ 50,300,000	\$ 50,300,000	\$ 50,300,000
Revenue from Money & Property					
Investment Income	\$ 63,000	\$ 33,000	\$ 88,000	\$ 526,000	\$ 1,165,729
Sewer Permit Fees	600,000	600,000	1,500,000	957,700	1,406,810
Miscellaneous	—	3,000	—	6,200	18,976
Grants	4,000,000	—	4,500,000	316,410	—
Subtotal	\$ 4,663,000	\$ 636,000	\$ 6,088,000	\$ 1,806,310	\$ 2,591,515
Adjustment to Net Assets Available for Projected Receipts	\$ —	\$ 1,061,200	\$ —	\$ 620,100	\$ 1,061,200
Equity Transfer to Bond Redemption & Interest Fund	(9,173,000)	(5,961,200)	(5,961,200)	(3,599,000)	(5,771,900)
Total	\$ 50,490,000	\$ 46,036,000	\$ 50,426,800	\$ 49,127,410	\$ 48,180,815

STORMWATER WORKING CASH FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2022 AND 2021

	ASSETS			
	2022		2021	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 10,598,300	\$ 10,598,300	\$ 11,600,000	\$ 11,600,000
Due from Stormwater Management Fund	26,500,000	26,500,000	26,500,000	26,500,000
Total Current Assets	\$ 37,098,300	\$ 37,098,300	\$ 38,100,000	\$ 38,100,000
FUND EQUITY				
Investment Income		\$ 39,000		\$ 74,000
Equity Transfer to Retirement Fund		\$ —		\$ —
ASSETS APPROPRIABLE FOR 2022 AND 2021		\$ 37,137,300		\$ 38,174,000
FUND EQUITY	\$ 37,098,300		\$ 38,100,000	

STORMWATER WORKING CASH FUND
APPROPRIABLE REVENUE
2022 - 2019

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2022 BUDGET	2021 ADJUSTED	2021 BUDGET	2020	2019
Investment Income	\$ 39,000	\$ 48,000	\$ 74,000	\$ 127,000	\$ 240,578
Other Financing Sources (Uses)					
Equity Transfer to Retirement Fund	—	—	—	(1,000,000)	—
GRAND TOTAL	\$ 39,000	\$ 48,000	\$ 74,000	\$ (873,000)	\$ 240,578

BOND REDEMPTION & INTEREST FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2022 AND 2021

	ASSETS			
	2022		2021	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 90,067,000	\$ 90,067,000	\$ 99,148,800	\$ 99,148,800
Restricted Cash	—	—	—	—
Deposits with Escrow Agent	—	—	—	—
Taxes Receivable	239,049,497	239,854,609	238,657,981	239,601,413
Total Current Assets	<u>\$ 329,116,497</u>	<u>\$ 329,921,609</u>	<u>\$ 337,806,781</u>	<u>\$ 338,750,213</u>
	LIABILITIES & FUND EQUITY			
CURRENT LIABILITIES				
Bonds Payable	\$ 170,994,102		\$ 122,745,890	
Interest Payable	106,444,185		109,379,960	
Program Expense Payable	—		—	
Equity Transfer	—		—	
Total Current Liabilities	<u>\$ 277,438,287</u>		<u>\$ 232,125,850</u>	
ASSETS APPROPRIABLE FOR 2022 AND 2021				
Net Assets Appropriable		\$ 329,921,609		\$ 338,750,213
Equity Transfer from Stormwater Management Fund		9,173,000		5,961,600
Equity Transfer From CIBF		35,965,403		—
Estimated Revenue		151,000		281,000
Total Assets Available		<u>\$ 375,211,012</u>		<u>\$ 344,992,813</u>
Liabilities Payable from Restricted Assets		—		—
Less: Assets Available for Future Years (Principal & Interest Payments)		<u>(97,772,725)</u>		<u>(112,866,563)</u>
Total Assets Appropriable		<u>\$ 277,438,287</u>		<u>\$ 232,126,250</u>
FUND EQUITY				
Undesignated	\$ 51,678,210		\$ 105,680,931	
TOTAL FUND EQUITY	<u>\$ 51,678,210</u>		<u>\$ 105,680,931</u>	
Total Liabilities & Fund Equity	<u>\$ 329,116,497</u>		<u>\$ 337,806,781</u>	

BOND REDEMPTION & INTEREST FUND **APPROPRIABLE REVENUE** **2022 - 2019**

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2022 BUDGET	2021 ADJUSTED	2021 BUDGET	2020	2019
Revenue from Taxes					
Real Estate					
Current	\$ 241,526,694	\$ 241,131,121	\$ 241,131,121	\$ 242,978,297	\$ 237,696,807
Prior	(1,672,085)	(1,529,708)	(1,529,708)	(1,481,160)	(1,451,937)
Total	\$ 239,854,609	\$ 239,601,413	\$ 239,601,413	\$ 241,497,137	\$ 236,244,870
Revenue from Money & Property					
Investment Income	\$ 151,000	\$ 124,000	\$ 281,000	\$ 771,000	\$ 2,765,277
Revenue from Miscellaneous Sources					
Cash Available	90,067,000	99,148,800	99,148,800	90,067,000	112,000,000
Other	—	—	—	—	51,590
Other Financing Sources (Uses)					
Bond Premium	—	—	—	—	—
Sale of Capital Improvements Bonds (CIB)	—	—	—	—	—
Bond Redemption	—	—	—	—	—
Refunding Transaction Costs	—	—	—	—	—
Equity Transfer from CIBF	35,965,403	—	—	—	—
Equity Transfer from Stormwater Management Fund	9,173,000	5,961,200	5,961,200	3,599,000	5,771,900
Equity Transfer to Retirement Fund	—	—	—	(3,000,000)	—
Less: Amount to Be					
Expended After Budget Year	(97,772,725)	(112,709,563)	(112,866,563)	(99,912,270)	(118,476,096)
GRAND TOTAL	\$ 277,438,287	\$ 232,125,850	\$ 232,125,850	\$ 233,021,867	\$ 238,357,541

RESERVE CLAIM FUND
ESTIMATED BALANCE SHEET
JANUARY 1, 2022 AND 2021

	ASSETS			
	2022		2021	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
CURRENT ASSETS				
Cash & Investments	\$ 37,389,400	\$ 37,389,400	\$ 32,424,400	\$ 32,424,400
Taxes Receivable	7,237,500	7,276,900	7,237,500	7,288,500
Total Current Assets	\$ 44,626,900	\$ 44,666,300	\$ 39,661,900	\$ 39,712,900
LIABILITIES & FUND EQUITY				
ACCOUNTS PAYABLE & OTHER LIABILITIES	\$ 275,000	\$ 275,000	\$ 275,000	\$ 275,000
ASSETS APPROPRIABLE FOR 2022 AND 2021				
Net Assets Appropriable		\$ 44,391,300		\$ 39,437,900
Equity Transfer to Bond and Interest Fund		—		—
Estimated Revenue		74,000		187,000
Total Assets Appropriable		\$ 44,465,300		\$ 39,624,900
FUND EQUITY	\$ 44,351,900		\$ 39,386,900	
Total Liabilities & Fund Equity	\$ 44,626,900		\$ 39,661,900	

RESERVE CLAIM FUND
APPROPRIABLE REVENUE
2022 - 2019

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2022 BUDGET	2021 ADJUSTED	2021 BUDGET	2020	2019
Revenue from Taxes					
Real Estate - Current	\$ 7,312,500	\$ 7,312,500	\$ 7,312,500	\$ 7,312,500	\$ 5,850,000
Real Estate - Prior	(35,600)	(38,700)	(38,700)	(38,700)	(27,600)
Replacement Tax	—	—	—	—	—
SUBTOTAL	\$ 7,276,900	\$ 7,273,800	\$ 7,273,800	\$ 7,273,800	\$ 5,822,400
Investment Income	74,000	103,000	187,000	391,000	648,878
Miscellaneous	—	—	—	900	1,434,630
GRAND TOTAL	\$ 7,350,900	\$ 7,376,800	\$ 7,460,800	\$ 7,665,700	\$ 7,905,908

RETIREMENT FUND

ESTIMATED BALANCE SHEET

JANUARY 1, 2022 AND 2021

CURRENT ASSETS	ASSETS			
	2022		2021	
	AMOUNT	AVAILABLE FOR APPROPRIATION	AMOUNT	AVAILABLE FOR APPROPRIATION
Taxes Receivable	\$ 70,195,500	\$ 70,195,500	\$ 69,699,600	\$ 69,699,600
Replacement Tax	18,558,500	18,558,500	18,427,400	18,427,400
Total Current Assets	\$ 88,754,000	\$ 88,754,000	\$ 88,127,000	\$ 88,127,000
LIABILITIES & FUND EQUITY				
ASSETS APPROPRIABLE FOR 2022 AND 2021				
Net Assets Appropriable		\$ 88,754,000		\$ 88,127,000
Transfer of Budget Reserve from Corporate Fund		30,000,000		10,000,000
Total Assets Appropriable Due to Retirement Fund		\$ 118,754,000		\$ 98,127,000
FUND EQUITY				
Total Fund Equity	\$ 88,754,000		\$ 88,127,000	

RETIREMENT FUND

APPROPRIABLE REVENUE

2022 - 2019

REVENUE DESCRIPTION	ESTIMATED			ACTUAL	
	2022 BUDGET	2021 ADJUSTED	2021 BUDGET	2020	2019
Revenue from Taxes					
Real Estate - Current	\$ 70,195,500	\$ 69,699,600	\$ 69,699,600	\$ 69,060,611	\$ 69,030,500
Replacement Tax	18,558,500	18,427,400	18,427,400	18,258,400	18,250,500
TOTAL TAX REVENUE	\$ 88,754,000	\$ 88,127,000	\$ 88,127,000	\$ 87,319,011	\$ 87,281,000
Other Financing Sources (Uses)					
Transfer of Budget Reserve from Corporate Fund	\$ 30,000,000	\$ —	\$ 10,000,000	\$ —	\$ —
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 Other Financing Sources	\$ 30,000,000	\$ —	\$ 10,000,000	\$ 20,000,000	\$ —
GRAND TOTAL	\$ 118,754,000	\$ 88,127,000	\$ 98,127,000	\$ 107,319,011	\$ 87,281,000

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 2013 through 2022. The structure of sub-units and sections, the number of actual 2020 full-time equivalent (FTE) positions, as well as FTE positions budgeted for 2021 and 2022 are shown in the organization chart. In this section, and throughout the Budget, actual expenditures are used for 2020 with estimated costs for 2021 and budgeted costs for 2022. Additional information for each department includes:

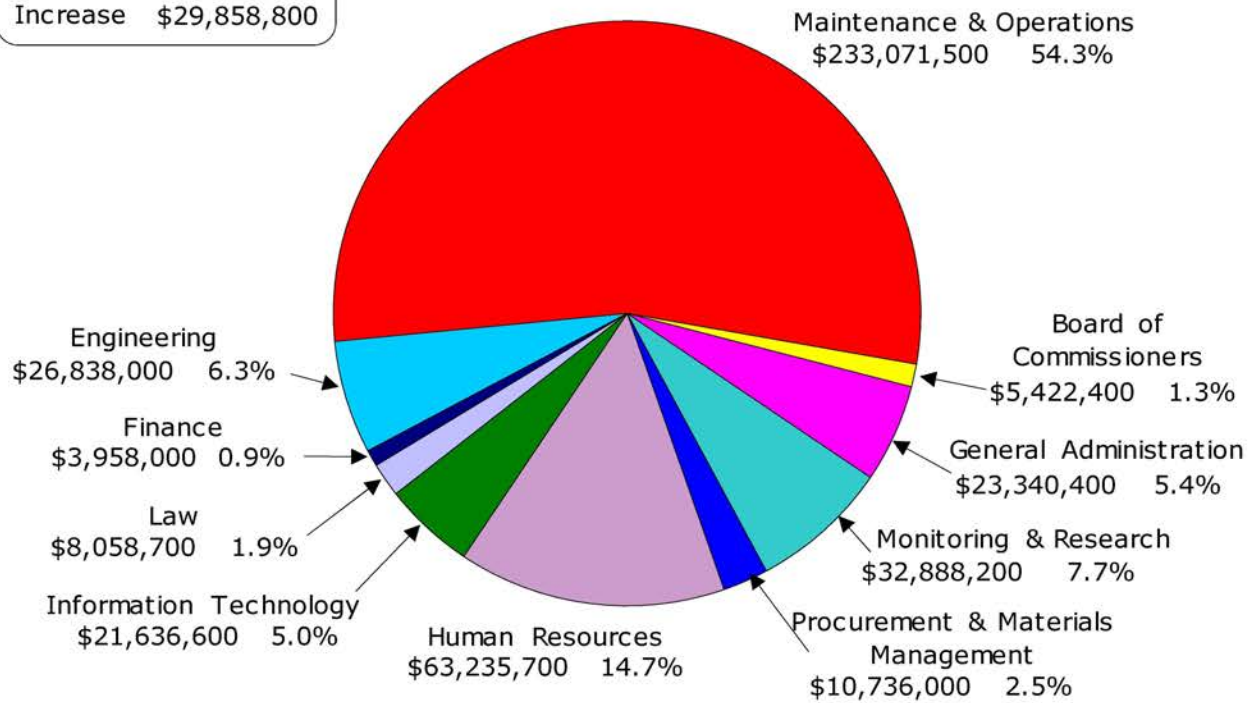
- A *Department Head Transmittal Letter* provides an outline of department plans for the 2022 budget year.
- A *Narrative* explanation of the responsibilities of the department, changes in appropriation from the 2021 Budget, accomplishments during 2021, and significant features for the 2022 Budget. The 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 2021. Actual costs are shown for 2020.
- *Performance Data* measures specific department activities by cost and, where possible, measurable units, and compares budgeted costs for 2022 and 2021 with actual costs for 2020.
- The *Line Item Analysis* provides detailed line item appropriations over a three-year period. Appropriations for 2022 are shown as proposed by the Executive Director. Original and adjusted appropriations and estimated expenditures are shown for 2021. Actual 2020 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 2022 salary appropriation is adjusted for vacancies in the Line Item Analysis.

Corporate Fund Appropriations, Expenditures, and Budgeted FTE Positions, 2013 - 2022	123
Corporate Fund Organization Chart	124
Corporate Fund Line Item Analysis	125
Detailed Appropriations by Department:	
Board of Commissioners	129
General Administration	139
Monitoring & Research	153
Procurement & Materials Management	175
Human Resources	189
Information Technology	205
Law	219
Finance	233
Maintenance & Operations	
Summary of All Divisions	243
General Division	258
North Service Area	272
Calumet Service Area	288
Stickney Service Area	301
Engineering	317

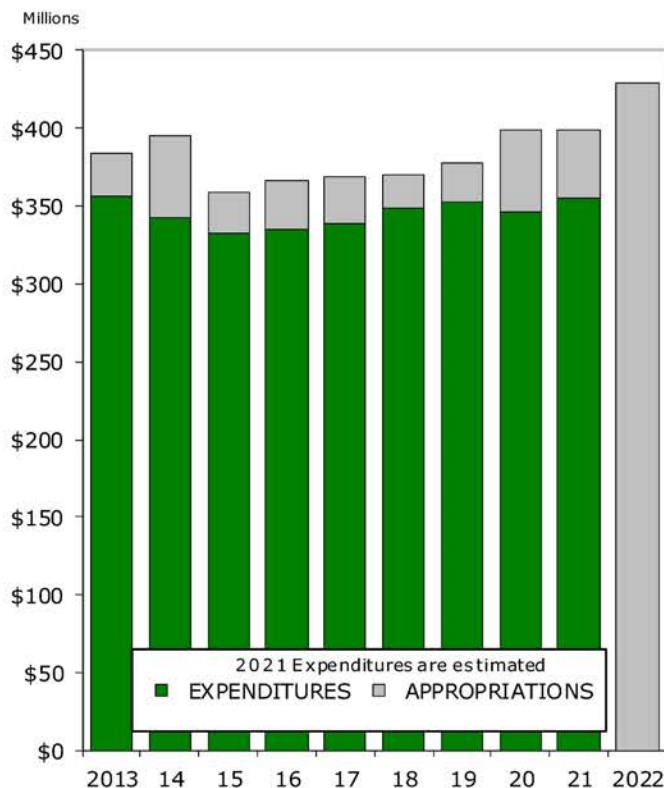
CORPORATE FUND

FUNCTIONS

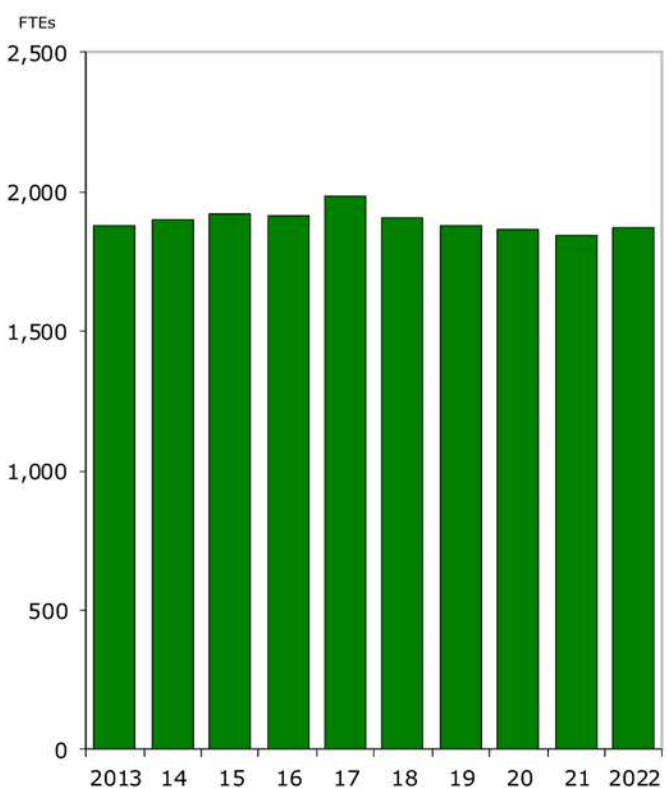
2022	\$429,185,500
2021	\$399,326,700
Increase	\$29,858,800



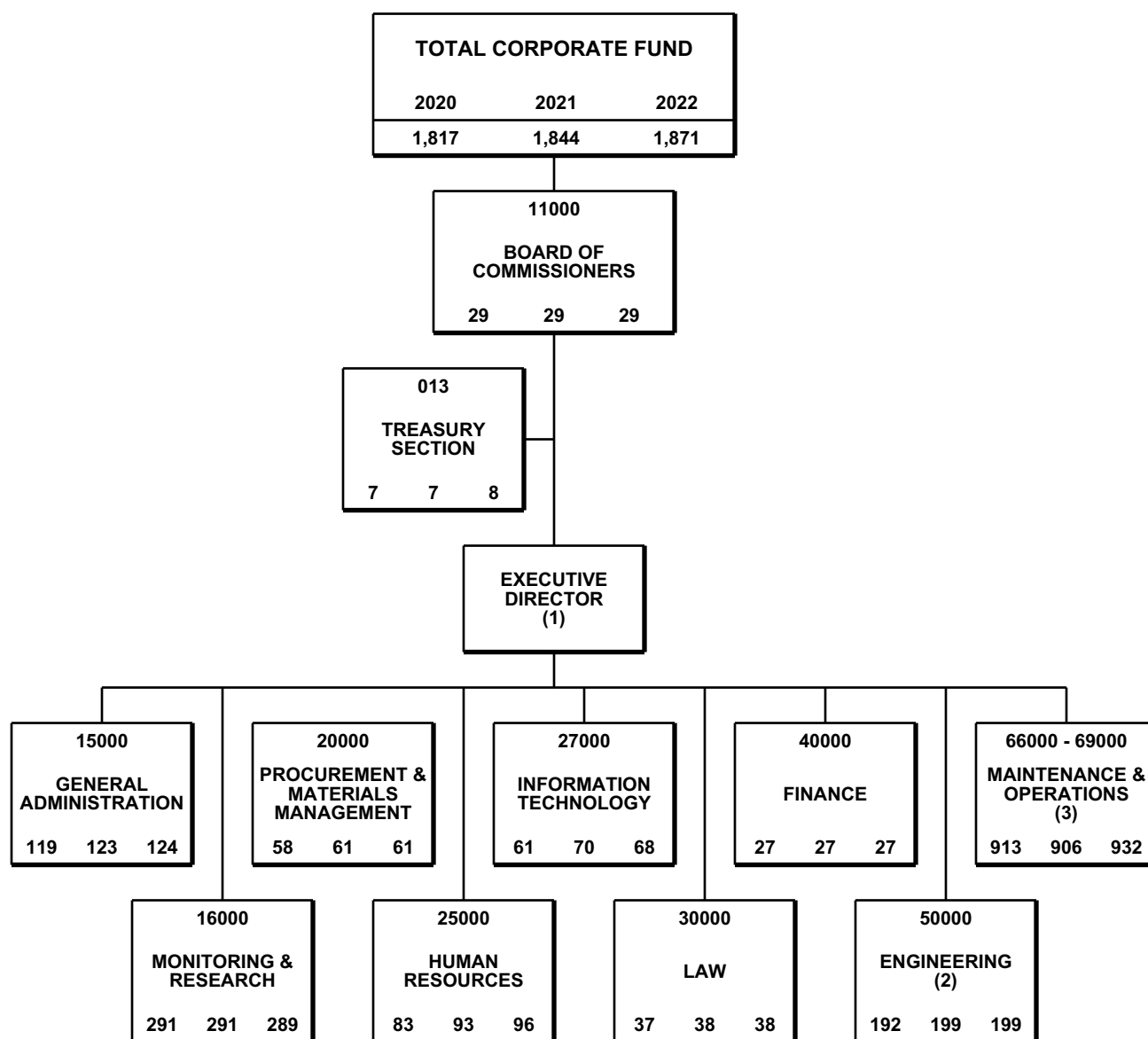
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



CORPORATE FUND



- (1) Personnel count for the Executive Director's Office is reflected in General Administration.
- (2) 72 positions are funded by the Stormwater Management Fund, the management of which remains in the Engineering Department.
- (3) 28 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						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$180,988,779	\$ 191,587,900	\$ 191,038,000	\$ 124,104,153	\$178,997,600	\$ 192,190,700	\$ —
601060	Compensation Plan Adjustments	9,500,657	8,591,200	8,759,800	5,998,909	8,139,200	10,664,500	—
601070	Social Security and Medicare Contributions	2,665,628	2,936,500	2,936,500	1,935,348	2,705,300	2,947,100	—
601080	Salaries of Nonbudgeted Employees	31,629	107,000	107,000	23,874	23,900	5,000	—
601090	Employee Claims	75,507	83,300	100,100	90,936	91,000	100,000	—
601100	Tuition and Training Payments	387,046	1,185,200	1,168,400	382,319	739,100	1,486,400	—
601250	Health and Life Insurance Premiums	40,190,299	47,059,000	47,059,000	29,531,174	39,442,400	47,900,200	—
601270	General Salary Adjustments	—	—	—	—	—	2,400,000	—
601300	Personal Services, N.O.C. (Not Otherwise Classified)	216,419	977,000	977,000	265,308	376,600	987,000	—
100	TOTAL PERSONAL SERVICES	234,055,964	252,527,100	252,145,800	162,332,021	230,515,100	258,680,900	—
612010	Travel	5,547	89,500	89,500	604	20,800	128,900	—
612030	Meals and Lodging	38,741	177,400	167,000	21,506	75,400	260,400	—
612040	Postage, Freight, and Delivery Charges	89,718	123,100	123,100	47,498	95,000	97,300	—
612050	Compensation for Personally-Owned Automobiles	93,370	170,000	169,900	68,515	129,200	170,000	—
612080	Motor Vehicle Operating Services	38,214	71,000	71,000	52,771	63,900	71,000	—
612090	Reprographic Services	17,338	78,800	78,800	36,317	86,200	178,800	—
612150	Electrical Energy	35,801,674	37,764,000	37,764,000	20,245,695	33,279,600	47,968,000	—
612160	Natural Gas	2,275,466	3,500,600	3,250,600	1,470,843	3,240,400	3,217,200	—
612170	Water and Water Services	1,880,394	2,343,700	2,193,700	1,052,261	2,135,900	1,918,100	—
612210	Communication Services	1,371,920	2,433,500	2,764,500	2,744,289	2,764,500	2,526,100	—
612240	Testing and Inspection Services	319,770	1,244,500	1,267,500	1,246,358	1,159,400	1,580,200	—
612250	Court Reporting Services	68,680	91,000	95,000	85,000	75,000	93,000	—
612260	Medical Services	77,760	170,800	170,800	130,800	112,700	451,300	—
612280	Subscriptions and Membership Dues	757,390	998,300	998,300	705,888	869,500	913,200	—
612290	Insurance Premiums	3,657,819	3,870,800	3,870,800	341,113	3,870,800	4,221,400	—
612330	Rental Charges	282,729	325,600	325,600	303,863	279,700	365,200	—
612340	Discount Lost	2,391	3,000	3,000	2,181	3,000	3,000	—
612360	Advertising	82,830	143,000	143,000	103,270	126,800	181,500	—
612370	Administration Building Operation	1,228,819	1,369,900	1,369,900	1,233,690	1,125,500	1,407,400	—
612390	Administration Building McMillan Pavilion Operation	627,967	823,800	823,800	754,508	682,500	842,600	—
612400	Intergovernmental Agreements	49,547	99,100	99,100	99,094	99,100	149,600	—
612410	Governmental Service Charges	3,462,176	4,406,000	4,057,600	2,843,169	4,076,900	4,100,700	—

101 11000 - 69000	Fund: Corporate Department: All	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
612420	Maintenance of Grounds and Pavements	1,056,484	1,436,800	1,805,200	1,783,389	1,240,700	1,943,400	—
612430	Payments for Professional Services	2,640,876	6,121,300	5,961,400	4,563,568	4,189,400	7,024,500	—
612440	Preliminary Engineering Reports and Studies	—	20,000	20,000	19,784	19,800	20,000	—
612490	Contractual Services, N.O.C.	1,000,882	1,586,000	1,709,800	1,414,238	1,327,100	1,335,600	—
612520	Waste Material Disposal Charges	13,535,721	12,297,400	13,545,200	11,571,962	9,277,900	13,273,700	—
612530	Farming Services	37,100	90,000	40,000	40,000	40,000	90,000	—
612590	Sludge Disposal	3,778,109	4,500,000	4,500,000	4,500,000	4,000,000	4,500,000	—
612600	Repairs to Collection Facilities	2,221,222	4,097,400	3,221,200	3,007,789	2,676,400	4,325,500	—
612620	Repairs to Waterway Facilities	112,645	148,600	223,600	186,931	160,600	582,900	—
612650	Repairs to Process Facilities	5,021,511	12,064,100	11,830,100	11,395,765	8,119,800	16,556,400	—
612670	Repairs to Railroads	358,561	642,800	888,200	881,385	461,600	719,000	—
612680	Repairs to Buildings	964,372	1,464,300	1,421,100	1,306,062	1,180,800	1,878,000	—
612760	Repairs to Material Handling and Farming Equipment	284,665	754,300	854,300	847,614	713,100	357,900	—
612780	Safety Repairs and Services	356,249	539,000	539,000	524,087	517,100	581,700	—
612790	Repairs to Marine Equipment	71,474	31,500	31,500	31,074	31,100	33,300	—
612800	Repairs to Office Furniture and Equipment	43,893	83,300	123,700	113,044	76,600	85,700	—
612810	Computer Equipment Maintenance	193,577	375,000	375,000	144,314	243,100	675,000	—
612820	Computer Software Maintenance	4,004,653	5,199,600	5,122,300	4,570,929	4,917,000	5,731,000	—
612840	Communications Equipment Maintenance (Includes Software)	595,056	766,500	766,500	718,147	710,700	816,100	—
612860	Repairs to Vehicle Equipment	394,646	576,900	581,700	578,209	420,000	643,400	—
612970	Repairs to Testing and Laboratory Equipment	304,243	382,300	382,300	344,589	371,700	353,900	—
612990	Repairs, N.O.C.	10,340	28,000	28,000	22,200	23,000	23,500	—
200	TOTAL CONTRACTUAL SERVICES	89,216,539	113,502,500	113,866,600	82,154,313	95,089,300	132,395,400	—
623030	Metals	78,017	126,100	156,100	131,696	162,600	160,100	—
623070	Electrical Parts and Supplies	2,099,988	3,435,400	3,345,200	3,175,675	3,184,700	3,803,000	—
623090	Plumbing Accessories and Supplies	742,039	1,141,600	1,178,600	984,346	1,087,000	1,184,700	—
623110	Hardware	59,454	104,300	94,300	76,204	83,800	110,800	—
623130	Buildings, Grounds, Paving Materials, and Supplies	212,675	424,900	387,400	298,516	323,900	406,800	—
623170	Fiber, Paper, and Insulation Materials	40,529	76,300	76,300	37,122	60,600	68,300	—
623190	Paints, Solvents, and Related Materials	42,165	56,900	54,900	34,479	47,500	56,900	—

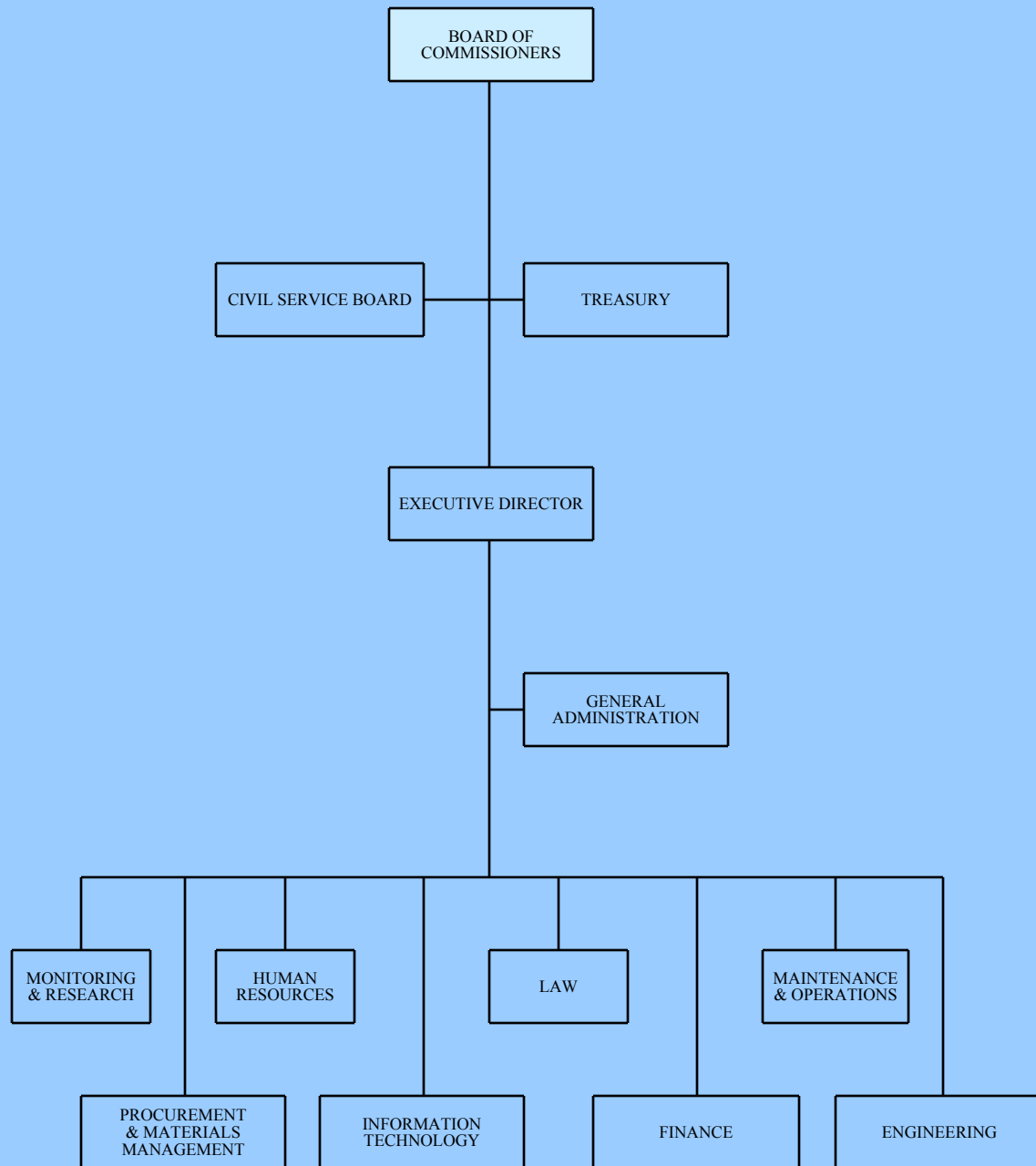
101 11000 - 69000	Fund: Corporate Department: All	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623250	Vehicle Parts and Supplies	149,974	212,300	212,300	207,039	163,000	228,300	—
623270	Mechanical Repair Parts	3,687,162	4,972,700	4,932,700	4,662,417	4,730,600	5,595,900	—
623300	Manhole Materials	3,990	70,000	30,000	—	63,000	70,000	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	193,611	353,300	353,300	274,568	263,400	370,200	—
623530	Farming Supplies	13,976	16,000	16,000	15,912	15,000	18,000	—
623560	Processing Chemicals	8,154,534	11,527,500	11,652,500	10,288,791	9,617,100	13,428,000	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	964,404	1,160,000	1,160,000	855,998	1,122,500	1,236,900	—
623660	Cleaning Supplies	575,113	643,300	498,300	167,213	337,700	298,800	—
623680	Tools and Supplies	301,869	356,800	356,800	330,725	328,500	415,700	—
623700	Wearing Apparel	266,751	353,100	433,100	312,639	464,900	416,800	—
623720	Books, Maps, and Charts	14,631	21,400	21,400	16,150	16,900	26,200	—
623780	Safety and Medical Supplies	308,819	371,700	371,700	291,411	349,000	413,800	—
623800	Computer Software	383,050	310,900	309,900	215,715	222,100	304,400	—
623810	Computer Supplies	1,167,061	896,900	880,100	582,961	761,200	703,600	—
623820	Fuel	333,176	618,800	568,800	502,070	500,400	657,700	—
623840	Gases	73,130	84,700	84,700	81,448	76,300	85,400	—
623850	Communications Supplies	257,532	87,200	109,200	64,079	49,200	199,600	—
623860	Lubricants	186,849	216,600	317,600	279,310	296,800	299,600	—
623990	Materials and Supplies, N.O.C.	204,961	290,600	290,600	207,678	227,800	314,700	—
300	TOTAL MATERIALS AND SUPPLIES	20,515,459	27,929,300	27,891,800	24,094,162	24,555,500	30,874,200	—
634600	Equipment for Collection Facilities	—	90,000	20,500	20,467	20,500	115,000	—
634620	Equipment for Waterway Facilities	—	135,000	142,000	140,349	136,700	—	—
634650	Equipment for Process Facilities	135,160	561,400	557,400	553,294	508,700	858,000	—
634670	Railroad Equipment	—	25,000	25,000	24,958	25,000	—	—
634760	Material Handling and Farming Equipment	60,216	333,000	320,600	319,087	319,200	805,000	—
634780	Safety and Medical Equipment	12,166	6,000	6,000	—	—	—	—
634800	Office Furniture and Equipment	—	—	—	—	—	21,500	—
634810	Computer Equipment	137,920	205,000	205,000	15,869	190,000	1,215,000	—
634820	Computer Software	294,688	950,000	708,200	628,375	298,200	434,900	—
634840	Communications Equipment (Includes Software)	—	—	—	—	—	50,000	—
634860	Vehicle Equipment	1,258,657	1,470,200	1,832,300	1,739,093	1,741,000	2,062,900	—

101 11000 - 69000	Fund: Corporate Department: All	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
634970	Testing and Laboratory Equipment	116,598	291,700	565,300	560,207	553,500	456,700	—
634990	Machinery and Equipment, N.O.C.	92,886	470,000	209,700	204,383	202,000	453,000	—
400	TOTAL MACHINERY AND EQUIPMENT	2,108,291	4,537,300	4,592,000	4,206,082	3,994,800	6,472,000	—
645680	Buildings	64,510	—	—	—	—	—	—
500	TOTAL CAPITAL PROJECTS	64,510	—	—	—	—	—	—
667130	Taxes on Real Estate	683,599	830,500	830,500	555,908	693,600	763,000	—
700	TOTAL FIXED AND OTHER CHARGES	683,599	830,500	830,500	555,908	693,600	763,000	—
TOTAL CORPORATE FUND		\$346,644,362	\$ 399,326,700	\$ 399,326,700	\$ 273,342,486	\$354,848,300	\$ 429,185,500	\$ —

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.



Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 7, 2021

Mr. Brian A. Perkovich
Executive Director
O F F I C E

Dear Sir:

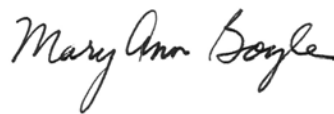
Subject: 2022 Program for the Board of Commissioners

The Board of Commissioners' program for 2022, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the department's 2022 initiatives in alignment with and in support of the Strategic 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, 2022 major initiatives and challenges, and 2021 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 2022.

Respectfully submitted,

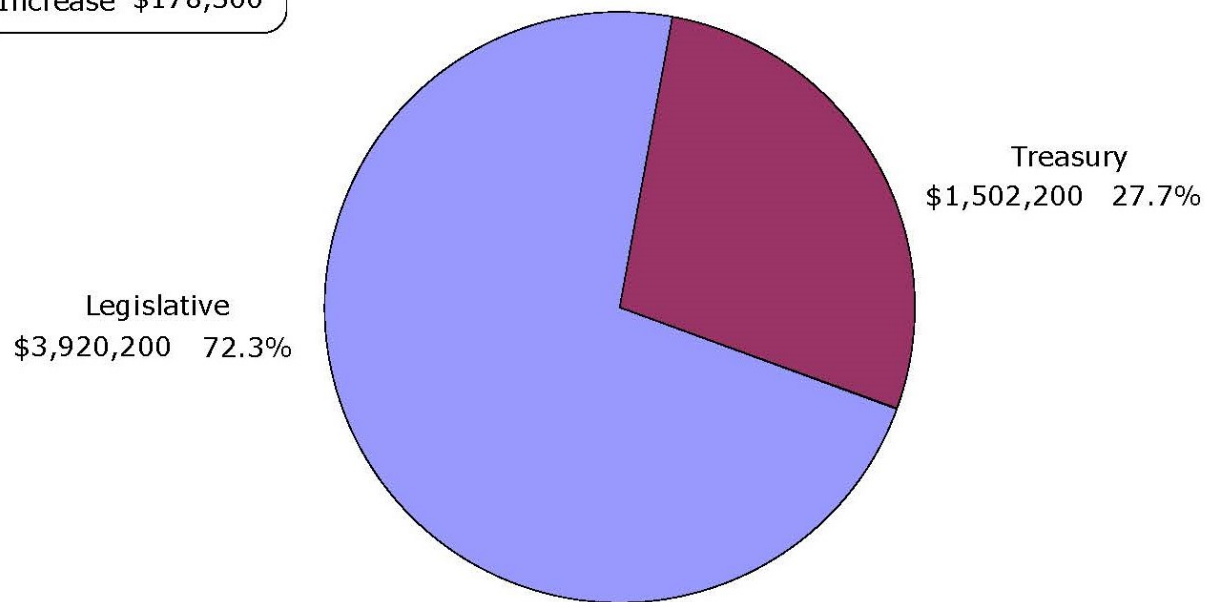


Mary Ann Boyle
Treasurer

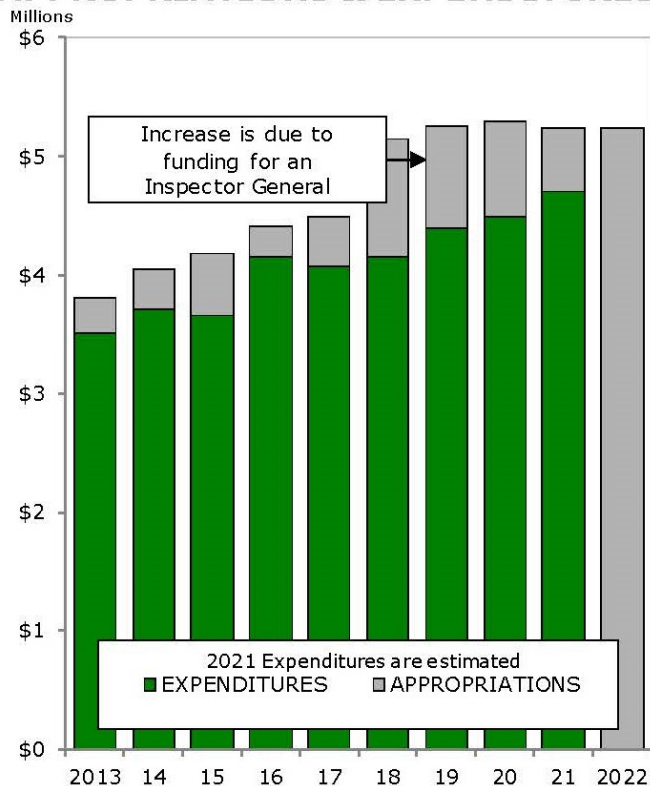
BOARD OF COMMISSIONERS

2022 \$5,422,400
2021 \$5,244,100
Increase \$178,300

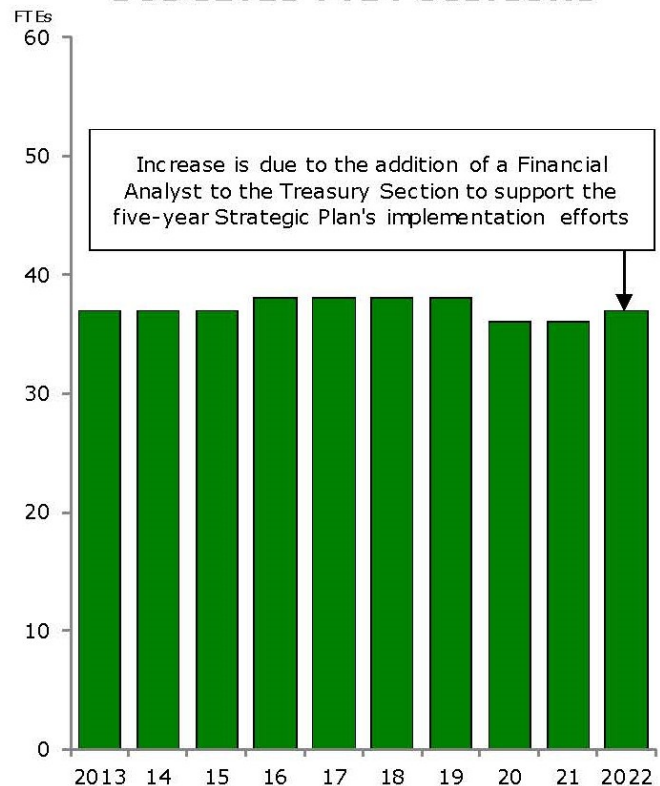
FUNCTIONS



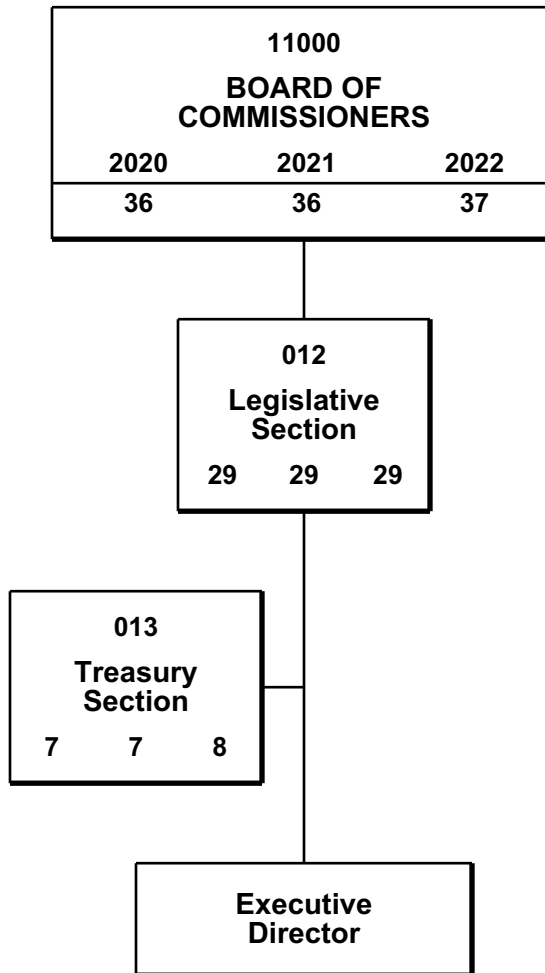
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



BOARD OF COMMISSIONERS



BOARD OF COMMISSIONERS

The mission of the Board of Commissioners is the mission of the Metropolitan Water Reclamation District of Greater Chicago (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 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 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 2021 Major Accomplishments

- Investment interest income earned for the year was approximately \$3.4 million, despite the significant challenges for investing created by the economic downturn in the financial markets. As of year-end, the District experienced no loss on investments;
- The District continued toward the funding policy goals for the Retirement Fund and the Other Postemployment Benefits (OPEB) Trust Fund. As of December 31, 2020, the Retirement Fund's funded ratio was 57.3 percent and the OPEB Trust Fund's funded ratio was 84.9 percent;
- Investment activities incorporated sustainability considerations according to the revised Investment Policy and guidelines implemented in December 2019. As of July 23, 2021, 100 percent of the District's applicable 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;
- The District plans to close on a sale of \$500.0 million of General Obligation Capital Improvement Bonds in the fourth quarter to fund its Capital Improvement Program and refund select outstanding bonds. The bond sale is part of the District's capital financing plan which also includes low-cost funding options such as 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;
- On September 9, 2021, Fitch Rating Agency affirmed the District's AAA rating with a stable outlook.

2022 Appropriation and Position Summary

The 2022 appropriation for the Board of Commissioners is \$5,422,400, an increase of \$178,300, or 3.4 percent, from 2021. The staffing level has increased from 36 to 37 positions. This includes the addition of one Financial Analyst position to support the five-year Strategic Plan's implementation efforts.

2022 Budget Highlights

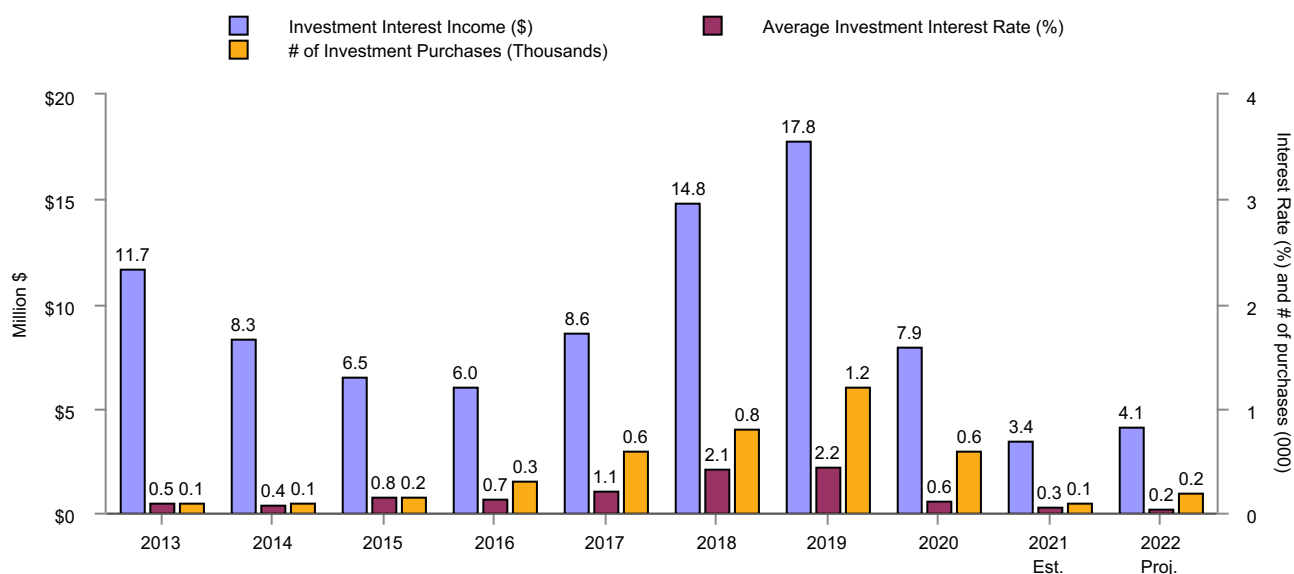
The following budget highlights support the District's Strategic Plan Goal of Enterprise Resilience, ensuring ongoing services that are reliable, equitable, and cost-effective, preparing for other man-made and natural events and strengthening the MWRD's operational and financial positions.

Maintaining strong fiscal management

- Although yields are expected to remain low, the Treasury Section will maximize investment yields while adhering to statutory and investment policy guidelines. Investment interest income estimate is \$4.1 million for 2022. After two interest rate decreases by the Federal Reserve in 2020, interest rates are forecasted to stay near zero through 2022;
- The District will make a transfer of \$10.0 million from the Corporate Fund to the Retirement Fund to provide advance funding to maintain growth in the Retirement Fund's funded ratio;

- The Legislative Section will continue an agreement with the Cook County Office of the Independent Inspector General in 2022. Inspectors General are accountable to the taxpayers with a role 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 explore innovative ideas on investment and debt management to maximize returns and cost efficiency for District taxpayers while adhering to District policies. For example, the District plans to close on its first loan from the U.S. Treasury under the Water Infrastructure Finance and Innovation Act program. The loan program's interest rate is lower than borrowing from the capital markets, which would allow the District to restructure its debt profile to create a more efficient utilization of the Debt Service Extension Base over the next 20 years;
- The District will increase its pension funding ratio to 65 percent as a first step in reaching an adequately funded pension plan;
- 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 on the Capital Finance Program and 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 global pandemic.

Average Investment Interest Rate on Purchases All Funds 2013-2022



Ending Investment Inventory (Par Value) (Dollars in Millions)	2013	2014	2015	2016	2017	2018	2019	2020	2021 Est.	2022 Proj.
	\$717.0	\$547.2	\$715.2	\$711.3	\$736.7	\$684.0	\$670.5	\$656.1	\$823.3	\$824.1

Interest rates are at historic lows since the onset of the COVID-19 global pandemic. This resulted in significantly lower investment interest income in years 2020-2022 and is expected to continue into the near future. The current Federal Fund rate is 0.10 percent and it is expected to increase to 0.13 percent in 2022 and 2023.

The following budget highlight supports the District's Strategic Plan Goal of Community Engagement, ensuring that the District is an inclusive business partner.

Increase diverse participation in MWRD contracts

- The Treasury Department ensures that the District is an inclusive business partner by aspiring to award a minimum of 33 percent of its professional services to minority owned, women owned, and veteran owned (MBE, WBE, VBE) business enterprises. Additionally, the Treasury Section seeks out community banks with which to invest, as a way to remain connected to and collaborate with the local community. The Legislative Section continues community outreach to bring awareness to the District's environmental achievements and its dedication to environmental equality.

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.		\$ 4,006,200	73.9 %
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.		\$ 844,000	15.6 %
3 . Enhance the District's image in national financial markets through the prudent use of debt financing for capital needs and debt service savings.		\$ 420,400	7.7 %
4 . Administer the Other Post Employment Benefit Trust investment and reporting activities.		\$ 151,800	2.8 %
	Totals	\$ 5,422,400	100.0 %

MEASURABLE GOALS:		2020 Actual	2021 Estimated	2022 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.		33%	33%	33%

PROGRAMS BY PRIORITY:		2020 Actual	Budgeted		Change	
Number	Name		FTEs	Dollars	Dollars	Percent
7110	Legislative	\$ 3,252,230	2022 29	\$ 3,827,600	\$ 11,300	0.3
			2021 29	\$ 3,816,300		
7210	Treasury Activities	\$ 722,196	2022 4	\$ 844,000	\$ 67,700	8.7
			2021 4	\$ 776,300		
7252	Management and Organization Studies	\$ —	2022 1	\$ 86,000	\$ 86,000	100.0
			2021 —	\$ —		
7316	Other Postemployment Benefits Trust Management and Report Preparation	\$ 160,653	2022 1	\$ 151,800	\$ (9,100)	(5.7)
			2021 1	\$ 160,900		
7601	Capital Financing Program and Other Related Costs	\$ 289,325	2022 2	\$ 420,400	\$ 17,800	4.4
			2021 2	\$ 402,600		
7604	Social Security and Medicare Contributions	\$ 65,879	2022 —	\$ 92,600	\$ 4,600	5.2
			2021 —	\$ 88,000		
	Totals	\$ 4,490,283	2022 37	\$ 5,422,400	\$ 178,300	3.4 %
			2021 36	\$ 5,244,100		
a) Increase is due to the addition of one Financial Analyst position to help implement the new Strategic Plan (\$86,000).						

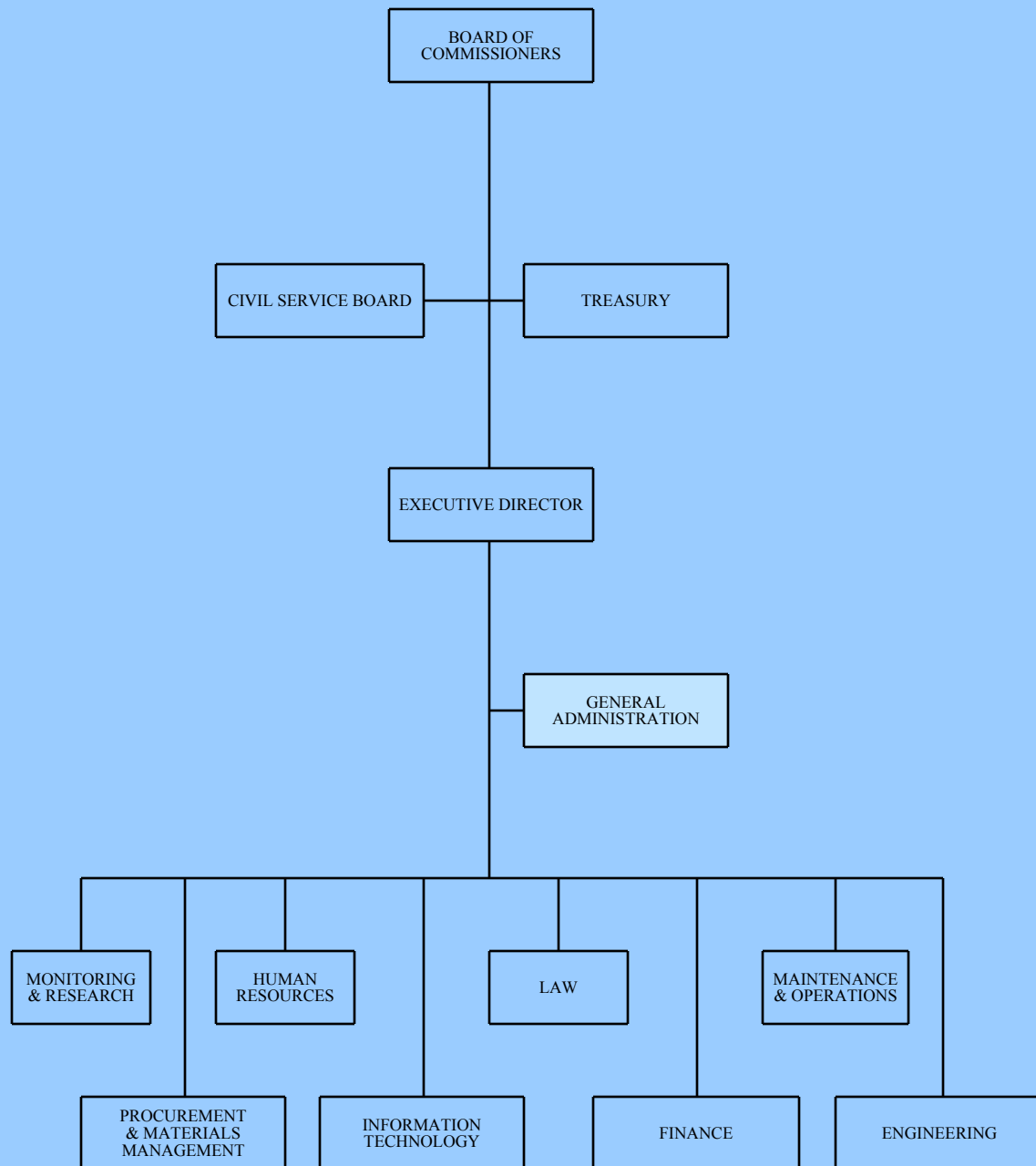
11000 BOARD OF COMMISSIONERS**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
7110	Legislative	Cost	\$ 3,252,230	\$ 3,816,300	\$ 3,827,600	a)
7210	Treasury Activities	Cost	\$ 722,196	\$ 776,300	\$ 844,000	
7252	Management and Organization Studies	Cost	\$ —	\$ —	\$ 86,000	
7316	Other Postemployment Benefits Trust Management and Report Preparation	Cost	\$ 160,653	\$ 160,900	\$ 151,800	
7601	Capital Financing Program and Other Related Costs	Cost	\$ 289,325	\$ 402,600	\$ 420,400	
7604	Social Security and Medicare Contributions	Cost	\$ 65,879	\$ 88,000	\$ 92,600	
		Totals	\$ 4,490,283	\$ 5,244,100	\$ 5,422,400	
a) Increase is due to the addition of one Financial Analyst position to help implement the new Strategic Plan (\$86,000).						

101 11000	Fund: Corporate Department: Board of Commissioners	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 3,508,075	\$ 3,662,000	\$ 3,592,000	\$ 2,316,712	\$ 3,261,200	\$ 3,605,100	\$ —
601060	Compensation Plan Adjustments	43,181	38,900	108,900	88,226	108,900	127,800	—
601070	Social Security and Medicare Contributions	65,878	88,000	88,000	55,811	88,000	92,600	—
601100	Tuition and Training Payments	4,822	20,700	20,700	1,254	13,000	27,800	—
601300	Personal Services, N.O.C. (Not Otherwise Classified)	215,828	517,000	517,000	265,308	376,600	527,000	—
100	TOTAL PERSONAL SERVICES	3,837,784	4,326,600	4,326,600	2,727,311	3,847,700	4,380,300	—
612010	Travel	61	17,000	17,000	—	5,000	24,300	—
612030	Meals and Lodging	—	20,500	20,500	73	10,000	33,300	—
612280	Subscriptions and Membership Dues	27,700	29,700	29,700	29,700	29,700	28,200	—
612430	Payments for Professional Services	622,172	824,100	824,100	667,355	780,000	927,600	—
612490	Contractual Services, N.O.C.	674	700	700	675	700	700	—
200	TOTAL CONTRACTUAL SERVICES	650,608	892,000	892,000	697,803	825,400	1,014,100	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	1,891	25,500	25,500	11,579	25,500	27,000	—
623720	Books, Maps, and Charts	—	—	—	—	—	1,000	—
300	TOTAL MATERIALS AND SUPPLIES	1,891	25,500	25,500	11,579	25,500	28,000	—
TOTAL BOARD OF COMMISSIONERS		\$ 4,490,283	\$ 5,244,100	\$ 5,244,100	\$ 3,436,693	\$ 4,698,600	\$ 5,422,400	\$ —
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				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	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	2,598,175	29	2,497,289
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		4	
EX06	Secretary to Officer	1	1		1	
TOTAL 013	Treasury Section	7	7	1,082,246	8	1,125,953
TOTAL	Board of Commissioners	36	36	3,680,421	37	3,623,242
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 7, 2021

Mr. Brian A. Perkovich
Executive Director
O F F I C E

Dear Sir:

Subject: 2022 Program for General Administration

General Administration's program for 2022, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of 2022 initiatives in alignment with and in support of the Strategic 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, 2022 major initiatives and challenges, and 2021 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 2022.

Respectfully submitted,

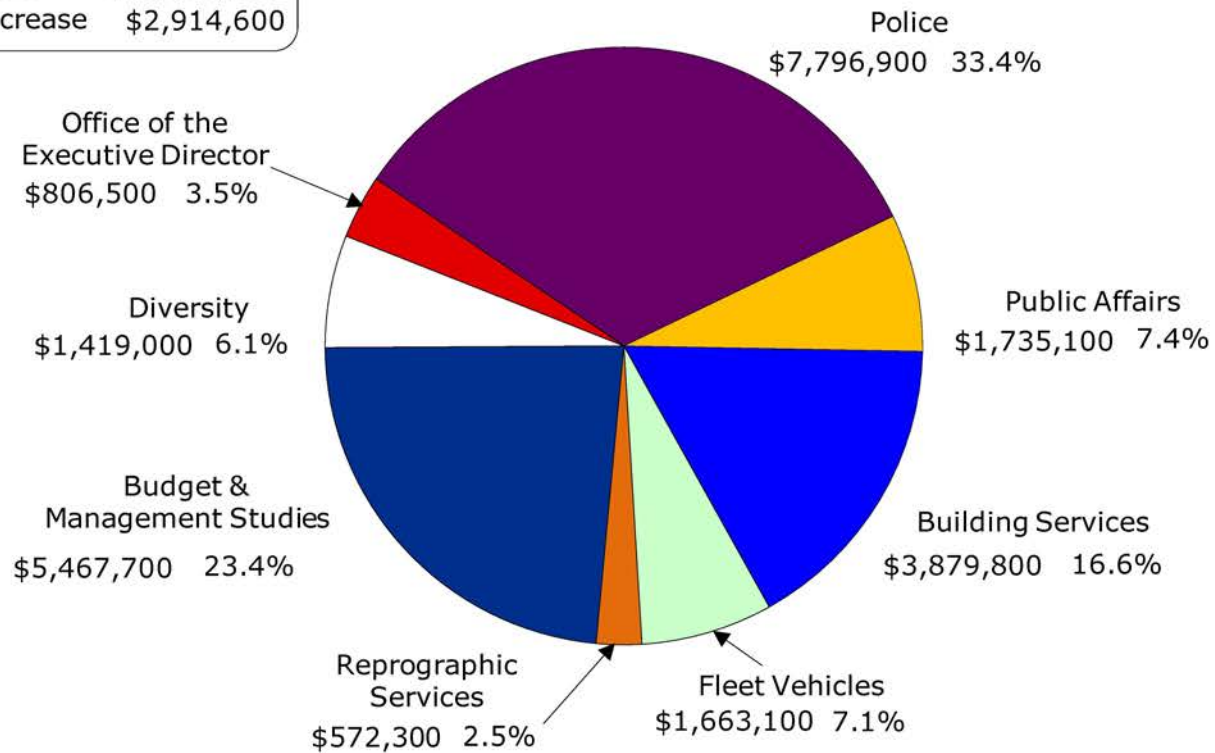


Acting Administrative Services Officer

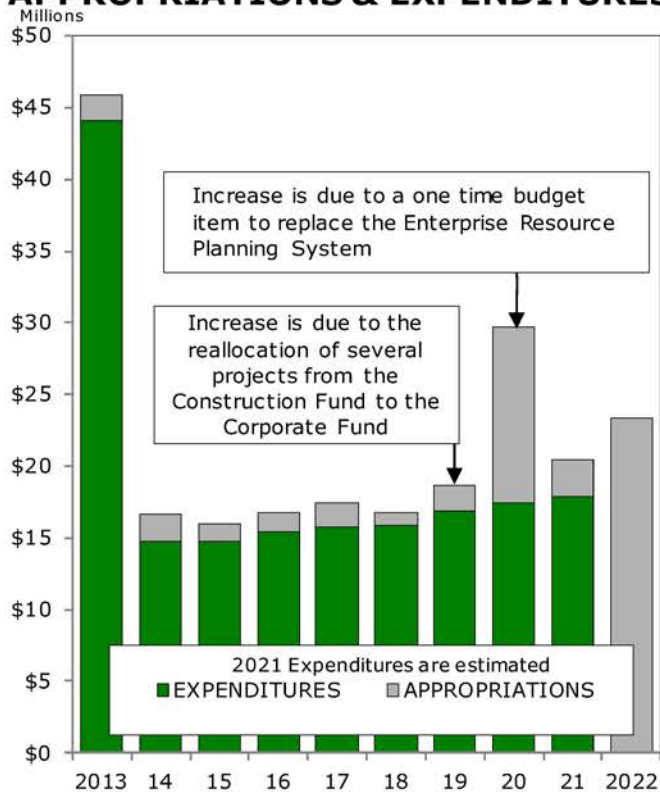
GENERAL ADMINISTRATION

2022	\$23,340,400
2021	\$20,425,800
Increase	\$2,914,600

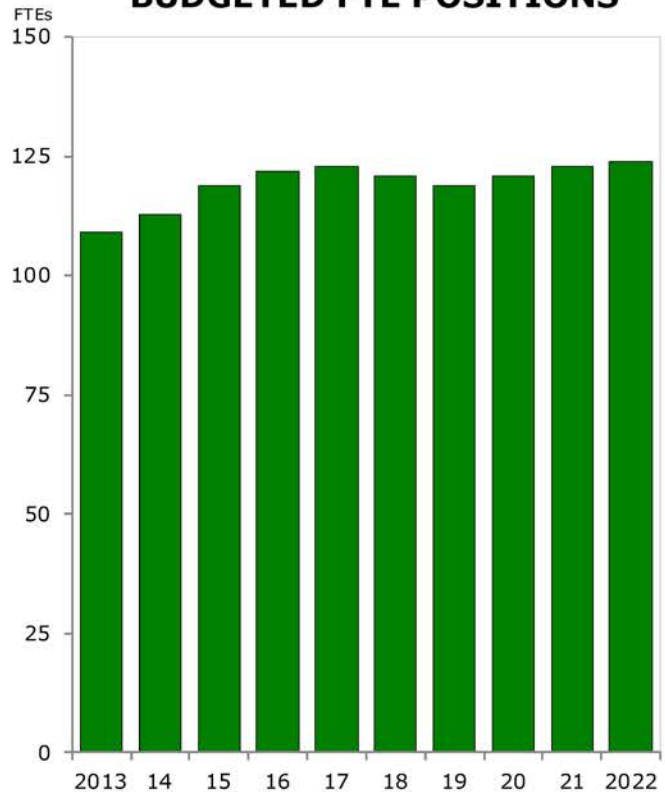
FUNCTIONS



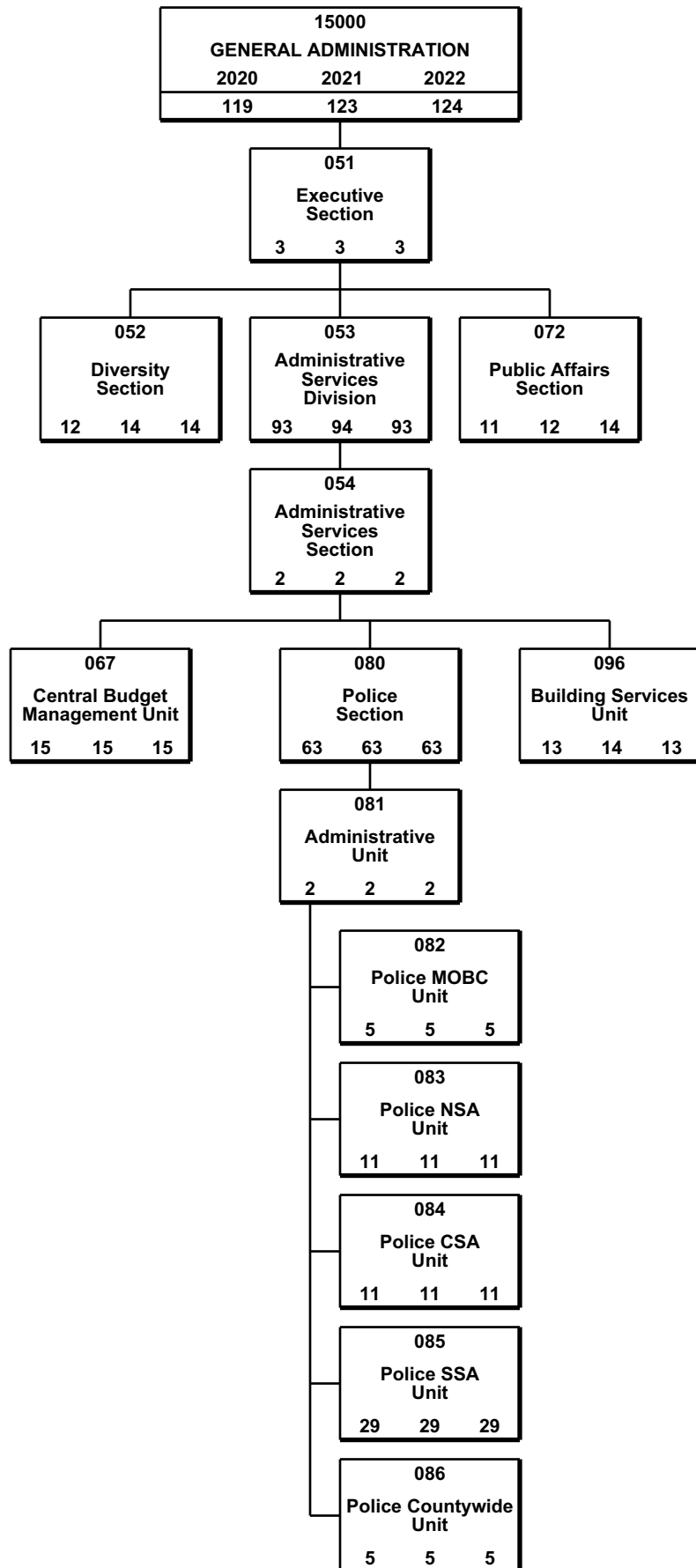
APPROPRIATIONS & EXPENDITURES



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.

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 2021 Major Accomplishments

- Participated in the Women's Business Development Center CityCon Program Panel, Women in Water Panel Roundtable, and Chicago Minority Supplier Development Council's virtual speaking event to promote the District Diversity Department's mission and increase the District's visibility among minority, women, small, veteran, LGBT, and disabled business enterprises;
- Conducted a Disparity Study to determine the program viability and implement the necessary changes in accordance with the federal government's protected class order and to reflect current best practices;
- Promoted the Save the Monarchs campaign, the District's partnership with the Illinois Monarch Project which works to save Monarch butterflies from extinction. The campaign educates the public about the butterfly's plight and provides milkweed seeds through engagement with our followers on social media and in the public. Received a Monarch Waystation certification, verifying the District maintained the growth of milkweed, nectar sources and shelter in our native plant areas, which is needed for the butterflies to migrate through North America;
- Translated and published the children's storybook "Where Does IT Go? Adventures with the Water Science Explorers" in Spanish, Polish, and Chinese, and also launched an animated version of the storybook on the District's website;
- Launched an Electric Vehicle Pilot Program by installing three charging stations at the Main Office Building, Stickney, and Calumet Water Reclamation plant, and purchased seven electric vehicles.

2022 Appropriation and Position Summary

The 2022 appropriation for General Administration is \$23,340,400, an increase of \$2,914,600, or 14.3 percent, from 2021. The staffing level has increased from 123 to 124 positions which includes the addition of one Graphic Artist and one Public Affairs Specialist - Bilingual, and the reduction of one Administrative Specialist. In addition, one Budget and Management Analyst was transferred to the Human Resources Department and one Management Analyst III was transferred from the Engineering Department.

2022 Budget Highlights

The following budget highlights support the District's Strategic Plan Goal of Community Engagement. The initiatives highlighted below illustrate how the District is engaging with the community to position it as a critical community asset and to ensure that the District is a responsive neighbor and inclusive business partner.

Expand partnerships, outreach, and engagement to new audiences

- The Public Affairs section will complete a market research and analysis study to help establish benchmarks for system-wide marketing communications and outreach goals, activities, and messaging. They will use the information gained from the study to expand partnerships by focusing outreach to specific groups, increase engagement with communities near the plants, and establishing Community Advisory Councils to invite ideas and recommendations from the public;
- The Public Affairs Section will launch a new online educational hub that will educate the public about ways to protect the waterways while teaching them about the District's role. The content will include research materials, science experiments, arts and crafts, helpful tips and advice for residents and business owners, and instructional materials for educators;

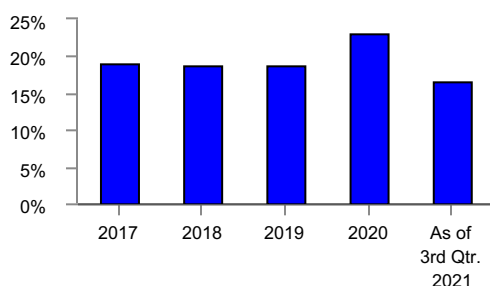
- The Public Affairs Section will add bilingual staff to increase engagement and expand outreach to schools, universities, neighborhood groups and government agencies.

Increase diverse participation on MWRD contracts

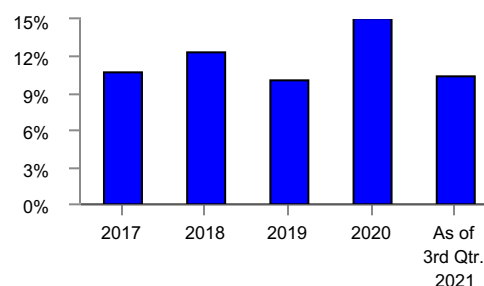
- The Diversity section will evaluate the recommendations provided by the Disparity Study completed in 2021 and determine if there are goals that could be applied through policy to increase opportunities for diversification in MWRD contracts;
- The Diversity section will also expand the capability of the PRISM contract management software which will evaluate the impact of the department's current efforts and identify opportunities for improvement to further increase diverse participation on MWRD contracts as follows:

Construction & Consulting Contracts	2017	2018	2019	2020	As of 2021 3rd Quarter
Minority-owned Business Enterprises	\$ 9,800,078	\$ 16,469,827	\$ 31,923,438	\$ 13,442,250	\$ 11,744,649
Women-owned Business Enterprises	\$ 5,565,425	\$ 10,931,146	\$ 17,096,986	\$ 8,686,314	\$ 7,363,487
Small Business Enterprises	\$ 1,364,898	\$ 2,287,186	\$ 1,302,827	\$ 431,330	\$ 1,101,333
Veteran-owned Business Enterprises	\$ —	\$ —	\$ 730,458	\$ 1,287,384	\$ 1,004,363
Total Contracts Awarded	\$ 51,475,204	\$ 87,762,251	\$ 169,620,574	\$ 57,859,661	\$ 71,097,417

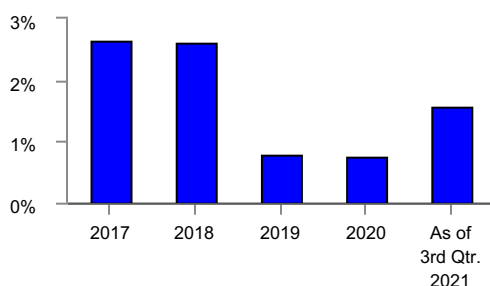
Minority-owned Business Enterprises



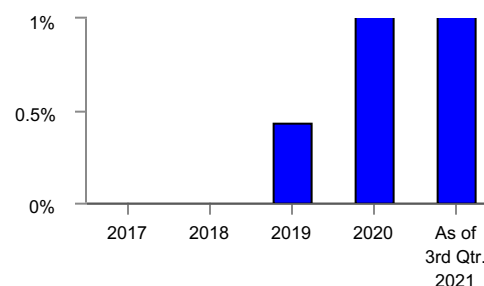
Women-owned Business Enterprises



Small Business Enterprises



Veteran-owned Business Enterprises



The following budget highlights support the District's Strategic Plan Goal of Enterprise Resilience. The initiatives highlighted below ensure ongoing services that are reliable, equitable, and cost-effective; achieve climate change and environmental justice protections; prepare for other man-made and natural events; strengthen the MWRD's operational and financial positions.

Increase visibility around goals and performance indicators

- The Budget Office will implement a new District-wide budgeting system with internal and external reporting capabilities to increase visibility to the public. The new system will track both financial and non-financial performance indicators to more accurately define and communicate the success measures of the District's Strategic Plan.

Finalize and implement climate change and resiliency plans

- The fleet section will install four additional charging stations and continue the replacement of District vehicles with electric vehicles whenever possible to reduce the District's carbon footprint. The District's goal is to replace passenger vehicles with electric vehicles by 2030.

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.	\$ 7,796,900	33.4 %
2.	Carry out policies established by the elected Board of Commissioners for the protection of the water environment of the District.	\$ 806,500	3.5 %
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.	\$ 1,419,000	6.1 %
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.	\$ 5,113,500	21.9 %
5.	Operate and maintain the Main Office Building Complex to provide a functional and cost-effective office environment for staff, contractors, and visitors.	\$ 3,879,800	16.6 %
6.	Provide public understanding of District functions and activities through media, publications, and tours.	\$ 1,735,100	7.4 %
7.	Provide fleet management services by administering the operation, maintenance, repair, and procurement of the District's fleet.	\$ 1,663,100	7.1 %
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.	\$ 572,300	2.5 %
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.	\$ 354,200	1.5 %
Totals		\$ 23,340,400	100.0 %

MEASURABLE GOALS:	2020	2021	2022
	Actual	Actual	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.			

	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
2022 - Proposed	8,459	10%	5,280	10%	5,600	10%	363,117	10%	1,694	10%
2021 - Estimated	7,690	24%	4,800	12%	5,088	16%	330,107	27%	1,540	28%
2020 - Actual	6,200	31%	4,300	20%	4,400	61%	260,000	46%	1,200	200%

15000 GENERAL ADMINISTRATION**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:			2020	Budgeted			Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent			
7100	Office of the Executive Director	\$ 512,493	2022	3	\$ 530,200	\$ 4,800	0.9		
			2021	3	\$ 525,400				
7110	Legislative	\$ 182,873	2022	—	\$ 276,300	\$ (65,900)	(19.3)	a)	
			2021	—	\$ 342,200				
7220	Reprographic Services	\$ 374,024	2022	2	\$ 572,300	\$ 105,800	22.7	b)	
			2021	2	\$ 466,500				
7240	Public Affairs	\$ 1,178,964	2022	14	\$ 1,735,100	\$ 251,000	16.9	c)	
			2021	12	\$ 1,484,100				
7251	Corporate Budget Preparation, Monitoring, and Administration	\$ 1,517,898	2022	7	\$ 4,464,000	\$ 2,281,700	104.6	d)	
			2021	7	\$ 2,182,300				
7252	Management and Organization Studies	\$ 377,259	2022	3	\$ 354,200	\$ (29,000)	(7.6)		
			2021	3	\$ 383,200				
7253	Support Department Budget Preparation, Monitoring, and Administration	\$ 491,157	2022	5	\$ 560,400	\$ (3,600)	(0.6)		
			2021	5	\$ 564,000				
7254	Enterprise System	\$ 69,861	2022	1	\$ 89,100	\$ 1,500	1.7		
			2021	1	\$ 87,600				
7340	Security of Plants and Properties	\$ 6,977,732	2022	63	\$ 7,619,700	\$ 422,700	5.9	e)	
			2021	63	\$ 7,197,000				
7460	Main Office Building Complex Services	\$ 3,419,192	2022	10	\$ 3,879,800	\$ 67,400	1.8		
			2021	11	\$ 3,812,400				
7470	Contract Diversity	\$ 900,229	2022	14	\$ 1,419,000	\$ (239,200)	(14.4)	f)	
			2021	14	\$ 1,658,200				
7490	Automotive Fleet Operations	\$ 1,230,653	2022	2	\$ 1,663,100	\$ 111,400	7.2		
			2021	2	\$ 1,551,700				
7604	Social Security and Medicare Contributions	\$ 165,163	2022	—	\$ 177,200	\$ 6,000	3.5		
			2021	—	\$ 171,200				
Totals		\$17,397,498	2022	124	\$23,340,400	\$ 2,914,600	14.3 %		
			2021	123	\$20,425,800				
a) Decrease is due to the reduction in funding for the federal lobbyist for 2022 (\$65,000).									
b) Increase is due to an increased amount of documents requiring digitization (\$80,000) and the replacement of the envelope printing machine in the print shop (\$21,500).									
c) Increase is due to the addition of a Graphic Artist and a Public Affairs Specialist (\$186,900), an increase to the market research and analysis project (\$25,000), and an increase in giveaway supplies for various events (\$12,800).									
d) Increase is due to the inclusion of the District-wide Corporate Fund general salary adjustments (\$2,400,000), offset by an anticipated reduction in retirements (\$103,600).									
e) Increase is due to the police overtime that will carry over into 2022 due to the COVID-19 global pandemic (\$202,600), compensation plan adjustments (\$192,600), and an increase to the Cook County Drug Takeback IGA (\$20,000).									
f) Decrease is due to the completion of the Diversity Disparity Study in 2021 (\$271,800), offset by an expansion to the PRISM Module (\$20,000), and a reallocation of salaries to more accurately reflect current activities (\$16,800).									

15000 GENERAL ADMINISTRATION**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
7100	Office of the Executive Director	Cost	\$ 512,493	\$ 525,400	\$ 530,200	
7110	Legislative	Cost	\$ 182,873	\$ 342,200	\$ 276,300	a)
7220	Reprographic Services					
7221	Duplication Services	# of Impressions	2,140,562	1,689,618	2,280,000	b)
		Cost	\$ 370,725	\$ 450,200	\$ 556,000	c)
		Cost/Impression	\$ 0.17	\$ 0.27	\$ 0.24	
7224	Design Services	Cost	\$ 3,299	\$ 16,300	\$ 16,300	
7240	Public Affairs					
7247	Internal Public Affairs					
	Interdepartmental Support	Cost	\$ 338,990	\$ 361,900	\$ 404,900	
7248	External Public Affairs					
	Respond to Public Inquiries and Furnish Public Information Pamphlets	# of Responses	48,000	48,000	48,000	
		Cost	\$ 280,423	\$ 374,643	\$ 444,084	d)
		Cost/Response	\$ 5.84	\$ 7.81	\$ 9.25	
	Coordinate District Communications with Public, Civic, and Social Groups	# of Contacts	25,000	25,000	25,000	
		Cost	\$ 153,224	\$ 204,707	\$ 242,649	d)
		Cost/Contact	\$ 6.13	\$ 8.19	\$ 9.71	
	Monitor Public Hearings, Board Meetings, Internet, and Media and Issue Press Releases	Cost	\$ 197,844	\$ 264,318	\$ 313,309	d)
	Special Public Events	Cost	\$ 208,483	\$ 278,532	\$ 330,158	d)
7250	Budget Preparation and Management Studies					
7251	Corporate Budget Preparation, Monitoring, and Administration	Cost	\$ 1,517,898	\$ 2,182,300	\$ 4,464,000	e)
7252	Management and Organization Studies	Cost	\$ 377,259	\$ 383,200	\$ 354,200	
7253	Support Department Budget Preparation, Monitoring, and Administration	Cost	\$ 491,157	\$ 564,000	\$ 560,400	
7254	Enterprise Systems	Cost	\$ 69,861	\$ 87,600	\$ 89,100	
<p>a) Decrease is due to the reduction in funding for the federal lobbyist for 2022 (\$65,000).</p> <p>b) Increase is due to a projected increase in demand for printing services as more employees return to the office.</p> <p>c) Increase is due to an increased amount of documents requiring digitization (\$80,000) and the replacement of the envelope printing machine in the print shop (\$21,500).</p> <p>d) Increase is due to the addition of a Graphic Artist and a Public Affairs Specialist (\$186,900), an increase to the market research and analysis project (\$25,000), and an increase in giveaway supplies for various events (\$12,800).</p> <p>e) Increase is due to the inclusion of the District-wide Corporate Fund general salary adjustments (\$2,400,000), offset by an anticipated reduction in retirements (\$103,600).</p>						

15000 GENERAL ADMINISTRATION**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
7340	Security of Plants and Properties					
	Patrol of District Facilities	# of Miles	119,839	113,527	119,839	
		Cost	\$ 1,350,797	\$ 1,393,245	\$ 1,475,074	f)
		Cost/Mile	\$ 11.27	\$ 12.27	\$ 12.31	
	Patrol of District Real Estate	# of Miles	232,692	220,377	225,000	
		Cost	\$ 3,819,822	\$ 3,939,856	\$ 4,171,255	f)
		Cost/Mile	\$ 16.42	\$ 17.88	\$ 18.54	
	Access Control to Facilities	# of Hours	45,431	45,132	45,431	
		Cost	\$ 1,807,113	\$ 1,863,899	\$ 1,973,371	f)
		Cost/Hour	\$ 39.78	\$ 41.30	\$ 43.44	
7460	Main Office Building Complex Services					
7461	Main Office Building Complex Operations	Area (Sq. Ft.)	198,901	198,901	198,901	
		Cost	\$ 3,132,597	\$ 3,437,800	\$ 3,542,600	
		Cost/Sq. Ft.	\$ 15.75	\$ 17.28	\$ 17.81	
7463	Collect and Distribute Mail	# of Pieces	343,729	600,000	600,000	
		Cost	\$ 207,738	\$ 296,500	\$ 272,500	
		Cost/Piece	\$ 0.60	\$ 0.49	\$ 0.45	
7464	Telephone Switchboard Operations at Main Office Building Complex	Cost	\$ 78,857	\$ 78,100	\$ 64,700	g)
7470	Contract Diversity					
7471	Contract Compliance	Cost	\$ 430,132	\$ 627,100	\$ 659,600	
7472	Community Activity	Cost	\$ 281,629	\$ 731,500	\$ 455,800	h)
7473	Contract Diversity Support	Cost	\$ 188,468	\$ 299,600	\$ 303,600	
7490	Automotive Fleet Operations					
7491	Automotive Fleet Procurement	Cost	\$ 733,430	\$ 902,200	\$ 973,000	
7499	Automotive Fleet Operations	Cost	\$ 497,223	\$ 649,500	\$ 690,100	
7604	Social Security and Medicare Contributions	Cost	\$ 165,163	\$ 171,200	\$ 177,200	
	Totals		\$ 17,397,498	\$ 20,425,800	\$ 23,340,400	
f) Increase is due to the police overtime that will carry over into 2022 due to the COVID-19 global pandemic (\$202,600), compensation plan adjustments (\$192,600), and an increase to the Cook County drug takeback Intergovernmental Agreement (\$20,000).						
g) Decrease is due to the drop of one Administrative Specialist position (\$13,500).						
h) Decrease is due to the completion of the Diversity Disparity Study in 2021 (\$271,800).						

101 15000	Fund: Corporate Department: General Administration	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 10,600,672	\$ 11,772,900	\$ 11,772,900	\$ 7,520,753	\$ 10,827,400	\$ 11,985,600	\$ —
601060	Compensation Plan Adjustments	1,282,389	919,000	919,000	648,473	923,900	1,193,300	—
601070	Social Security and Medicare Contributions	165,163	171,200	171,200	121,168	171,100	177,200	—
601100	Tuition and Training Payments	13,774	50,500	50,500	4,710	9,200	53,800	—
601270	General Salary Adjustments	—	—	—	—	—	2,400,000	—
100	TOTAL PERSONAL SERVICES	12,061,998	12,913,600	12,913,600	8,295,104	11,931,600	15,809,900	—
612010	Travel	655	9,000	9,000	137	200	13,700	—
612030	Meals and Lodging	1,999	18,100	18,100	980	1,400	23,900	—
612040	Postage, Freight, and Delivery Charges	83,743	110,800	110,800	35,832	85,400	85,800	—
612050	Compensation for Personally- Owned Automobiles	719	4,300	4,300	1,787	2,300	4,300	—
612080	Motor Vehicle Operating Services	38,063	68,500	68,500	52,542	62,800	68,500	—
612090	Reprographic Services	9,030	55,800	55,800	14,056	32,200	160,800	—
612150	Electrical Energy	276,210	340,300	340,300	152,931	272,300	372,300	—
612160	Natural Gas	23,614	24,000	24,000	15,169	22,500	24,000	—
612170	Water and Water Services	4,138	6,700	6,700	2,641	5,800	6,700	—
612210	Communication Services	—	3,000	3,000	3,000	3,000	3,000	—
612280	Subscriptions and Membership Dues	729,690	968,600	968,600	676,188	839,800	885,000	—
612330	Rental Charges	58,230	72,100	72,100	68,513	58,300	69,800	—
612360	Advertising	9,900	15,000	15,000	—	13,000	12,500	—
612370	Administration Building Operation	1,228,819	1,369,900	1,369,900	1,233,690	1,125,500	1,407,400	—
612390	Administration Building McMillan Pavilion Operation	627,967	823,800	823,800	754,508	682,500	842,600	—
612400	Intergovernmental Agreements	—	—	—	—	—	100,000	—
612430	Payments for Professional Services	171,636	845,800	945,800	789,860	620,800	634,000	—
612490	Contractual Services, N.O.C.	189,381	429,100	320,100	189,396	141,000	237,800	—
612680	Repairs to Buildings	384,755	121,500	63,800	6,000	40,000	374,000	—
612800	Repairs to Office Furniture and Equipment	38,515	64,200	98,200	94,114	64,300	69,900	—
612820	Computer Software Maintenance	—	150,000	156,200	156,154	102,700	274,800	—
612840	Communications Equipment Maintenance (Includes Software)	22,208	22,800	22,800	21,860	20,300	17,800	—
612860	Repairs to Vehicle Equipment	303,803	421,000	423,800	423,763	299,400	441,800	—
200	TOTAL CONTRACTUAL SERVICES	4,203,074	5,944,300	5,920,600	4,693,121	4,495,500	6,130,400	—
623070	Electrical Parts and Supplies	7,646	8,600	8,600	7,600	7,600	8,600	—

101 15000	Fund: Corporate Department: General Administration	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623090	Plumbing Accessories and Supplies	29,724	8,500	8,500	8,000	7,500	8,500	—
623110	Hardware	10,784	16,000	16,000	15,300	13,700	16,000	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	98,554	118,000	118,000	111,965	92,700	123,100	—
623660	Cleaning Supplies	4,145	1,300	1,300	1,000	1,200	1,300	—
623700	Wearing Apparel	23,547	38,900	38,900	30,648	35,500	35,400	—
623720	Books, Maps, and Charts	640	1,000	1,000	57	500	1,000	—
623810	Computer Supplies	—	71,200	71,200	1,606	15,000	25,000	—
623850	Communications Supplies	191,434	—	—	—	—	—	—
623990	Materials and Supplies, N.O.C.	32,524	52,200	52,200	27,415	46,900	66,700	—
300	TOTAL MATERIALS AND SUPPLIES	398,997	315,700	315,700	203,591	220,600	285,600	—
634800	Office Furniture and Equipment	—	—	—	—	—	21,500	—
634820	Computer Software	—	—	—	—	—	20,000	—
634860	Vehicle Equipment	733,430	902,200	1,152,200	1,061,644	1,061,700	973,000	—
634990	Machinery and Equipment, N.O.C.	—	350,000	123,700	123,618	123,000	100,000	—
400	TOTAL MACHINERY AND EQUIPMENT	733,430	1,252,200	1,275,900	1,185,262	1,184,700	1,114,500	—
TOTAL GENERAL ADMINISTRATION		\$ 17,397,499	\$ 20,425,800	\$ 20,425,800	\$ 14,377,078	\$ 17,832,400	\$ 23,340,400	\$ —

NOTES: 1. Amounts may not add up due to rounding.

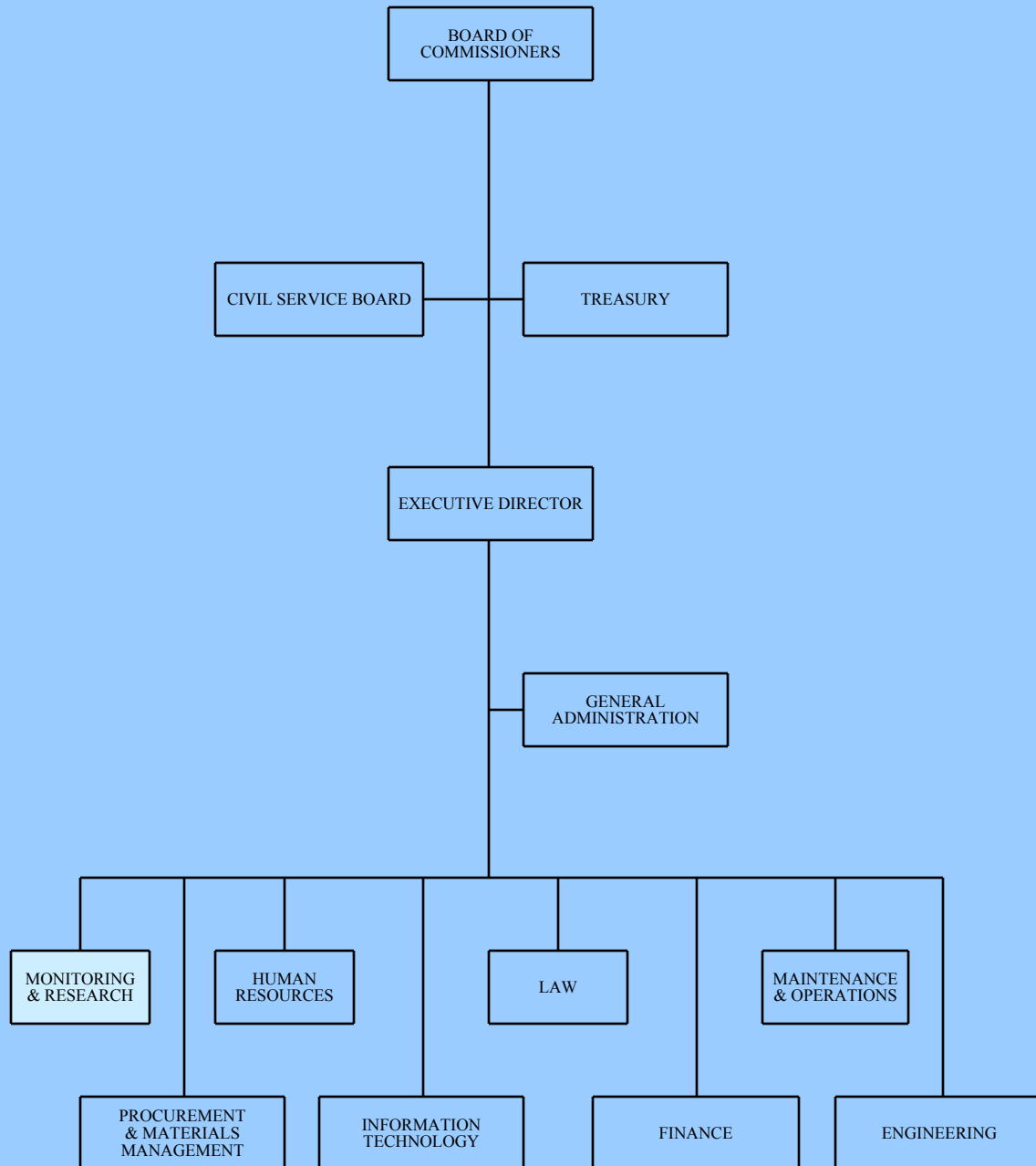
2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.

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				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	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	507,727	3	512,532
052	Diversity Section					
HP18	Diversity Administrator	1	1		1	
HP16	Senior Diversity Officer	2	2		2	
HP14	Diversity Officer	6	8		8	
HP11	Administrative Specialist	2	2		2	
HP09	Administrative Clerk	1	1		1	
TOTAL 052	Diversity Section	12	14	1,276,729	14	1,293,615
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	328,234	2	328,234
067	Central Budget Management Unit					
HP20	Budget Officer	1	1		1	
HP18	Supervising Budget & Management Analyst	1	1		1	
HP17	Management Analyst III #2 (Senior Budget & Management Analyst) (New Grade HP16)	—	—		1	
HP16	Senior Budget & Management Analyst	5	5		5	
HP14	Budget & Management Analyst	8	8		7	
TOTAL 067	Central Budget Management Unit	15	15	1,607,537	15	1,664,847
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	257,977	2	257,977

Fund: Corporate Dept: General Administration		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
082	Police Main Office Building Complex Unit					
NR2483	Police Officer	5	5		5	
TOTAL 082	Police Main Office Building Complex Unit	5	5	441,064	5	441,064
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	987,026	11	987,026
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	997,240	11	997,240
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	2,745,016	29	2,755,733
086	Police Countywide Unit					
NR2483	Police Officer	5	5		5	
TOTAL 086	Police Countywide Unit	5	5	441,064	5	441,064
TOTAL 080	Police Section	63	63	5,869,387	63	5,880,103
096	Building Services Unit					
HP16	Senior Budget & Management Analyst	1	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	3	4		3	
HP09	Administrative Clerk	3	3		3	
NR8661	Motor Vehicle Dispatcher Supervisor	1	1		1	

Fund: Corporate Dept: General Administration		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
NR8660	Motor Vehicle Dispatcher	2	2		2	
TOTAL 096	Building Services Unit	13	14	1,008,918	13	945,051
TOTAL 053	Administrative Services Division	93	94	8,814,076	93	8,818,235
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	
HP14	Public Affairs Specialist-Bilingual	—	1		2	
HP13	Graphic Artist	2	2		3	
HP13	Senior Administrative Specialist	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 072	Public Affairs Section	11	12	1,233,260	14	1,421,113
TOTAL	General Administration	119	123	11,831,792	124	12,045,496
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.						



Kari K. Steele
President
Barbara J. McGowan
Vice President
Marcelino Garcia
Chairman Of Finance
Cameron Davis
Kimberly Du Buclet
Josina Morita
Eira L. Corral Sepúlveda
Debra Shore
Mariyana Spyropoulos

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 7, 2021

Mr. Brian A. Perkovich
Executive Director
O F F I C E

Dear Sir:

Subject: 2022 Program for the Monitoring & Research Department

The Monitoring & Research Department's program for 2022, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the department's 2022 initiatives in alignment with and in support of the Strategic 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, 2022 major initiatives and challenges, and 2021 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 2022.

Respectfully submitted,

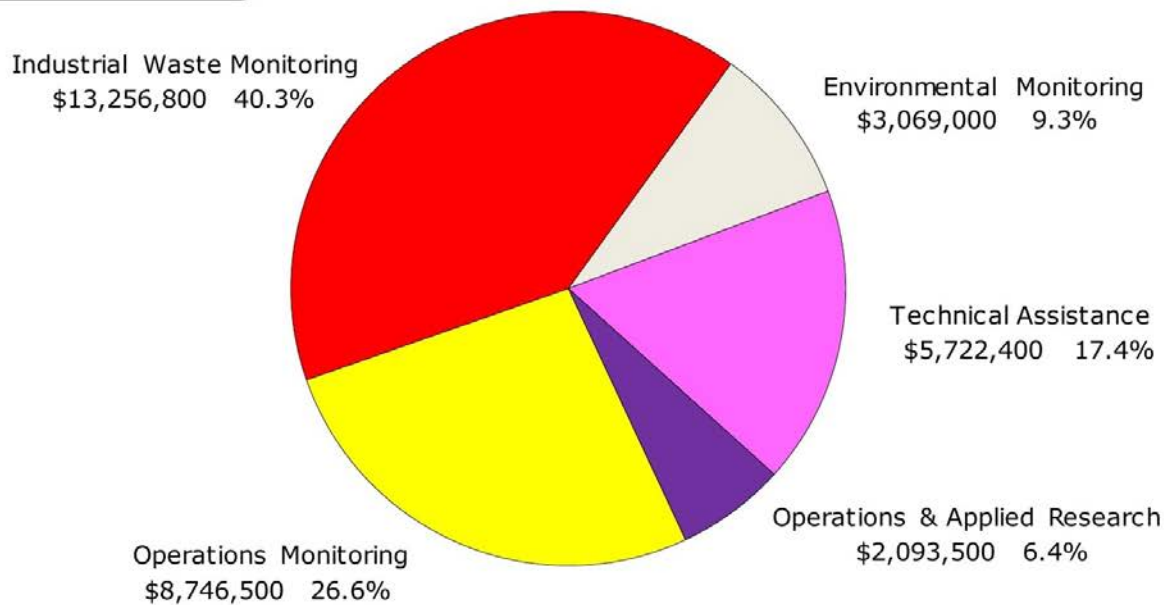


Edward W. Podczerwinski
Director of Monitoring & Research

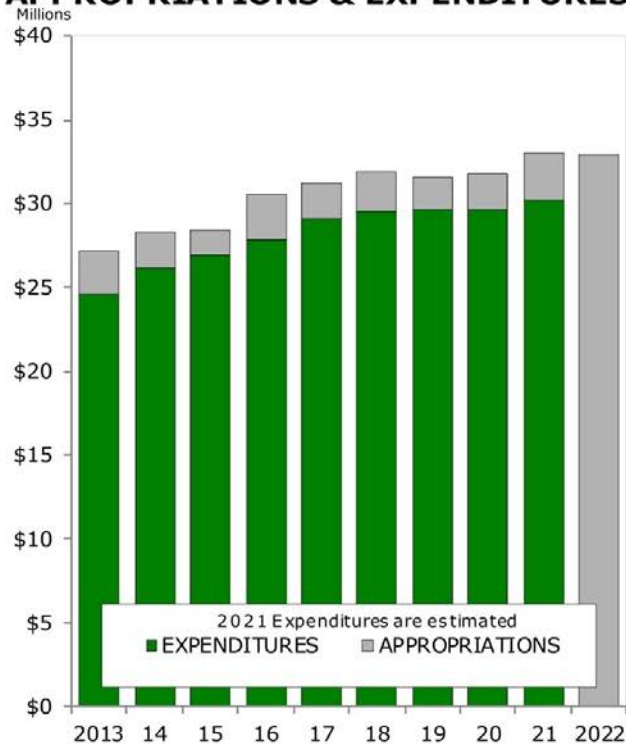
MONITORING & RESEARCH

2022	\$32,888,200
2021	\$33,002,000
Decrease	(\$113,800)

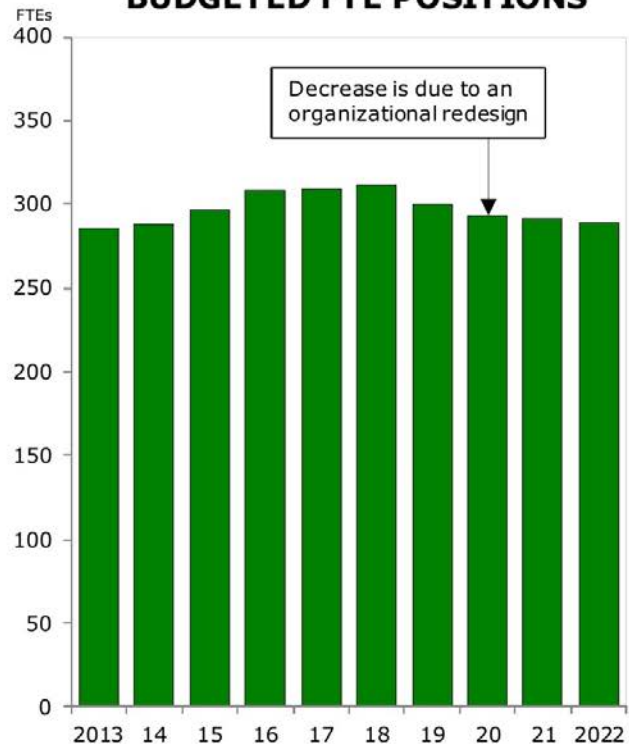
FUNCTIONS



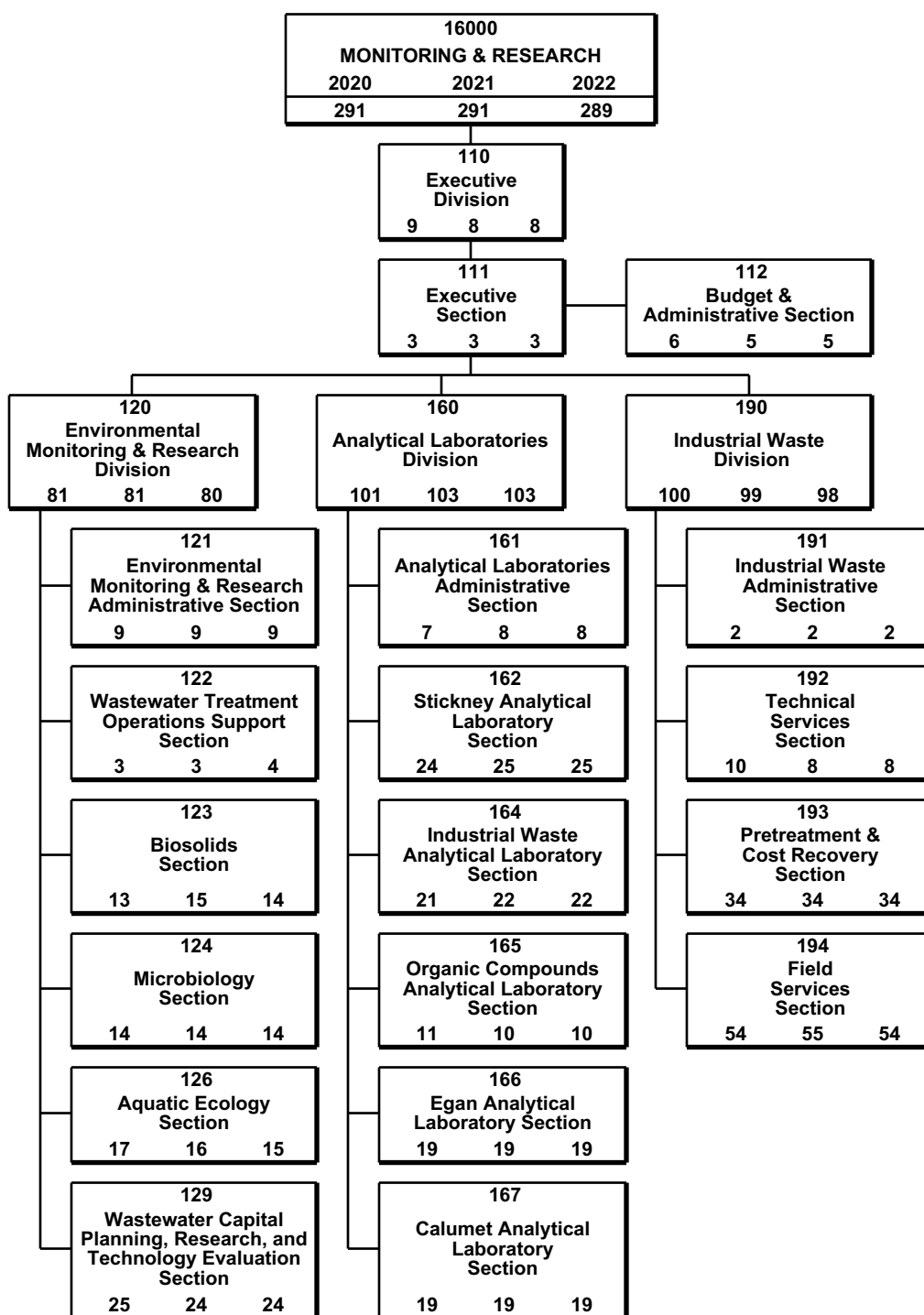
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



MONITORING & RESEARCH



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 2021 Major Accomplishments

- Conducted specialized monitoring to obtain additional data to complete the second of a four year study of the Chicago Area Waterway System (CAWS) Phosphorus Assessment and Reduction Plan, in collaboration with the Illinois Environmental Protection Agency (IEPA) and Environmental Advocacy Groups;
- Completed an evaluation of final biosolids processing for the Stickney Water Reclamation Plant (WRP) to provide a long-term plan for biosolids utilization;
- Completed an odor study at the Stickney WRP to aid in the prioritization of control odor strategies and Phosphorus Removal Feasibility Studies for the Kirie, Egan, Hanover Park, and Lemont WRPs;
- Led the District's participation in two wastewater based epidemiology programs conducted by the U.S. Department of Health and Human Services and a team of regional institutions, as well as a research project led by Stanford University;
- Led an interdepartmental task force to develop a Climate Action Plan and Sustainability and Resiliency Action Plan for the District;
- Developed a quantitative polymerase chain reaction method as a more technologically advanced and efficient method for estimating phosphorus accumulating organisms in the wastewater treatment process to support the biological nutrient removal process at the District's WRPs;
- Worked with the IEPA to modify and gain approval for the seven National Pollutant Discharge Elimination System (NPDES) permits to allow the conversion of Total Organic Carbon (TOC) data to Biochemical Oxygen Demand (BOD) and Carbonaceous BOD. The Hanover Park NPDES permit has received IEPA approval to use TOC data for conversion to BOD and Carbonaceous BOD beginning with the samples collected on June 1, 2021. This TOC analysis results in faster data reporting which allows for better process control of the Hanover Park WRP.

2022 Appropriation and Position Summary

The 2022 appropriation for M&R is \$32,888,200, a decrease of \$113,800, or 0.3 percent, from 2021. The staffing level has decreased from 291 to 289 positions, which includes the drop of one Environmental Specialist and one Pollution Control Technician I. Titles on four positions were reclassified: one Instrumentation Chemist II was reclassified to an Environmental Chemist, one Managing Civil Engineer was reclassified to a Managing Engineer, one Principal Civil Engineer was reclassified to a Principal Engineer, and one Senior Environmental Research Scientist was reclassified to an Environmental Research Scientist.

2022 Budget Highlights

M&R continuously works to improve 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 while 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. The following budget highlights support the District's Strategic Plan Goal of Resource Management. The District seeks to maintain a high level of performance on the core mission of protecting the public health and area waterways, while pursuing opportunities to recover and reuse resources. The initiatives described below exemplify the District's goal of maintaining and operating its facilities and assets to provide that high level of service.

Maintaining high level of permit compliance in the face of evolving regulatory requirements, continue efforts to improve water quality

- Conduct permit-required groundwater monitoring for four TARP tunnel systems, three reservoirs, four biosolids management sites, and Fischer Farm in Hanover Park;
- Administer Ambient Water Quality Monitoring and Continuous Dissolved Oxygen Monitoring programs for the waterways in the District's service area to meet the National Pollutant Discharge Elimination System (NPDES) permit requirements;

- Oversee the continued implementation of a District-wide Odor Monitoring Program and Reduction Strategy to document occurrences of odors with the purpose of minimizing or eliminating odors in the communities surrounding the District's facilities, collection systems, and biosolids drying areas;
- 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 the District-wide phosphorus studies to implement biological phosphorus removal at District WRPs. 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;
- Manage the contract to develop the Phosphorus Assessment and Reduction Plan for the CAWS, and continue to participate on the CAWS Nutrient Oversight Committee;
- In 2022, the IEPA is expected to have modified all of the District's NPDES permits. All NPDES permits, which previously required BOD analyses, will be replaced with the TOC analyses that will now be analyzed by the Egan Analytical Laboratory. This will provide the District with a more reliable, cost effective replacement of the BOD analyses.

Pursue resource recovery opportunities to increase sustainability and recover costs

- Continue to lead and develop the Resource Recovery Program for supporting the District's energy recovery, phosphorus recovery, and biosolids composting initiatives;
- Work to develop a District-wide biosolids strategy to ensure continued sustainability of the District's Biosolids Management Program. M&R will continue to provide technical support to the M&O Department 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 also establish a biosolids brownfield research and demonstration site at Stickney to promote the local use of EQ biosolids, and continue their promotion and sustainability practices through technical support to users, a quarterly newsletter, a sustainability workshop, biosolids beneficial reuse awards, and other public events;
- The District has revised its Resource Recovery Ordinance by reducing its delivery fee to encourage the delivery of high strength organic materials to the Calumet WRP. In addition, the District is actively seeking additional sources of material to be delivered to Calumet WRP to further enhance phosphorus removal;
- Investigate technologies to reduce energy costs such as ammonia-based aeration control and new aeration systems;
- Partner 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.

Develop Innovation Ecosystem - drive innovation through partnerships with water associations, universities, and labs

- Support the IEPA by participating in various workgroups for implementing the Illinois Nutrient Loss Reduction Strategy and developing nutrient water quality standards for Illinois;
- 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;
- 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, the Chloride Time Limited Water Quality Standard annual requirements, and the Phosphorus Assessment and Reduction Plan for the CAWS;
- M&R will continue to represent the District on technical committees for the Illinois Association of Wastewater Agencies and will have a representative as President of their executive board in 2022.

The following budget highlights support the District's Strategic Plan Goal of Workforce Excellence. The District is committed to investing in its future by investing in its employees. The initiatives highlighted below will allow the District to continue to recruit, develop, and retain best-in-class employees as the foundation of the organization's ongoing success.

Foster a culture that recognizes the value of every employee and cultivate an employee population that evolves with industry trends

- Arrange 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 are streamed to multiple facilities and are available online through the District's web portal. The seminar series is available to all employees and the local community, and is approved by both the Illinois Society of Professional Engineers for professional development credits and the Illinois Environmental Agency for Wastewater Operator Continual Education Units for some topics. Based on the 2019 and 2021 attendees, either in person or virtually, it is anticipated that attendance for 2022 will be approximately 1,800.

The following budget highlights support the District's Strategic Plan Goal of Community Engagement. The initiatives below show the District is committed to engage with community to demonstrate the commitment to be a critical community asset, a responsive neighbor, and inclusive business partner.

Raise public awareness of the value of the District's work and encourage public involvement

- Provide support to outreach activities, such as school science fair projects, District laboratory tours, local public meetings, and parades. M&R will distribute newsletters and hold at least one annual workshop for the industrial user community.

The following budget highlights support the District's Strategic Plan Goal of Enterprise Resilience, ensuring ongoing services that are reliable, equitable, and cost-effective; achieve climate change and environmental justice protections; prepare for other man-made and natural events.

Proactively expand efforts to strengthen functionality in the face of future events

- Lead long-term capital planning for District WRPs. In 2022, M&R will oversee the development of conceptual plans and cost estimates for achieving energy neutrality at one WRP by the year 2030, and achieving net energy neutrality District-wide by 2035. Completion of this plan is expected by December 31, 2023;
- 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 2022, M&R will continue to address issues such as updating the WRP processes and hydraulic models, as well as incorporating findings from the ongoing development of the District's Biosolids Strategy and Odor Reduction Strategy.

Standardize operations - streamline and automate internal processes

- Finalize the implementation of a new Laboratory Information Management System which streamlines processes to ensure continued data quality and increased productivity. The goal is to 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 mitigate errors and reduce the use of paper. It will also be adaptable to the use of mobile devices, which will enable electronic chain of custody for future samples;
- Deploy electronic reporting capabilities that have been under development since 2020, which will allow Commercial/Industrial Users to submit self-monitoring data and permit applications electronically, eliminating hard copy reports, and manual data entry by M&R staff.

Identify and scale existing practices for cross-departmental collaboration

- Increase its Service Level Agreement Meetings with the M&O Department from every six months to every month to improve communications and maintain a higher level of performance between the two departments. This will allow for faster feedback about service levels and operational concerns regarding the support provided.

USER CHARGE AND INDUSTRIAL WASTE PRETREATMENT PROGRAM

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 the charges, 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. Based on the 2022 rates, the 2020 user clearing data, and the recent impact of the COVID-19 global pandemic, the projected 2022 User Charge Revenue is \$38.0 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.

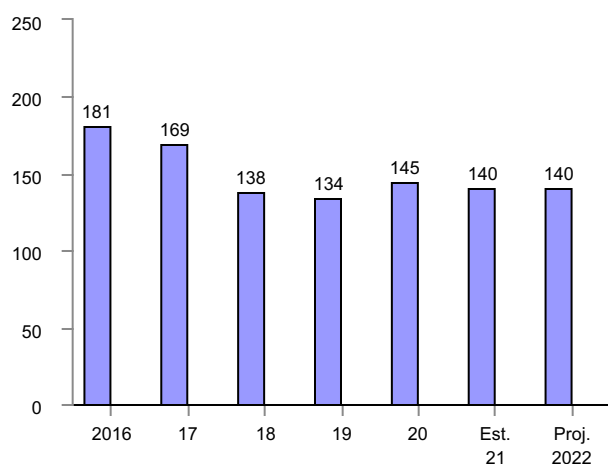
Five-Year Trend in User Charge Revenue	
Year	User Charge Receipts
2016	\$44,487,370
2017	\$53,252,035
2018	\$41,301,817
2019	\$51,783,405
2020	\$45,901,043
2021 Estimated	\$40,000,000
2022 Projected	\$38,000,000

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 2022 has a goal of identifying, classifying, and administering 50 new users to offset any reductions in existing users. In addition, M&R continues to monitor industrial users that require higher scrutiny to safeguard the WRPs and local waterways. This includes the Dental Amalgam Program, for which M&R has already processed approximately 1,600 compliance forms from local dentists and expects roughly 800 more forms before the end of 2022.

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 2022, the administration of the Program will require the issuance or renewal of Discharge Authorizations for approximately 70 Significant Industrial Users, the review of approximately 700 Continued Compliance Reports, and 20 Slug Control or Spill Prevention, and Countermeasure Plans. M&R expects to perform approximately 900 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. As shown in the table below, M&R is not anticipating any substantial variation in the number of enforcement activities for significant violations of the Sewage and Waste Control Ordinance, by Cease and Desist Orders issued to Industrial Users.

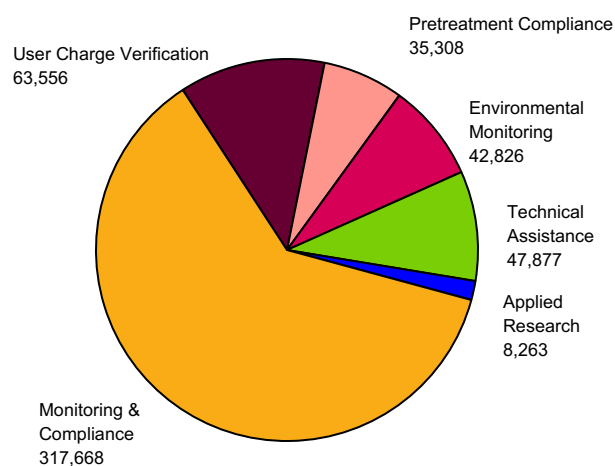
Five-Year Trend in Enforcement Activities	
Year	Cease and Desist Orders
2018	72
2019	110
2020	53
2021 Estimated	80
2022 Projected	80

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.

2022 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. Approximately 140 investigations in response to requests from federal, state, and local agencies, municipalities, private citizens, industrial sources, and the M&O Department will be conducted in 2022. As a result of the District's Industrial Waste Pretreatment Program, all of the biosolids produced by the District in 2022 are expected to meet the highest quality criteria for trace metals under the USEPA Biosolids Rule (40 CFR Part 503) and the WRP effluents are expected to meet all NPDES permit limits for regulated industrial pollutants.

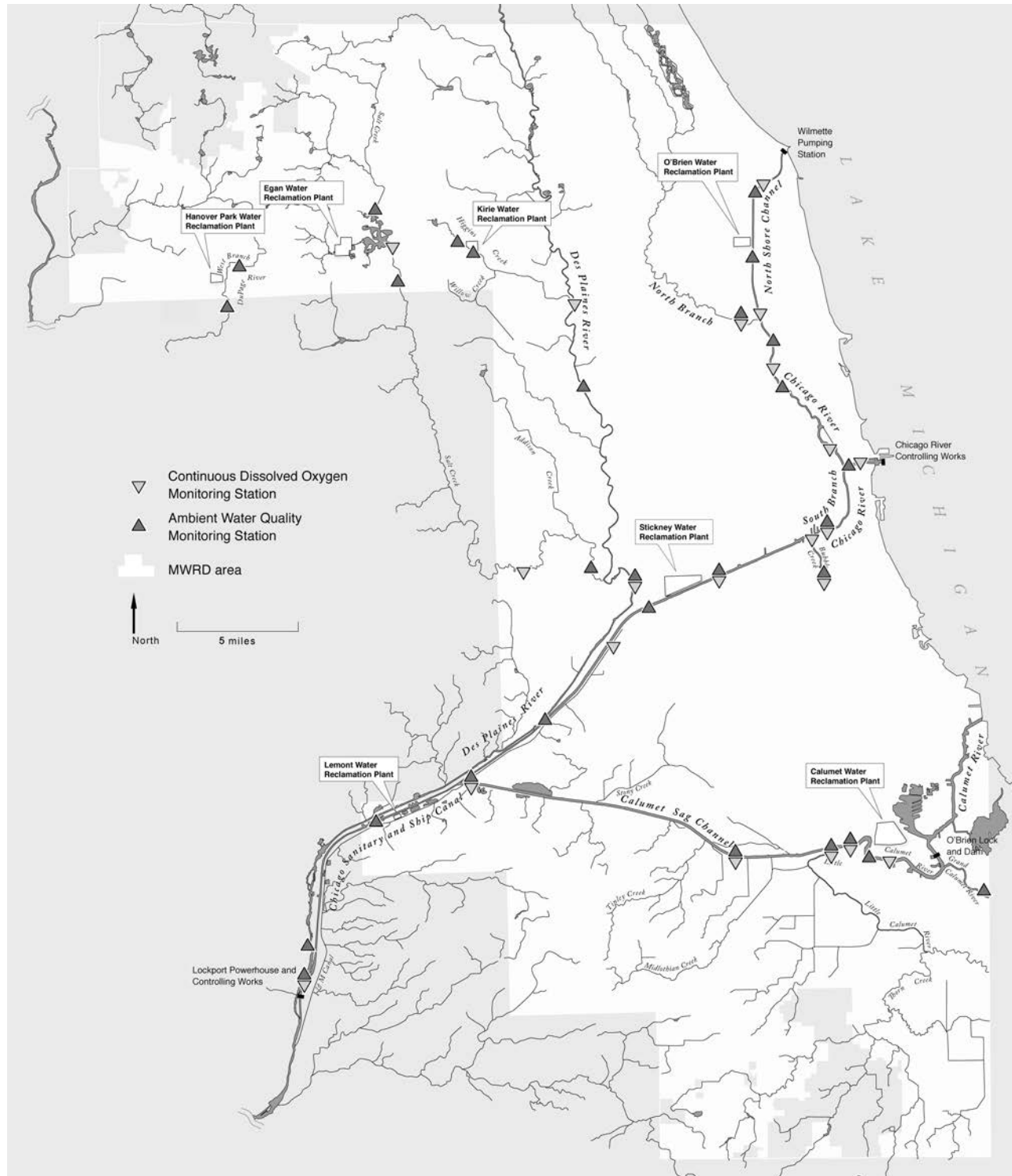
WATER AND AIR MONITORING

In 2022, M&R will collect and analyze approximately 300 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, and Upper Des Plaines systems, as well as the Gloria Alitto Majewski, the Thornton Composite, and the McCook Reservoirs, to meet the operating permit requirements of these facilities. These samples also include groundwater monitoring at four biosolids management facilities in accordance with permits issued by the IEPA. A total of 32 monitoring reports will be submitted to the IEPA.

On a daily basis, M&R monitors multiple critical control points of the liquid and solids process trains at each of the seven WRPs to improve operations and the quality of effluents and biosolids. This process includes chemical, biological, and microbiological monitoring, which will generate 515,498 projected tests in 2022. In addition 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.

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	\$ 5,861,200	17.8 %
	Solids Process Analyses	\$ 2,698,700	8.2 %
	Air Quality Monitoring	\$ 186,600	0.6 %
		<u>\$ 8,746,500</u>	<u>26.6 %</u>
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	\$ 340,300	1.0 %
	Tax-Exempt Users	\$ 1,306,100	4.0 %
	Large Commercial/Industrial Users	\$ 4,680,000	14.2 %
	Environmental Remediation	\$ 131,800	0.4 %
	Chemical Toilet Waste	\$ 212,900	0.7 %
	* Note: "SIUs" refers to Significant Industrial Users.		
	SIUs* - Pretreatment Program	\$ 4,619,900	14.0 %
	SIUs* - Extraordinary Monitoring/ Enforcement	\$ 1,029,500	3.1 %
	Other Industrial Users	\$ 514,400	1.6 %
	All Other - General	\$ 421,900	1.3 %
		<u>\$ 13,256,800</u>	<u>40.3 %</u>
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	\$ 74,400	0.2 %
	Waterways Monitoring	\$ 2,253,000	6.8 %
	Inspection Events	\$ 130,400	0.4 %
	Groundwater Monitoring	\$ 611,200	1.9 %
		<u>\$ 3,069,000</u>	<u>9.3 %</u>
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	\$ 1,676,600	5.1 %
	General Assistance	\$ 564,300	1.7 %
	Regulatory Review and Response	\$ 1,187,300	3.6 %
	Engineering Process Design Support	\$ 1,110,300	3.4 %
	Regulatory Compliance Reporting	\$ 397,300	1.2 %
	Facility Capital Planning	\$ 786,600	2.4 %
		<u>\$ 5,722,400</u>	<u>17.4 %</u>
5. OPERATIONS & APPLIED RESEARCH: Conduct operations and applied research for process improvement and cost reduction in District operations.		\$ 2,093,500	6.4 %
	Totals	<u>\$ 32,888,200</u>	<u>100.0 %</u>

16000 MONITORING & RESEARCH**OBJECTIVES AND PROGRAM SUMMARY**

MEASURABLE GOALS:		2020	2021	2022
		Actual	Estimated	Proposed
1	Submit all required environmental monitoring reports on time.	100%	100%	100%
2	Maintain laboratory accreditation.	100%	100%	100%
3	Complete all regulatory-required monitoring on the Chicago Area Waterways.	100%	100%	100%
4	Complete all regulatory-required groundwater monitoring.	100%	100%	100%
5	Complete all monitoring on the Chicago Area Waterways with no injuries.	100%	100%	100%
6	Continue a four-year Phosphorus Assessment Reduction Plan study of the Chicago Area Waterways.	25%	50%	75%
7	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%
8	Provide water quality sample data by the 15th of the following month 100 percent on time.	100%	100%	100%
9	Issue Discharge Authorizations in response to all SIU requests and enforcement actions within the timeframes established under the Sewage and Waste Control Ordinance.	83%	90%	100%
10	Process User Charge Annual Certified Statements submitted by Commercial/Industrial Users by June 30th.	94%	99%	100%

16000 MONITORING & RESEARCH**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:		2020	Budgeted		Change	
Number	Name	Actual	FTEs	Dollars	Dollars	Percent
4650	Operations Monitoring	\$ 7,158,010	2022 79	\$ 8,746,500	\$ (76,100)	(0.9)
			2021 77	\$ 8,822,600		
4660	Industrial Waste Monitoring	\$12,306,664	2022 116	\$ 12,834,900	\$ (175,300)	(1.3)
			2021 119	\$ 13,010,200		
4670	Environmental Monitoring	\$ 2,536,418	2022 29	\$ 3,069,000	\$ 95,500	3.2
			2021 28	\$ 2,973,500		
4680	Technical Assistance	\$ 5,181,435	2022 45	\$ 5,722,400	\$ 68,700	1.2
			2021 47	\$ 5,653,700		
4690	Operations and Applied Research	\$ 2,048,462	2022 20	\$ 2,093,500	\$ (24,700)	(1.2)
			2021 20	\$ 2,118,200		
7604	Social Security and Medicare Contributions	\$ 383,776	2022 —	\$ 421,900	\$ (1,900)	(0.4)
			2021 —	\$ 423,800		
Totals		\$29,614,765	2022 289	\$ 32,888,200	\$ (113,800)	(0.3)%
			2021 291	\$ 33,002,000		

a) Decrease is due to the completion of the Cross-Media Electronic Reporting Rule software implementation (\$200,000).

16000 MONITORING & RESEARCH**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 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	156,368	249,797	232,432	
		Program Cost	\$ 4,501,705	\$ 6,007,900	\$ 5,861,200	
		Program Cost/Analysis	\$ 28.79	\$ 24.05	\$ 25.22	
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	50,842	88,124	81,201	
		Program Cost	\$ 2,492,084	\$ 2,639,900	\$ 2,698,700	
		Program Cost/Analysis	\$ 49.02	\$ 29.96	\$ 33.23	
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	4,152	4,500	4,035	
		Sampling Events	424	450	410	
		Program Cost	\$ 164,221	\$ 174,800	\$ 186,600	
		Program Cost/Analysis	\$ 39.55	\$ 38.84	\$ 46.25	
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	1,654	1,500	1,500	
		Program Cost	\$ 314,748	\$ 337,200	\$ 340,300	
		Program Cost/User	\$ 190.30	\$ 224.80	\$ 226.87	
4662	User Charge Ordinance - Tax-Exempt Users	Number of Users	2,778	2,800	2,750	
		Program Cost	\$ 1,215,615	\$ 1,269,600	\$ 1,306,100	
		Program Cost/User	\$ 437.59	\$ 453.43	\$ 474.95	
		Revenue	\$ 11,475,261	\$ 11,000,000	\$ 9,500,000	a)
		Revenue/User	\$ 4,130.76	\$ 3,928.57	\$ 3,454.55	
4663	User Charge Ordinance - Large Commercial/Industrial Users	Number of Users	603	620	600	
		Program Cost	\$ 4,560,830	\$ 4,792,500	\$ 4,680,000	
		Program Cost/User	\$ 7,563.57	\$ 7,729.84	\$ 7,800.00	
		Revenue	\$ 34,425,782	\$ 26,000,000	\$ 28,500,000	b)
		Revenue/User	\$ 57,090.85	\$ 41,935.48	\$ 47,500.00	
		Industrial Waste Monitoring Analyses	29,721	65,693	63,556	
		Program Cost/Analysis	\$ 153.45	\$ 72.95	\$ 73.64	
4664	Environmental Remediation Wastewater Ordinance	Permits Issued	7	15	15	
		Program Cost	\$ 126,296	\$ 133,900	\$ 131,800	
		Program Cost/Permit	\$ 18,042.29	\$ 8,926.67	\$ 8,786.67	
a) Decrease is due to the projected reduction in the number of tax-exempt users that will return to operations following the COVID-19 global pandemic.						
b) Increase is due to the projected increase in the number of large commercial/industrial users that will return to operations following the COVID-19 global pandemic.						

16000 MONITORING & RESEARCH**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
4665	Chemical Toilet Wastes Disposal Ordinance	Permits Issued	3	3	3	
		Program Cost	\$ 174,693	\$ 183,700	\$ 212,900	c)
		Program Cost/Permit	\$ 58,231.00	\$ 61,233.33	\$ 70,966.67	
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	332	340	330	
		Waste Monitoring Analyses	23,590	36,320	35,308	
		Program Cost	\$ 4,355,179	\$ 4,677,300	\$ 4,619,900	
		Program Cost/Analysis	\$ 184.62	\$ 128.78	\$ 130.85	
		Program Cost/SIU	\$ 13,118.01	\$ 13,756.76	\$ 13,999.70	
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	102	120	120	
		Program Cost	\$ 1,025,316	\$ 1,045,400	\$ 1,029,500	
		Program Cost/SIU	\$ 10,052.12	\$ 8,711.67	\$ 8,579.17	
4668	Other Regulatory Activities - Industrial Users	Number of IUs	353	300	300	
		Program Cost	\$ 533,987	\$ 570,600	\$ 514,400	
		Program Cost/IU	\$ 1,512.71	\$ 1,902.00	\$ 1,714.67	
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	88	240	302	d)
		Program Cost	\$ 62,627	\$ 72,600	\$ 74,400	
		Program Cost/Analysis	\$ 711.67	\$ 302.50	\$ 246.36	
4672	Waterways Monitoring: Sampling and analysis of Chicago Area Waterways to assess the impact of treated effluent discharge and comply with regulations	Sampling Events	745	900	706	e)
		Environmental Analyses	33,068	30,566	27,919	
		Program Cost	\$ 1,883,467	\$ 2,209,000	\$ 2,253,000	
		Program Cost/Analysis	\$ 56.96	\$ 72.27	\$ 80.70	
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	145	140	140	
		Program Cost	\$ 215,674	\$ 215,100	\$ 130,400	f)
		Program Cost/Inspection	\$ 1,487.41	\$ 1,536.43	\$ 931.43	
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	10,160	19,572	14,605	g)
		Sampling Events	304	600	300	g)
		Number of Sites	165	165	165	
		Program Cost	\$ 374,650	\$ 476,800	\$ 611,200	h)
		Program Cost/Analysis	\$ 36.88	\$ 24.36	\$ 41.85	
c) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$28,000).						
d) Increase is due to the projected increase in wet weather rain events and it is based on 2021 actual data.						
e) Decrease is due to the projected completion of special sampling done for the Phosphorus Reduction Assessment Reduction Plan project.						
Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$52,300) and the drop of one Environmental						
f) Specialist position (\$32,300).						
g) Decrease is due to the reduction of monitoring frequency for some of the Tunnel and Reservoir Plan effective January 2021 based on the Illinois Environmental Protection Agency approval.						
h) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$125,100).						

16000 MONITORING & RESEARCH**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 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	481	483	535	
		Number of Analyses	25,961	29,415	26,911	
		Sampling Events	2,975	650	576	
		Program Cost	\$ 1,469,719	\$ 1,584,600	\$ 1,676,600	
		Program Cost/Analysis	\$ 56.61	\$ 53.87	\$ 62.30	
		Program Cost/Event	\$ 494.02	\$ 2,437.85	\$ 2,910.76	
4682	General Assistance to All Other Departments: Technical assistance based on requests, primarily to the Law Department	Responses Completed	227	250	264	
		Number of Analyses	741	633	763	i)
		Sampling Events	21	60	16	j)
		Program Cost	\$ 597,254	\$ 633,300	\$ 564,300	
		Program Cost/Analysis	\$ 806.01	\$ 1,000.47	\$ 739.58	
		Program Cost/Event	\$ 28,440.67	\$ 10,555.00	\$ 35,268.75	
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	86	70	77	
		Program Cost	\$ 737,182	\$ 1,107,400	\$ 1,187,300	
4684	Engineering Process Design Support: Technical assistance to the Engineering Department to improve District facilities and optimize process design	Number of Analyses	12,185	17,523	20,203	k)
		Responses Completed	293	123	59	l)
		Sampling Events	3	21	—	l)
		Program Cost	\$ 1,320,701	\$ 1,287,700	\$ 1,110,300	m)
		Program Cost/Analysis	\$ 108.39	\$ 73.49	\$ 54.96	
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	39	56	56	
		Program Cost	\$ 246,508	\$ 262,300	\$ 397,300	n)
		Program Cost/Report	\$ 6,320.72	\$ 4,683.93	\$ 7,094.64	
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	\$ 810,071	\$ 778,400	\$ 786,600	
i) Increase is due to the biennial fish analyses needed for the Tinley Creek restoration project. j) Decrease is due to annual fluctuations in technical assistance requests from other departments. k) Increase is due to an increase in samples to support phosphorus removal projects in anticipation of upcoming total phosphorus permit limits. l) Decrease is due to annual fluctuations in technical assistance requests from other departments. m) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$183,200). n) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$133,900).						

16000 MONITORING & RESEARCH**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 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	1,623	1,800	1,401	o)
		Research Projects	70	65	64	
		Laboratory Analyses	12,949	12,583	8,263	p)
		Program Cost	\$ 2,048,462	\$ 2,118,200	\$ 2,093,500	
		Program Cost/Analysis	\$ 158.19	\$ 168.34	\$ 253.36	
7604	Social Security and Medicare Contributions	Program Cost	\$ 383,776	\$ 423,800	\$ 421,900	
		Totals	\$ 29,614,765	\$ 33,002,000	\$ 32,888,200	
<p>o) Decrease is due to annual fluctuations and the continued impact of the COVID-19 global pandemic.</p> <p>p) Decrease is due to analyses being reflected in Program Number 4684 as the phosphorus projects have progressed into the implementation stage.</p>						

101 16000	Fund: Corporate Department: Monitoring & Research	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 26,848,276	\$ 28,452,400	\$ 28,452,400	\$ 18,313,870	\$ 26,482,500	\$ 28,442,400	\$ —
601060	Compensation Plan Adjustments	840,740	817,200	817,200	432,555	808,600	878,500	—
601070	Social Security and Medicare Contributions	383,776	423,800	423,800	274,940	379,300	421,900	—
601100	Tuition and Training Payments	6,366	59,700	59,700	29,160	55,000	71,700	—
100	TOTAL PERSONAL SERVICES	28,079,157	29,753,100	29,753,100	19,050,525	27,725,400	29,814,500	—
612010	Travel	250	11,000	11,000	452	10,000	27,500	—
612030	Meals and Lodging	536	22,800	22,700	80	21,000	56,800	—
612040	Postage, Freight, and Delivery Charges	4,019	7,900	7,900	7,900	7,300	7,100	—
612050	Compensation for Personally-Owned Automobiles	17,069	27,300	27,300	12,339	26,700	27,300	—
612080	Motor Vehicle Operating Services	36	300	300	51	300	300	—
612330	Rental Charges	—	300	300	—	100	300	—
612400	Intergovernmental Agreements	49,547	99,100	99,100	99,094	99,100	49,600	—
612410	Governmental Service Charges	17,000	17,000	17,000	13,600	13,600	17,000	—
612430	Payments for Professional Services	186,353	505,500	505,600	505,552	343,300	755,700	—
612440	Preliminary Engineering Reports and Studies	—	20,000	20,000	19,784	19,800	20,000	—
612490	Contractual Services, N.O.C.	190,712	303,100	300,600	217,577	210,600	236,200	—
612790	Repairs to Marine Equipment	23,469	31,500	31,500	31,074	31,100	33,300	—
612820	Computer Software Maintenance	10,250	25,700	28,200	28,147	25,700	28,600	—
612970	Repairs to Testing and Laboratory Equipment	302,407	374,800	374,800	342,273	365,100	348,400	—
200	TOTAL CONTRACTUAL SERVICES	801,647	1,446,300	1,446,300	1,277,923	1,173,700	1,608,100	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	11,101	27,100	27,100	23,293	26,700	22,100	—
623530	Farming Supplies	13,976	12,000	12,000	12,000	11,500	14,000	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	310,253	410,900	410,900	371,509	399,700	492,400	—
623700	Wearing Apparel	8,387	15,000	15,000	14,333	15,000	15,300	—
623720	Books, Maps, and Charts	690	400	400	—	400	400	—
623810	Computer Supplies	4,362	—	—	—	—	—	—
623820	Fuel	7,680	15,000	15,000	13,416	13,400	17,000	—
623990	Materials and Supplies, N.O.C.	58,114	80,500	80,500	45,043	59,600	62,800	—
300	TOTAL MATERIALS AND SUPPLIES	414,563	560,900	560,900	479,594	526,300	624,000	—
634820	Computer Software	202,800	950,000	708,200	628,375	298,200	384,900	—

101 16000	Fund: Corporate Department: Monitoring & Research	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
634970	Testing and Laboratory Equipment	116,598	291,700	533,500	528,457	523,500	456,700	—
400	TOTAL MACHINERY AND EQUIPMENT	319,398	1,241,700	1,241,700	1,156,832	821,700	841,600	—
TOTAL MONITORING & RESEARCH		\$ 29,614,765	\$ 33,002,000	\$ 33,002,000	\$ 21,964,874	\$ 30,247,100	\$ 32,888,200	\$ —

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				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	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	478,241	3	478,242
112	Budget & Administrative Section					
HP22	Assistant Director of Monitoring & Research	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	5	515,271	5	521,589
TOTAL 110	Executive Division	9	8	993,512	8	999,830
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	
HP18	Biostatistician	1	1		1	
HP15	Associate Civil Engineer	1	1		1	
HP13	Senior Administrative Specialist	2	2		2	
HP11	Administrative Specialist	3	3		3	
TOTAL 121	Environmental Monitoring & Research Administrative Section	9	9	1,152,104	9	1,174,125
122	Wastewater Treatment Operations Support Section					
HP17	Senior Environmental Research Scientist	2	2		1	
HP15	Environmental Research Scientist	1	1		2	
HP11	Environmental Research Technician	—	—		1	
TOTAL 122	Wastewater Treatment Operations Support Section	3	3	363,482	4	430,912

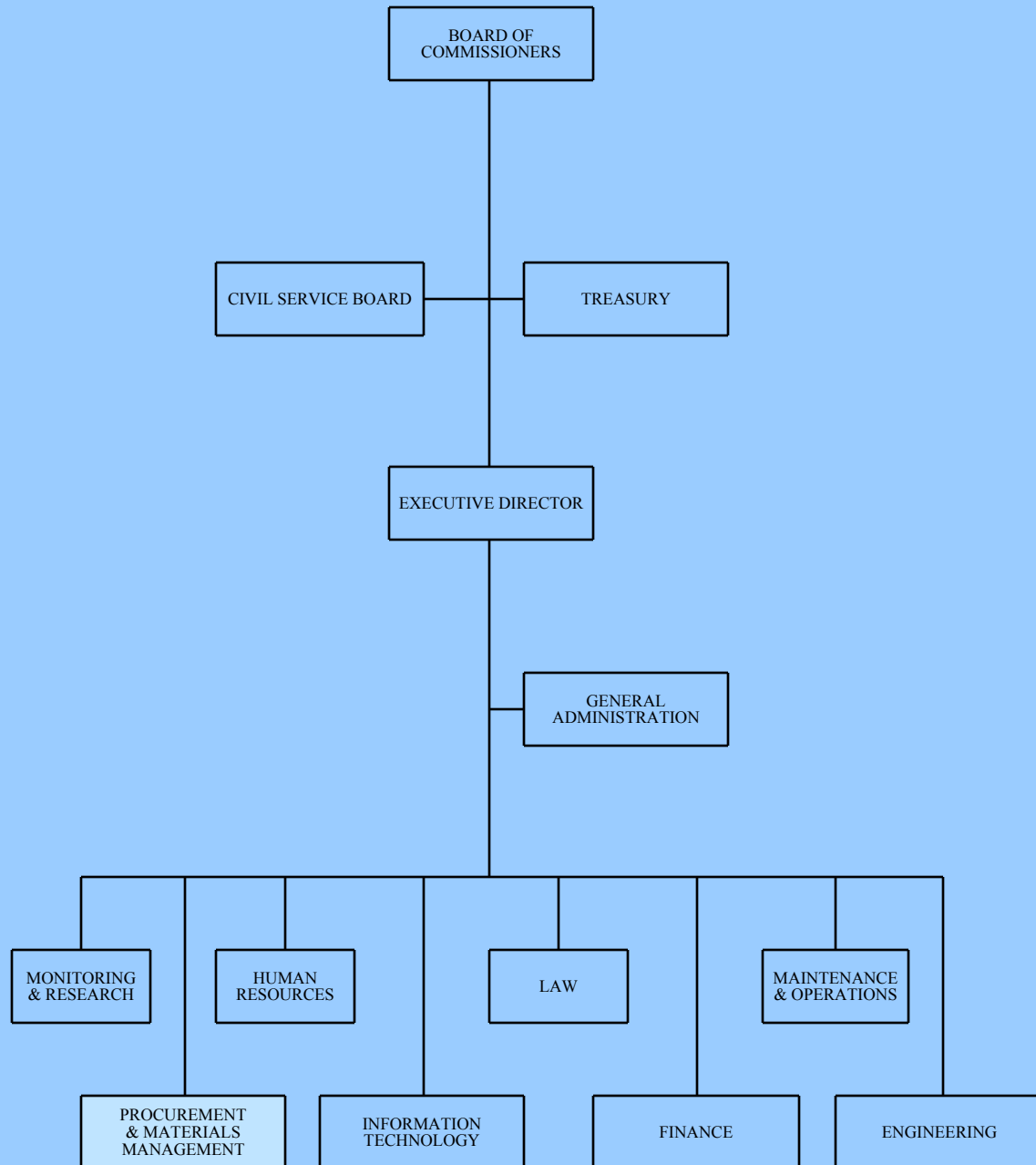
Fund: Corporate Dept: Monitoring & Research		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
123	Biosolids Section					
HP18	Principal Environmental Scientist	1	1		1	
HP17	Senior Environmental Soil Scientist	2	2		2	
HP15	Environmental Soil Scientist	2	2		2	
HP15	Environmental Chemist #2 (Senior Environmental Research Technician) (New Grade HP 13)	1	1		—	
HP13	Senior Environmental Research Technician	—	—		1	
HP11	Environmental Research Technician	6	6		5	
HP09	Laboratory Assistant	1	1		1	
NR3642	Pollution Control Technician II	—	2		2	
TOTAL 123	Biosolids Section	13	15	1,280,670	14	1,216,515
124	Microbiology 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	7	7		7	
HP09	Laboratory Assistant	2	2		2	
TOTAL 124	Microbiology Section	14	14	1,173,837	14	1,174,093
126	Aquatic Ecology Section					
HP18	Principal Environmental Scientist	1	1		1	
HP17	Senior Aquatic Biologist	—	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	4	4		4	
NR6441	Patrol Boat Operator	2	2		2	
NR3642	Pollution Control Technician II	2	—		—	

Fund: Corporate Dept: Monitoring & Research		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
NR3641	Pollution Control Technician I	4	4		3	
TOTAL 126	Aquatic Ecology Section	17	16	1,402,340	15	1,360,867
129	Wastewater Capital Planning, Research, and Technology Evaluation Section					
HP20	Managing Civil Engineer	1	1		—	
HP20	Managing Engineer	—	—		1	
HP18	Principal Civil Engineer	1	1		—	
HP18	Principal Engineer	—	—		1	
HP18	Principal Environmental Scientist	2	2		2	
HP17	Senior Civil Engineer	2	2		2	
HP17	Senior Environmental Research Scientist	4	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	3	3		3	
HP13	Senior Environmental Research Technician	2	2		2	
HP11	Environmental Research Technician	6	6		6	
HP11	Environmental Research Technician #1	1	—		—	
TOTAL 129	Wastewater Capital Planning, Research, and Technology Evaluation Section	25	24	2,631,225	24	2,668,698
TOTAL 120	Environmental Monitoring & Research Division	81	81	8,003,658	80	8,025,209
160	Analytical Laboratories Division					
161	Analytical Laboratories Administrative Section					
HP22	Assistant Director of Monitoring & Research	1	1		1	
HP18	Supervising Environmental Chemist	1	1		1	
HP17	Senior Environmental Chemist	1	1		1	
HP15	Environmental Chemist	2	3		3	
HP13	Senior Administrative Specialist	2	2		2	
TOTAL 161	Analytical Laboratories Administrative Section	7	8	906,460	8	952,977

Fund: Corporate Dept: Monitoring & Research		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
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	1	1		1	
HP09	Laboratory Assistant	2	2		2	
TOTAL 162	Stickney Analytical Laboratory Section	24	25	2,181,683	25	2,166,780
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	1	2		2	
TOTAL 164	Industrial Waste Analytical Laboratory Section	21	22	1,927,357	22	1,942,306
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		—	
HP15	Environmental Chemist	2	2		3	
HP13	Senior Laboratory Technician	1	1		1	
HP11	Laboratory Technician II	3	3		3	
TOTAL 165	Organic Compounds Analytical Laboratory Section	11	10	1,082,909	10	1,090,623
166	Egan Analytical Laboratory Section					
HP18	Supervising Environmental Chemist	1	1		1	
HP17	Senior Environmental Chemist	2	2		2	

Fund: Corporate Dept: Monitoring & Research		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP15	Environmental Chemist	3	3		3	
HP13	Senior Laboratory Technician	2	2		2	
HP12	Administrative Assistant #2 (Administrative Specialist) (New Grade HP11)	1	1		—	
HP11	Administrative Specialist	—	—		1	
HP11	Laboratory Technician II	7	8		8	
HP11	Laboratory Technician II #4	1	—		—	
HP09	Laboratory Assistant	2	2		2	
TOTAL 166	Egan Analytical Laboratory Section	19	19	1,566,740	19	1,577,673
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	1,718,017	19	1,718,001
TOTAL 160	Analytical Laboratories Division	101	103	9,383,165	103	9,448,360
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	259,986	2	269,988
192	Technical Services Section					
HP18	Supervising Environmental Specialist	1	1		1	
HP17	Senior Environmental Specialist	1	2		2	
HP15	Environmental Specialist	5	3		3	
HP11	Administrative Specialist	1	1		1	
NR3642	Pollution Control Technician II	2	1		1	
TOTAL 192	Technical Services Section	10	8	848,668	8	878,722

Fund: Corporate Dept: Monitoring & Research		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
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	8		8	
HP15	Associate Mechanical Engineer #2 (Associate Civil Engineer)	1	—		—	
HP15	Environmental Specialist	16	16		16	
HP11	Administrative Specialist	2	2		2	
HP09	Administrative Clerk	2	2		2	
TOTAL 193	Pretreatment & Cost Recovery Section	34	34	3,805,608	34	3,745,473
194	Field Services Section					
HP18	Supervising Environmental Specialist	2	2		2	
HP17	Senior Environmental Specialist	4	4		4	
HP15	Environmental Specialist	26	26		25	
HP13	Senior Administrative Specialist	1	1		1	
HP11	Administrative Specialist	1	1		1	
NR3642	Pollution Control Technician II	—	1		1	
NR3641	Pollution Control Technician I	20	20		20	
TOTAL 194	Field Services Section	54	55	5,300,712	54	5,218,391
TOTAL 190	Industrial Waste Division	100	99	10,214,974	98	10,112,574
TOTAL	Monitoring & Research	291	291	28,595,309	289	28,585,973
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 7, 2021

Mr. Brian A. Perkovich
Executive Director
O F F I C E

Dear Sir:

Subject: 2022 Program for Procurement & Materials Management Department

The Procurement & Materials Management Department's program for 2022, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of 2022 initiatives in alignment with and in support of the Strategic 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, 2022 major initiatives and challenges, and 2021 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 2022.

Respectfully submitted,

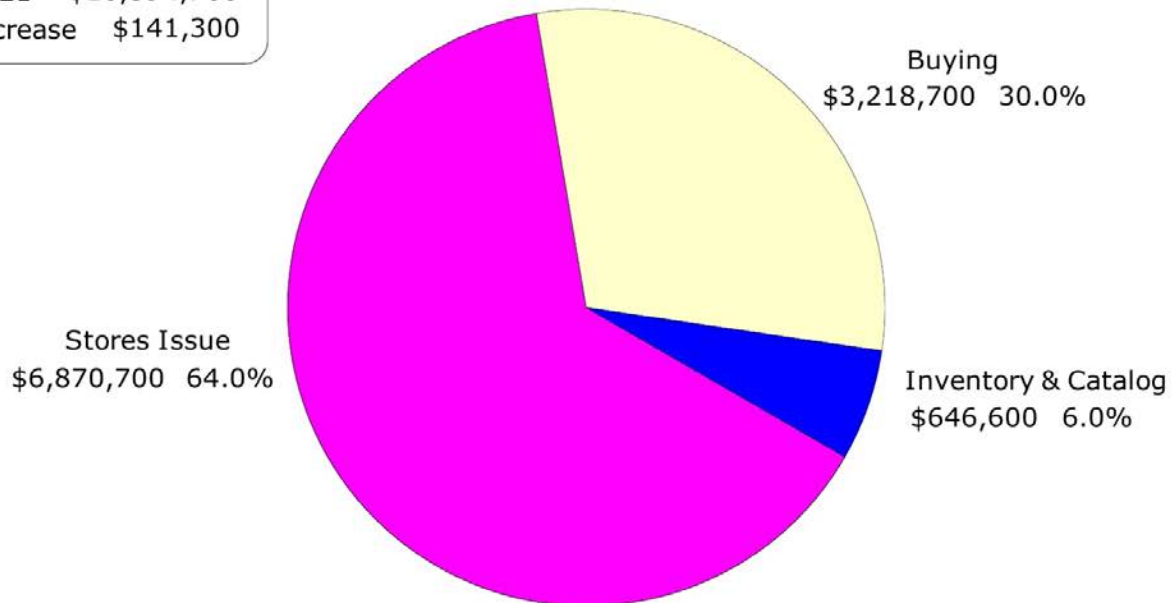


Darlene A. LoCascio
Director of Procurement & Materials Management

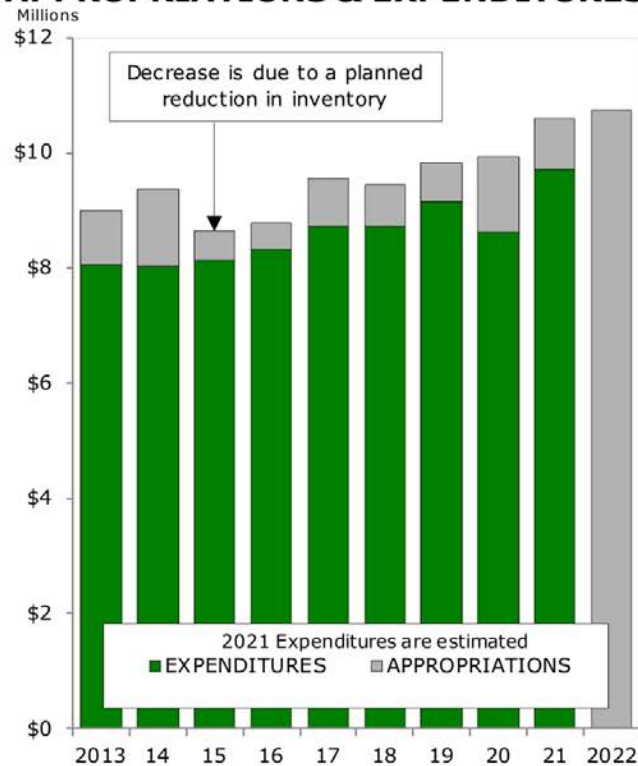
PROCUREMENT & MATERIALS MANAGEMENT

2022 \$10,736,000
2021 \$10,594,700
Increase \$141,300

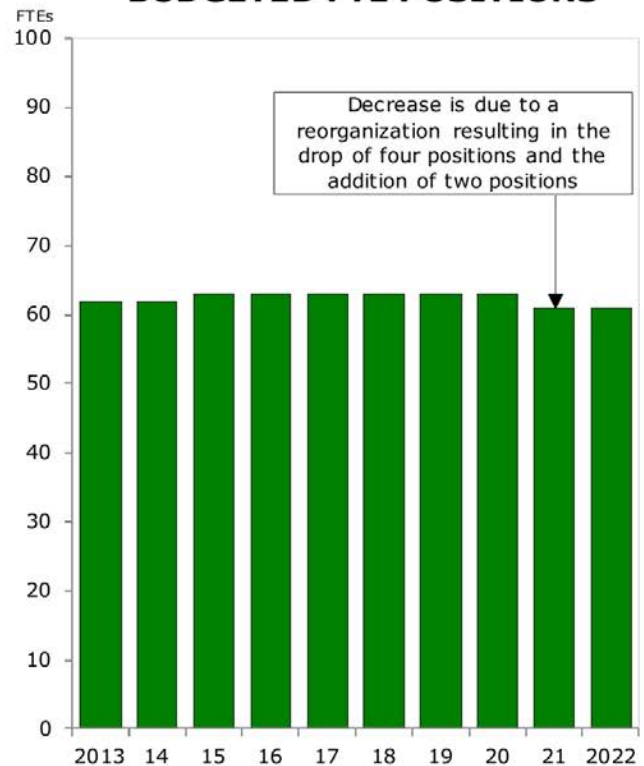
FUNCTIONS



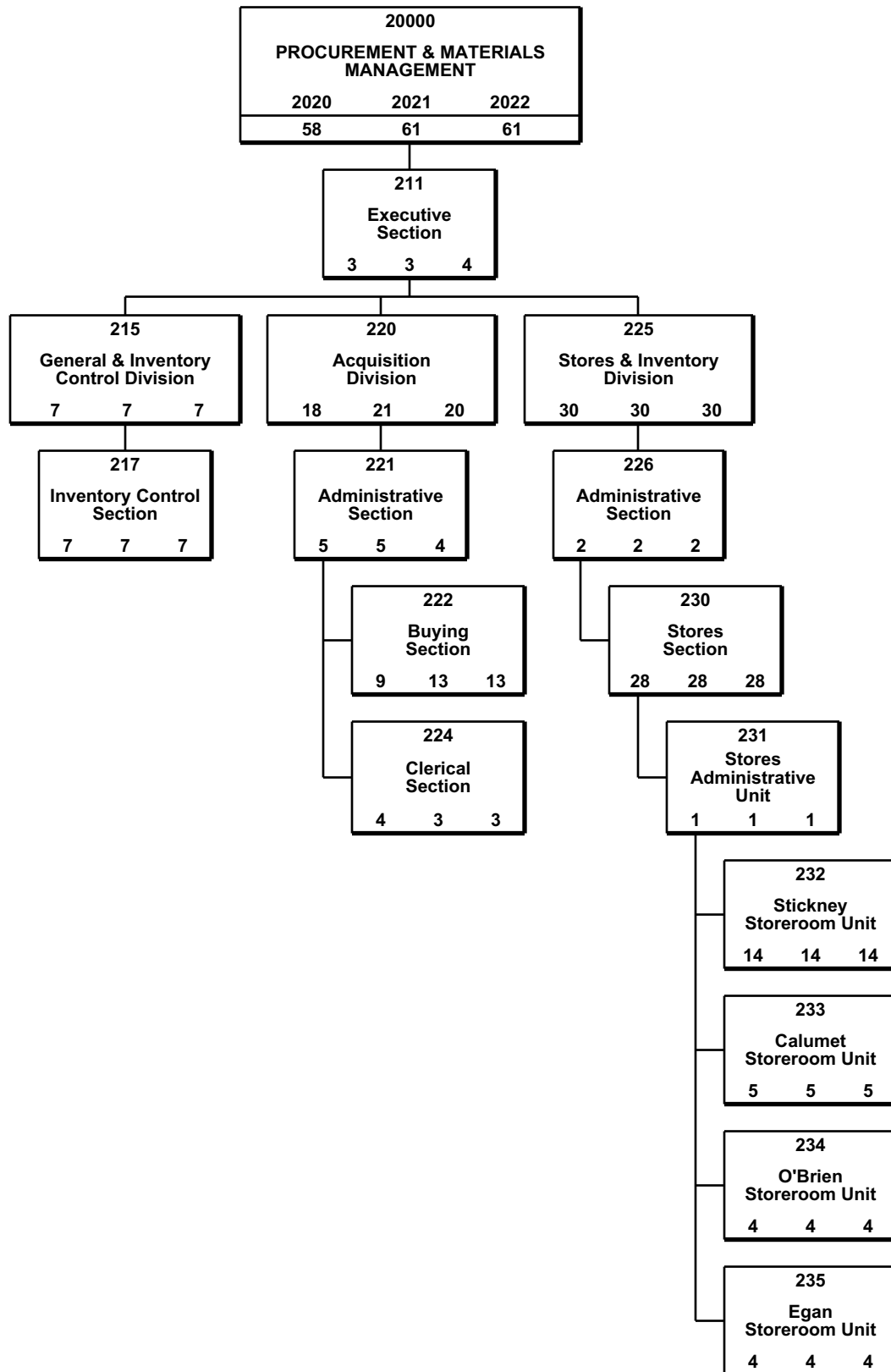
APPROPRIATIONS & EXPENDITURES



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 2021 Major Accomplishments

- Reorganized staff to implement an electronic procurement process, resulting in the net reduction of two positions;
- Expanded electronic bidding system to allow outside engineering and architectural firms to submit their qualifications electronically. All departments are now using the E-procurement system for advertised contracts and Requests For Proposals in the procurement of goods and services;
- Developed a request for proposal for an interactive vendor portal with a document management module;
- Developed and completed customer surveys for both external and internal customers to create a more efficient procurement process.

2022 Appropriation and Position Summary

The 2022 appropriation for P&MM is \$10,736,000, an increase of \$141,300, or 1.3 percent, from 2021. The staffing level remains unchanged at 61 positions.

2022 Budget Highlights

The following budget highlights support the District's Strategic Plan Goal of Community Engagement. The initiatives highlighted below will ensure that the District will be an inclusive business partner.

Continue to improve the experience of vendors that do business with the MWRD

- Implement an automated program for procurement related public information requests, providing easily accessible and timely information to vendors and the general public;
- Improve the experience for vendors who do business with the District and make revisions to address issues identified in customer surveys conducted in 2021 to provide a more effective and efficient process;
- Enhance the department's electronic bidding process and implement an interactive vendor portal to ensure that vendors encounter a manageable and streamlined process, with easy access to information and the ability to update their profile and provide the District with current and accurate vendor information.

The following budget highlights support the District Strategic Plan Goal of Enterprise Resilience. The initiatives highlighted below will ensure that ongoing services are reliable, equitable, and cost-effective.

Standardize operations - streamline and automate internal processes, scale lessons learned from pandemic response

- Develop a request for proposal and begin an implementation of an automated program to process public information requests, increasing transparency and reducing the response time for such requests;
- Streamline internal processes, evaluating and modifying 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. Process revisions will be made as a result of the department's internal customer surveys conducted in 2021 that identified issues and obstacles;
- 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;
- Improve service levels to meet the needs and expectations of the internal customer, to enhance planning schedules, and to adhere to project timeframes;
- Continue to find innovative ways to best manage District resources, such as the sale of Renewable Energy Credits on the wholesale market, and the public auction of surplus goods and materials.

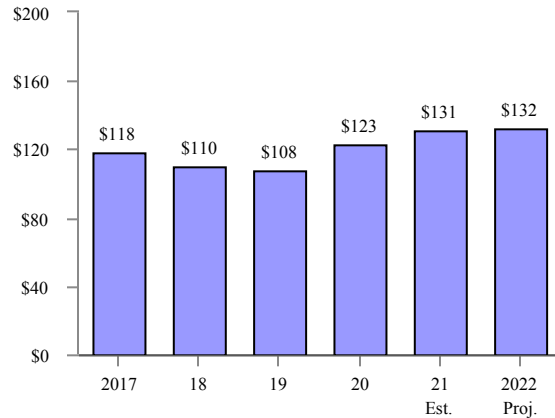
Cost to Prepare a Purchase Order

This data measures on average how much the District spends to issue a Purchase Order. It includes processing requisitions into inquiries for competitive purchases, preparing, evaluating, and receiving quotations, and preparing, issuing, and maintaining purchase orders.

Sales of Surplus Goods

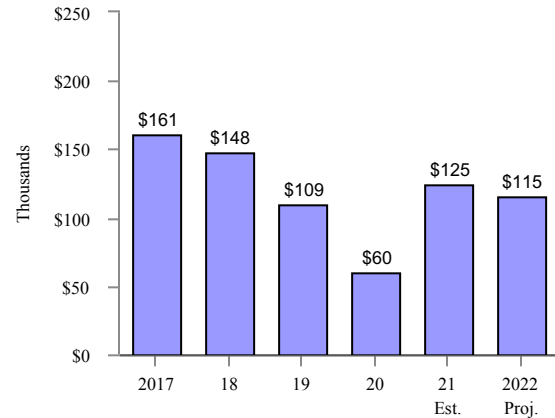
This data measures annual revenue generated by the sale of scrap and obsolete materials; items that would otherwise be wasted or cost money for the District to dispose of. It includes vehicles that are beyond their useful life, and equipment, parts, and materials that have become obsolete, or otherwise cannot be used by the District.

Cost to Prepare a Purchase Order



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

Sales of Surplus Goods



- 2018 - Decrease is due to fewer materials being identified as surplus.
- 2019 - Decrease is due to fewer materials being identified as surplus.
- 2020 - Decrease is due to the suspension of surplus and scrap sales during the COVID-19 global pandemic.
- 2021 - Estimated 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 \$225.7 million. The estimated number of contracts and purchase orders is 120 and 5,700, 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.	\$ 3,218,700	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 \$35,500,000 and consisting of 71,400 items.	\$ 6,870,700	64.0 %
3. Support the material and supply requirements of the District by planning, monitoring, cataloging, and controlling \$35,500,000 of inventory consisting of 71,400 items.	\$ 646,600	6.0 %
Totals	\$ 10,736,000	100.0 %

MEASURABLE GOALS:	2020 Actual	2021 Estimated	2022 Proposed
1. Process all requisitions and issue the related purchase orders within 25 days.			
Percent of Purchase Orders Processed within 25 days	83%	72%	90%
Percent of Purchase Orders Processed within 10 days	64%	66%	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	70,504	71,028	71,400
Stock Issues (Number of Stock Documents)	18,653	22,123	22,300
Total Quantity SKUs (Individual Items) Issued	904,629	1,171,000	1,200,000
Total Stock-outs (Storeroom stock items only)	174	225	200
Items Requested (Multi-Issues of Like Items)	40,673	47,314	43,000
Percent of Stock-outs (Maintain a level below three percent)	0.4%	0.5%	0.5%
3. Achieve inventory accuracy of 99 percent of operating supplies.			
Total Cycle Counts (Periodic physical inventory)	44,603	55,050	57,550
Total Errors	608	582	450
Percent Accuracy	98.6%	98.9%	99.2%
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	4.0%	3.5%	6.0%
Women-owned Business Enterprises Solicited	6.1%	6.5%	6.0%
Small Business Enterprises Solicited	0.1%	0.1%	1.0%
Veteran-owned Business Enterprises Solicited	0.3%	0.1%	0.5%
Total Percent Solicited	10.5%	10.2%	13.5%

20000 PROCUREMENT & MATERIALS MANAGEMENT**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:			2020		Budgeted		Change	
Number	Name		Actual		FTEs	Dollars	Dollars	Percent
7253	Support Department Budget Preparation, Monitoring, and Administration	\$	133,218	2022	1	\$ 135,100	\$ 2,000	1.5
				2021	1	\$ 133,100		
7260	Buying Procedures	\$	2,095,045	2022	23	\$ 3,083,600	\$ 43,200	1.4
				2021	23	\$ 3,040,400		
7270	Inventory and Cataloging	\$	611,322	2022	7	\$ 646,600	\$ (37,300)	(5.5)
				2021	7	\$ 683,900		
7280	Stores Operation and Issue	\$	5,707,788	2022	30	\$ 6,782,400	\$ 133,000	2.0
				2021	30	\$ 6,649,400		
7604	Social Security and Medicare Contributions	\$	74,234	2022	—	\$ 88,300	\$ 400	0.5
				2021	—	\$ 87,900		
Totals		\$	8,621,607	2022	61	\$ 10,736,000	\$ 141,300	1.3 %
				2021	61	\$ 10,594,700		

20000 PROCUREMENT & MATERIALS MANAGEMENT**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated
7253	Support Department Budget Preparation, Monitoring, and Administration	Cost	\$ 133,218	\$ 133,100	\$ 135,100
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	4,453	5,800	5,700
		Cost	\$ 370,706	\$ 494,400	\$ 498,300
		Cost/Purchase Order	\$ 83.25	\$ 85.24	\$ 87.42
7262	Process Requisition Requirements into Inquiries for Competitive Purchases	Requisitions	7,129	8,700	8,600
		Cost	\$ 196,125	\$ 288,700	\$ 288,300
		Cost/Requisition	\$ 27.51	\$ 33.18	\$ 33.52
7263	Purchase all Labor, Materials, Services, and Equipment through Formal Contracts	Contracts Advertised	110	158	120
		Cost	\$ 879,725	\$ 1,032,900	\$ 1,041,500
		Cost/Contract	\$ 7,997.50	\$ 6,537.34	\$ 8,679.17
7264	Prepare, Receive, and Evaluate Quotations from Various Suppliers	Inquiries	17,404	27,400	27,000
		Cost	\$ 213,023	\$ 298,400	\$ 300,100
		Cost/Inquiry	\$ 12.24	\$ 10.89	\$ 11.11
7265	Advertise, Evaluate Bids, and Award the Sale of Obsolete Inventory, Scrap, Surplus Materials, and Document Fees	Revenue	\$ 60,154	\$ 93,000	\$ 115,000
		Cost	\$ 106,377	\$ 110,700	\$ 104,200
		Cost/\$1,000 Revenue	\$ 1,768.41	\$ 1,190.32	\$ 906.09
7269	Buying Procedures - All Other (General)	Cost	\$ 329,089	\$ 815,300	\$ 851,200
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	\$ 35,200,000	\$ 35,000,000	\$ 35,500,000
		Cost	\$ 163,810	\$ 179,400	\$ 170,500
		Cost/Million	\$ 4,653.69	\$ 5,125.71	\$ 4,802.82
7272	Cycle Counting and Transaction File Maintenance to Ensure Optimum Levels of Inventory and Accountability of District Stock	Inventory	\$ 35,200,000	\$ 35,000,000	\$ 35,500,000
		Cost	\$ 266,951	\$ 324,200	\$ 295,500
		Cost/Million	\$ 7,583.84	\$ 9,262.86	\$ 8,323.94
7273	Requirement Planning, Controlling, Monitoring, and Analyzing Commodity Index Coded Items in an Optimum and Economic Manner	Cost	\$ 152,728	\$ 152,700	\$ 152,700
7279	Inventory and Cataloging - All Other (General)	Cost	\$ 27,833	\$ 27,600	\$ 27,900

20000 PROCUREMENT & MATERIALS MANAGEMENT**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 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	8,683	10,900	9,300	
		Cost	\$ 502,831	\$ 497,500	\$ 495,500	
		Cost/Requisition	\$ 57.91	\$ 45.64	\$ 53.28	
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	26,717	23,500	27,000	
		Cost	\$ 679,010	\$ 685,600	\$ 669,000	
		Cost/Receipt	\$ 25.41	\$ 29.17	\$ 24.78	
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	\$ 35,200,000	\$ 35,000,000	\$ 35,500,000	
		Cost	\$ 943,106	\$ 649,900	\$ 759,900	a)
		Cost/Million	\$ 26,792.78	\$ 18,568.57	\$ 21,405.63	a)
7285	Provide Controlled Disbursement of Stored Materials and Supplies to Requesting Departments	Issue Slips	18,653	18,000	22,300	
		Cost	\$ 661,230	\$ 674,300	\$ 756,700	
		Cost/Issue Slip	\$ 35.45	\$ 37.46	\$ 33.93	
7286	Stores Operation and Issue - All Other (General)	Cost	\$ 243,653	\$ 265,500	\$ 296,300	
7289	Inventory Purchases	Cost	\$ 2,677,958	\$ 3,876,600	\$ 3,805,000	
7604	Social Security and Medicare Contributions	Cost	\$ 74,234	\$ 87,900	\$ 88,300	
	Totals		\$ 8,621,607	\$ 10,594,700	\$ 10,736,000	
a) Increase is due to the purchase of a narrow aisle forklift (\$90,000) and repairs to overhead doors (\$20,000).						

101 20000	Fund: Corporate Department: Procurement & Materials Management	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 5,300,448	\$ 5,900,500	\$ 5,900,500	\$ 3,640,406	\$ 5,283,200	\$ 5,853,900	\$ —
601060	Compensation Plan Adjustments	36,935	165,100	165,100	29,791	152,000	189,300	—
601070	Social Security and Medicare Contributions	74,234	87,900	87,900	54,087	79,900	88,300	—
601100	Tuition and Training Payments	2,205	13,800	13,800	1,190	12,500	15,200	—
100	TOTAL PERSONAL SERVICES	5,413,821	6,167,300	6,167,300	3,725,474	5,527,600	6,146,700	—
612010	Travel	—	700	700	—	—	1,200	—
612030	Meals and Lodging	—	1,000	1,000	—	—	1,100	—
612050	Compensation for Personally-Owned Automobiles	195	1,200	1,200	—	400	1,200	—
612360	Advertising	72,930	125,000	125,000	102,720	110,800	138,000	—
612430	Payments for Professional Services	4,019	60,000	60,000	3,475	52,500	60,000	—
612490	Contractual Services, N.O.C.	—	700	700	415	500	—	—
612680	Repairs to Buildings	110,795	9,000	44,500	26,500	42,500	29,000	—
612800	Repairs to Office Furniture and Equipment	378	2,000	2,000	2,000	1,700	2,200	—
612820	Computer Software Maintenance	58,449	285,500	285,500	34,096	233,700	363,200	—
612840	Communications Equipment Maintenance (Includes Software)	390	500	500	500	400	500	—
612860	Repairs to Vehicle Equipment	10,691	8,900	10,900	9,500	9,800	8,900	—
200	TOTAL CONTRACTUAL SERVICES	257,847	494,500	532,000	179,206	452,300	605,300	—
623030	Metals	56,502	95,600	125,600	104,593	134,400	129,600	—
623070	Electrical Parts and Supplies	175,385	280,300	280,300	228,609	308,300	329,300	—
623090	Plumbing Accessories and Supplies	268,053	345,800	390,800	324,501	457,200	380,000	—
623110	Hardware	44,561	81,400	71,400	54,419	65,000	83,900	—
623130	Buildings, Grounds, Paving Materials, and Supplies	112,364	258,100	220,600	153,562	216,200	248,100	—
623170	Fiber, Paper, and Insulation Materials	35,820	62,800	62,800	31,822	55,300	62,800	—
623190	Paints, Solvents, and Related Materials	17,761	50,500	40,500	20,542	32,400	50,500	—
623250	Vehicle Parts and Supplies	13,159	12,300	12,300	9,658	10,600	13,300	—
623270	Mechanical Repair Parts	91,865	225,300	185,300	137,388	150,100	225,300	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	5,394	14,300	14,300	12,727	7,300	14,300	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	625,490	713,000	713,000	453,219	691,600	713,000	—
623660	Cleaning Supplies	569,556	636,000	491,000	163,877	333,600	291,000	—

101 20000	Fund: Corporate Department: Procurement & Materials Management	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623680	Tools and Supplies	85,224	100,500	100,500	87,565	96,500	122,000	—
623700	Wearing Apparel	232,551	295,100	375,100	265,729	412,600	362,000	—
623780	Safety and Medical Supplies	48,375	72,800	72,800	41,921	68,400	74,800	—
623810	Computer Supplies	56,010	67,200	67,200	56,795	66,500	82,200	—
623820	Fuel	131,144	288,200	238,200	174,733	219,100	285,200	—
623840	Gases	72,921	84,100	84,100	80,848	75,700	85,400	—
623850	Communications Supplies	7,101	7,200	7,200	7,196	7,200	9,200	—
623860	Lubricants	177,777	200,400	300,400	263,311	282,500	257,400	—
623990	Materials and Supplies, N.O.C.	58,414	42,000	42,000	40,640	40,700	74,700	—
300	TOTAL MATERIALS AND SUPPLIES	2,885,429	3,932,900	3,895,400	2,713,655	3,731,200	3,894,000	—
634760	Material Handling and Farming Equipment	—	—	—	—	—	90,000	—
400	TOTAL MACHINERY AND EQUIPMENT	—	—	—	—	—	90,000	—
645680	Buildings	64,510	—	—	—	—	—	—
500	TOTAL CAPITAL PROJECTS	64,510	—	—	—	—	—	—
TOTAL PROCUREMENT & MATERIALS MANAGEMENT		\$ 8,621,607	\$ 10,594,700	\$ 10,594,700	\$ 6,618,335	\$ 9,711,100	\$ 10,736,000	\$ —

NOTES: 1. Amounts may not add up due to rounding.

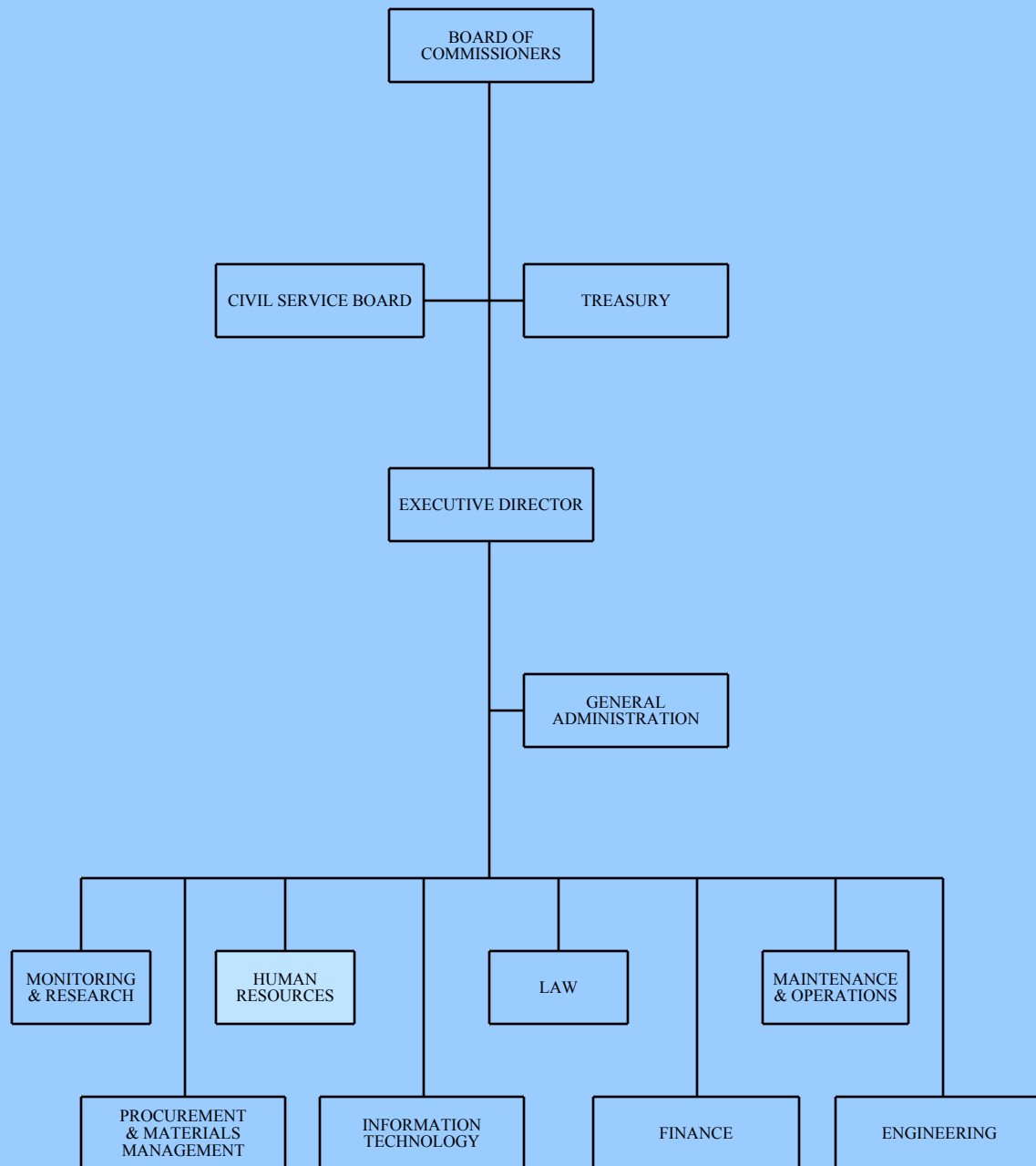
2. Departmental appropriation totals for salaries in the Line Item Analysis may differ from those contained in the Position Analysis by a factor identified to adjust for vacancies.

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.

Fund: Corporate Dept: Procurement & Materials Management		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
211	Executive Section					
EX08	Director of Procurement & Materials Management	1	1		1	
HP20	Assistant Director of Procurement & Materials Management	—	—		1	
EX06	Secretary to Officer	2	2		2	
TOTAL 211	Executive Section	3	3	464,550	4	671,118
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		—	
HP14	Senior Stores Specialist	—	—		1	
HP12	Stores Specialist	4	4		4	
HP09	Administrative Clerk	1	1		1	
TOTAL 217	Inventory Control Section	7	7	644,577	7	607,608
TOTAL 215	General & Inventory Control Division	7	7	644,577	7	607,608
220	Acquisition Division					
221	Administrative Section					
HP20	Assistant Director of Procurement & Materials Management	1	1		—	
HP14	Budget & Management Analyst	1	1		1	
HP13	Senior Administrative Specialist	1	1		1	
HP11	Administrative Specialist	2	2		2	
TOTAL 221	Administrative Section	5	5	533,167	4	333,677
222	Buying Section					
HP18	Head Buyer	1	2		—	
HP18	Procurement Manager	—	—		2	
HP16	Senior Buyer	5	6		6	
HP14	Buyer	3	5		5	
TOTAL 222	Buying Section	9	13	1,379,900	13	1,378,804

Fund: Corporate Dept: Procurement & Materials Management		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
224	Clerical Section					
HP11	Administrative Specialist	2	2		2	
HP09	Administrative Clerk	2	1		1	
TOTAL 224	Clerical Section	4	3	197,356	3	199,983
TOTAL 220	Acquisition Division	18	21	2,110,423	20	1,912,464
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	300,355	2	300,355
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	142,500	1	142,500
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	1,186,179	14	1,164,941
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	407,813	5	407,813

Fund: Corporate Dept: Procurement & Materials Management		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
234	O'Brien Storeroom Unit					
HP09	Administrative Clerk	1	1		1	
NR1857	Principal Storekeeper	1	1		1	
NR1853	Storekeeper	1	1		1	
NR8651	Maintenance Laborer Class A	1	1		1	
TOTAL 234	O'Brien Storeroom Unit	4	4	319,600	4	322,226
235	Egan Storeroom Unit					
NR1857	Principal Storekeeper	1	1		1	
NR1853	Storekeeper	2	2		2	
NR8651	Maintenance Laborer Class A	1	1		1	
TOTAL 235	Egan Storeroom Unit	4	4	354,453	4	354,453
TOTAL 230	Stores Section	28	28	2,410,545	28	2,391,932
TOTAL 225	Stores & Inventory Division	30	30	2,710,900	30	2,692,288
TOTAL	Procurement & Materials Management	58	61	5,930,450	61	5,883,478
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 7, 2021

Mr. Brian A. Perkovich
Executive Director
O F F I C E

Dear Sir:

Subject: 2022 Program for the Human Resources Department

The Human Resources Department's program for 2022, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of 2022 initiatives in alignment with and in support of the Strategic 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, 2022 major initiatives and challenges, and 2021 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 2022.

Respectfully submitted,

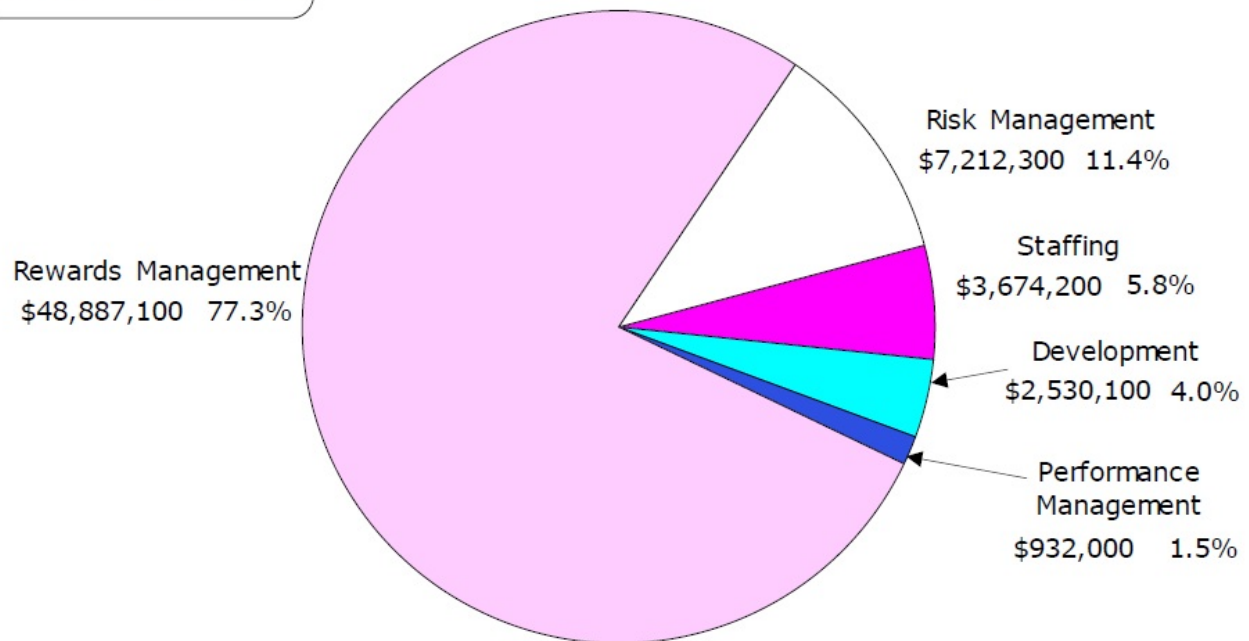


Beverly K. Sanders
Director of Human Resources

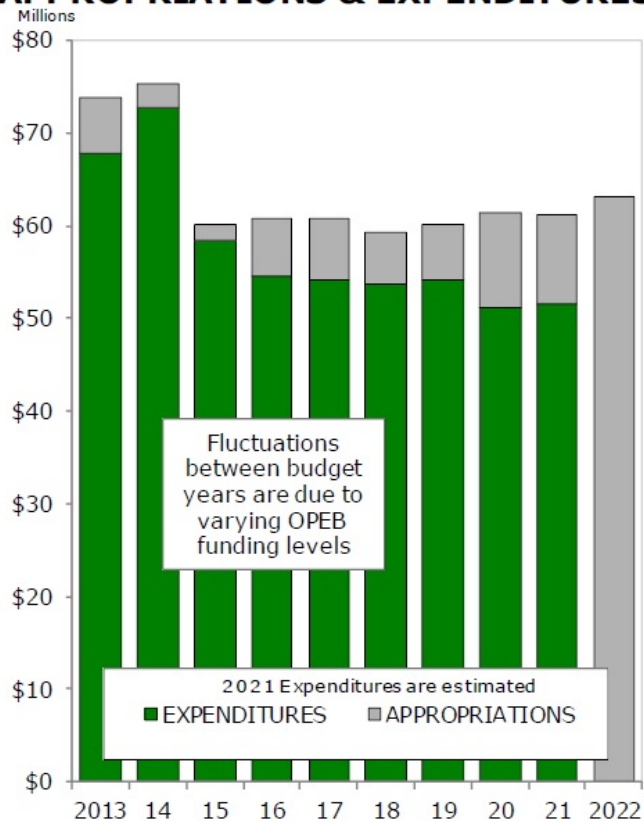
HUMAN RESOURCES

2022	\$63,235,700
2021	\$61,210,600
Increase	\$2,025,100

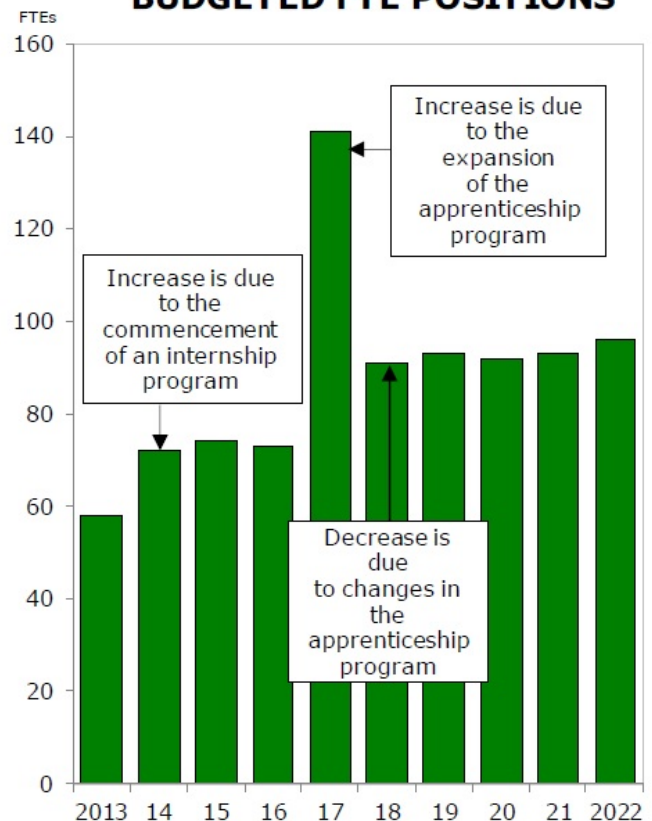
FUNCTIONS



APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



HUMAN RESOURCES

25000		
HUMAN RESOURCES		
2020	2021	2022
83	93	96

252		
Executive Unit		
7	7	8

254		
Employee Selection Section		
13	13	13

255		
Employee Development Section		
32	39	39

256		
Classification, Compensation, & Benefits Section		
8	7	7

257		
Risk Management Section		
4	6	6

258		
Employee Relations Section		
8	8	8

259		
Safety Section		
11	13	15

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; 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 2021 Major Accomplishments

- Implemented a cloud-based crisis management software product designed to deliver real-time situational awareness information and facilitate management of larger-scale emergencies;
- Transitioned to a combined system of digital and small in-person group safety training to allow for training while meeting COVID-19 mitigation protocols District-wide;
- 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 in 2021 more than 60 percent lower than at the inception of the Program in 2013;
- Developed and implemented virtual oral test administration using the Microsoft Teams platform for the oral board raters. The use of this process has proven successful and will continue for the oral portion of test administration;
- Employees received mandatory refresher compliance trainings for diversity, inclusion, and harassment prevention and the District's Ethics Ordinance.

2022 Appropriation and Position Summary

The 2022 appropriation for the Human Resources Department is \$63,235,700, an increase of \$2,025,100, or 3.3 percent, from 2021. The staffing level has increased from 93 to 96 positions, including the addition of a Human Resources Manager and two Senior Safety Specialists. In addition, one Risk Manager was dropped and one Budget & Management Analyst was transferred in. The number of employees budgeted in the Human Resources Department includes 13 Apprentices, 20 full-time equivalent Interns, and three Civil Service Board members.

2022 Budget Highlights

The following budget highlights support the District's Strategic Plan Goal of Workforce Excellence. The District is committed to investing in its future by investing in its employees. The initiatives highlighted below will allow the District to continue to recruit, develop, and retain best-in-class employees as the foundation of the organization's ongoing success.

Foster a culture that recognizes the value of every employee

- The District is adding a Human Resources Manager position dedicated to diversity, equity, and inclusion efforts. This position will be responsible for expanding diversity, equity, and inclusion efforts through the continuous review of diversity data, development of communications strategies, internal initiatives, increased targeted recruitment efforts, development of strategies to engage educational institutions, increased community outreach activities to underserved communities, and the expansion of partnerships with external organizations. Increased targeted recruitment efforts are necessary to increase the percentage of the underrepresented in the many nontraditional job classifications, particularly in the trades.

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, 2021 was 44 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, 2021 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
	2017 Actual	2018 Actual	2019 Actual	2020 Actual	2021 Estimated	2022 Projected		
Minorities	41%	42%	43%	44%	44%	45%	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 2022, 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.

- The Safety Section will conduct regular field compliance audits of specific safety programs including lock-out tag-out and hot work with an established review target. This will aid in ensuring effective District safety programs through ongoing compliance audits by safety staff and correction of any noted deficiencies;
- The District will be developing an internal communication strategy to improve employee engagement and to ensure that employees understand the vital role they play in the overall mission of the organization;
- An annual employee survey will be developed to solicit feedback from employees and foster an understanding that every employee's feedback is valued. The survey will seek to understand how employees view the different aspects of the organizational culture, measure the level of employee satisfaction among staff, and solicit feedback on other workplace factors important to employees;
- The Compensation and Benefits Section will be soliciting proposals for on-site health care services for employees. The District continues to explore ways to safeguard the health of its employees and create a culture of health in the workplace. Focusing on employee health and wellness has a positive impact on employee morale, can be a tool in recruiting top talent, helps the District ensure continuity of operations, assists in managing health care costs, and can increase the overall productivity of staff. On-site health care services can be a key contributor to building a culture of health and is a visible indication that the health and wellness of employees is a top priority.

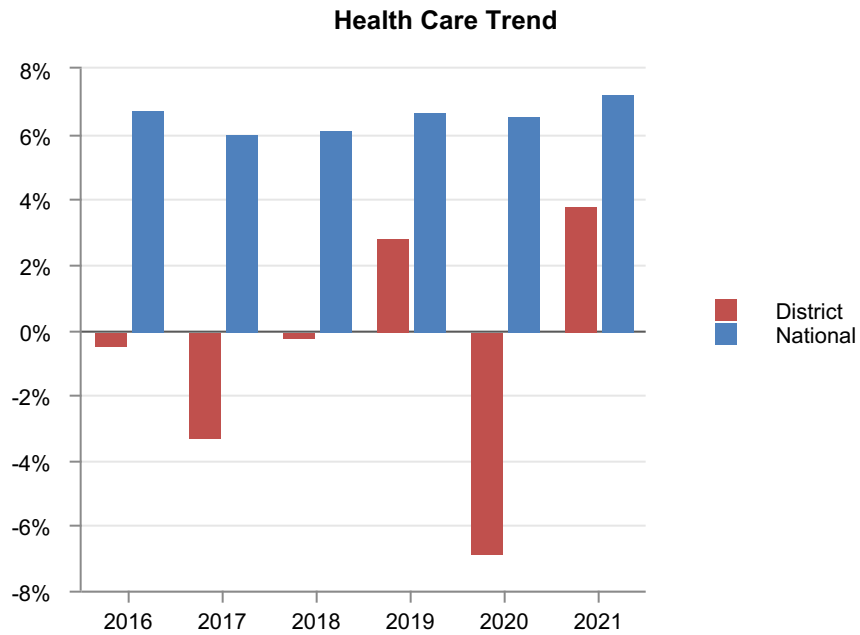
Provide ongoing training to supervisory staff regarding coaching and giving feedback

- Supervisors and managers will receive training in facilitating effective performance management evaluations and having impactful discussions and coaching sessions with employees.

The following budget highlights support the District's Strategic Plan Goal of Enterprise Resilience by seeking to strengthen the District's financial position.

Maintain strong fiscal management, identify and leverage opportunities for cost reduction and cost recovery

- The Safety Section will utilize technology to increase efficiency in routine audits of safety programs such as hot work jobs and lock-out tag-out procedures; general building, area and equipment specific inspections; and documented observations of compliance with safety rules and procedures. This will eliminate redundancy of paper field forms re-entered into digital formats. Using tablet devices for safety checks will provide more time in the field for Safety staff;
- The District will continue to develop health and wellness strategies to control health care spending including the introduction of on-site health care services in 2022. Strategies employed to-date have included the launch of digital health platforms for chronic conditions such as obesity, diabetes, hypertension, and chronic back and neck pain; on-site health screenings and flu shots; and webinars on mental and physical health topics. The impact of these strategies is evident in the District health care trend. From 2016 through 2020, the national trend for health care costs has been an average annual increase of 6.47 percent. The District's average annual health care trend over this same period of time has been -1.58 percent, significantly below the national average. The District health care trend for 2021 is projected to be 3.82 percent, also significantly below the projected national trend of 7.26 percent. This has allowed the District to maintain a strong financial position while continuing to offer a robust health care package to help recruit and retain top talent.



The District will continue to leverage the Labor Management Committee on Health Care to further its health care strategy. These semiannual meetings with union leadership provide a platform to discuss health care utilization, cost trends, and cost containment strategies and encourage 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.

25000 HUMAN RESOURCES**OBJECTIVES AND PROGRAM SUMMARY**

OBJECTIVES BY PRIORITY:	Cost	Percent
1 . Review employment applications, and develop and administer 52 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.	\$ 1,871,500	2.9 %
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.	\$ 7,212,300	11.4 %
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.	\$ 31,193,500	49.3 %
4 . Administer seven collective bargaining agreements, covering 797 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.	\$ 932,000	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.	\$ 17,693,600	28.0 %
6 . Develop and monitor diversity, equity and inclusion initiatives. Implement the District's equal employment opportunity and affirmative action objectives through targeted recruitment, counseling, and complaint investigation.	\$ 480,800	0.8 %
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.	\$ 1,321,900	2.1 %
8 . Provide educational opportunities for employees through professional development, technical training, and tuition reimbursement.	\$ 2,530,100	4.0 %
Totals	\$ 63,235,700	100.0 %

MEASURABLE GOALS:	2020 Actual	2021 Estimated	2022 Proposed
1. Minimize the number of days between an original entrance appointment and the start date for the new employee.	50	37	35
2. Reduce the number of workers' compensation claims per 100 employees.	4.70	5.67	5.00
3. Reduce the number of lost time claims per 100 employees.	1.59	2.44	2.00

25000 HUMAN RESOURCES**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:		2020	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
7290	Examinations and Employment Activities	\$ 1,220,729	2022 12	\$ 1,871,500	\$ 167,400	9.8	a)
			2021 12	\$ 1,704,100			
7295	Diversity, Equity, and Inclusion Activities	\$ 369,716	2022 4	\$ 480,800	\$ 107,400	28.8	b)
			2021 3	\$ 373,400			
7310	Training and Development Activities	\$ 1,050,661	2022 39	\$ 2,530,100	\$ 274,900	12.2	c)
			2021 39	\$ 2,255,200			
7315	Retiree Benefits	\$11,279,915	2022 —	\$ 12,693,600	\$ 141,800	1.1	
			2021 —	\$ 12,551,800			
7316	Other Postemployment Benefits Trust Management and Report Preparation	\$ 5,000,000	2022 —	\$ 5,000,000	\$ —	—	
			2021 —	\$ 5,000,000			
7320	Employee Benefits	\$24,533,426	2022 4	\$ 31,051,900	\$ 595,400	2.0	d)
			2021 4	\$ 30,456,500			
7325	Labor and Employee Relations	\$ 847,957	2022 7	\$ 932,000	\$ (5,300)	(0.6)	
			2021 7	\$ 937,300			
7330	Human Resources Administration	\$ 825,925	2022 9	\$ 1,321,900	\$ 352,600	36.4	e)
			2021 9	\$ 969,300			
7480	Safety Program	\$ 1,584,870	2022 15	\$ 2,065,300	\$ 134,100	6.9	
			2021 13	\$ 1,931,200			
7500	Risk Management Operations	\$ 4,345,422	2022 6	\$ 5,147,000	\$ 256,500	5.2	f)
			2021 6	\$ 4,890,500			
7604	Social Security and Medicare Contributions	\$ 85,924	2022 —	\$ 141,600	\$ 300	0.2	
			2021 —	\$ 141,300			
Totals		\$51,144,545	2022 96	\$ 63,235,700	\$ 2,025,100	3.3 %	
			2021 93	\$ 61,210,600			
<p>a) Increase is due to additional costs for examination development consultants (\$105,000), job recruitment advertising (\$28,000), costs for raters for examination administration (\$20,000), and rental charges for test sites (\$8,000).</p> <p>b) Increase is due to the addition of one FTE position, a Human Resources Manager (\$125,300), offset by the reallocation of salaries to more accurately reflect current activities (\$20,100).</p> <p>c) Increase is due to mandatory workplace violence awareness training (\$100,000), supervisory coaching classes (\$75,000), an increase in the cost estimate for a development consultant for training of supervisors (\$36,000), and an increase in the cost estimate for harassment awareness training (\$25,000).</p> <p>d) Increase is due to a rise in the costs of PPO health insurance premiums for active employees (\$1,217,700), pharmacy for active employees (\$52,400), and health and welfare consulting services (\$45,000), offset by a decrease in HMO insurance premiums for active employees (\$290,000), a reduction in the cost of dental insurance premiums for active employees (\$259,200), and fewer retirements expected within the Human Resources Department (\$153,200).</p> <p>e) Increase is due to the addition of on-site nursing services (\$250,000), an internal communications strategy consultant (\$50,000), and focus group and survey consulting services (\$50,000).</p> <p>f) Increase is due to an increase in the estimate for the property insurance premium (\$200,000), the transfer into the Human Resources Department of one FTE, a Budget and Management Analyst (\$94,200), an increase in the estimates for the casualty insurance premium (\$76,000) and cyber insurance (\$60,000), offset by the drop of one FTE, a Risk Manager position (\$161,800).</p>							

25000 HUMAN RESOURCES**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
7290	Examinations and Employment Activities					
		Candidates	500	2,500	420	a)
		Examinations	36	75	52	a)
		Applications	1,841	9,000	2,000	a)
		Requisitions	127	350	250	a)
		Cost	\$ 1,220,729	\$ 1,704,100	\$ 1,871,500	b)
7295	Diversity, Equity, and Inclusion Activities					
	Provide Counseling, Investigate Complaints and Implement Affirmative Action Plan Objectives	Actions	875	1,000	1,100	
		Cost	\$ 369,716	\$ 373,400	\$ 480,800	c)
		Cost/Action	\$ 422.53	\$ 373.40	\$ 437.09	
7310	Training and Development Activities					
	Training and Professional Development	Training Courses	1,614	60	500	d)
		eLearning Courses	6,555	6,500	10,000	e)
		Cost	\$ 677,072	\$ 835,500	\$ 1,065,900	f)
	Apprenticeship Program	Cost	\$ 175,925	\$ 664,100	\$ 698,500	
	Administer and Finance the Tuition Reimbursement Program for the Entire District	Participants	47	65	65	
		Cost	\$ 197,072	\$ 295,600	\$ 305,700	
		Cost/Participant	\$ 4,193.02	\$ 4,547.69	\$ 4,703.08	
	Internship Program	Cost	\$ 592	\$ 460,000	\$ 460,000	
7315	Retiree Benefits					
	Health Insurance - Corporate Fund Retirees	Retirees	1,984	1,995	1,995	
		Cost	\$ 8,117,875	\$ 8,528,200	\$ 8,874,000	g)
		Cost/Retiree	\$ 4,091.67	\$ 4,274.79	\$ 4,448.12	
	Prescription Drug Retirees	Participants	1,984	1,995	1,995	
		Cost	\$ 3,162,040	\$ 4,023,600	\$ 3,819,600	h)
		Cost/Participant	\$ 1,593.77	\$ 2,016.84	\$ 1,914.59	
<p>a) Decrease is due to the planned schedule of examinations for 2022.</p> <p>b) Increase is due to additional costs for examination development consultants (\$105,000), job recruitment advertising (\$28,000), costs for raters for examination administration (\$20,000), and rental charges for test sites (\$8,000).</p> <p>c) Increase is due to the addition of one FTE position, a Human Resources Manager (\$125,300), offset by the reallocation of salaries to more accurately reflect current activities (\$20,100).</p> <p>d) Increase is due to more in-house training courses expected if COVID-19 global pandemic restrictions are lifted.</p> <p>e) Increase is due to the planned schedule of mandatory online training.</p> <p>f) Increase is due to mandatory workplace violence awareness training (\$100,000), supervisory coaching classes (\$75,000), and an increase in the cost estimate for a development consultant for training of supervisors (\$36,000).</p> <p>g) Increase is due to the rise in costs of HMO health insurance premiums (\$461,200) and Medicare Advantage (\$92,300) for retirees, and an employee benefits platform expansion for retirees (\$30,000), offset by a reduction in cost of PPO insurance premiums for retirees (\$237,700).</p> <p>h) Decrease is due to a reduction in the cost of retiree pharmacy benefits (\$204,000).</p>						

25000 HUMAN RESOURCES**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 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	1,609	1,650	1,650	
		Cost	\$ 19,553,600	\$ 22,931,500	\$ 23,882,200	i)
		Cost/Participant	\$ 12,152.64	\$ 13,897.88	\$ 14,474.06	
	Prescription Drugs - Corporate Fund Employees ¹	Participants	1,609	1,650	1,650	
		Cost	\$ 3,399,650	\$ 5,231,400	\$ 5,283,800	
		Cost/Participant	\$ 2,112.90	\$ 3,170.55	\$ 3,202.30	
	Dental Insurance - Corporate Fund Employees ¹	Participants	1,593	1,635	1,640	
		Cost	\$ 942,050	\$ 1,387,500	\$ 1,128,300	j)
		Cost/Participant	\$ 591.37	\$ 848.62	\$ 687.99	
	Life Insurance - Corporate Fund Employees ¹	Employees	1,692	1,735	1,710	
		Cost	\$ 69,864	\$ 74,700	\$ 78,600	
		Cost/Employee	\$ 41.29	\$ 43.05	\$ 45.96	
	Deferred Compensation Administration	Cost	\$ 39,000	\$ 39,000	\$ 39,000	
	Other Benefits					
	Employee Assistance Program	Cost	\$ 39,522	\$ 42,000	\$ 45,500	
	Flexible Spending Accounts Program	Cost	\$ 50,901	\$ 49,500	\$ 45,000	
	Compensation and Classification Activities	Cost	\$ 438,839	\$ 700,900	\$ 549,500	k)
7325	Labor and Employee Relations					
	Labor and Employee Relations Activities	Employees Served	1,906	1,940	1,971	
		Cost	\$ 631,846	\$ 703,300	\$ 690,100	
	Compliance with Unemployment Compensation Requirements	Claims	45	25	25	
		Cost	\$ 75,507	\$ 83,300	\$ 100,000	l)
		Cost/Claim	\$ 1,677.93	\$ 3,332.00	\$ 4,000.00	
	Employee Performance Management	Cost	\$ 140,604	\$ 150,700	\$ 141,900	
<p>i) Increase is due to a rise in the costs of PPO health insurance premiums for active employees (\$1,217,700) and health and welfare consulting services (\$45,000), offset by a decrease in HMO insurance premiums for active employees (\$290,000).</p> <p>j) Decrease is due to a reduction in the cost of dental insurance premiums for active employees (\$259,200).</p> <p>k) Decrease is due to fewer retirements expected within the Human Resources Department (\$153,200).</p> <p>l) Increase is due to an expected rise in unemployment claims (\$16,700).</p> <p>¹ Additional funds are budgeted in the Stormwater Management Fund.</p>						

25000 HUMAN RESOURCES**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
7330	Human Resources Administration					
	Personnel Activity Administration	Employees Served	1,906	1,940	1,971	
		Cost	\$ 610,247	\$ 694,900	\$ 1,052,500	m)
		Cost/Employee	\$ 320.17	\$ 358.20	\$ 533.99	
	Pre-employment Activities	New Hires	106	100	110	
		Cost	\$ 37,986	\$ 109,800	\$ 104,800	
		Cost/New Hire	\$ 358.36	\$ 1,098.00	\$ 952.73	
	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	15	20	20	
		Cost	\$ 177,692	\$ 164,600	\$ 164,600	
		Cost/Action	\$ 11,846.13	\$ 8,230.00	\$ 8,230.00	
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	\$ 1,272,543	\$ 1,509,300	\$ 1,582,800	
	Safety Training	# of Classes	791	1,250	1,900	n)
		# of Attendees	4,407	8,500	13,000	n)
	Safety Equipment Purchase, Rental, and Maintenance	Cost	\$ 227,817	\$ 252,000	\$ 295,200	o)
	Payment for External Services to Support Safety Activities	Cost	\$ 84,510	\$ 169,900	\$ 187,300	
7500	Risk Management Operations					
	Administration and Professional Development (formerly Administration)	Cost	\$ 488,480	\$ 704,700	\$ 640,600	
	Third Party Services	Cost	\$ 415,623	\$ 531,500	\$ 520,000	
	Insurance Premiums (such as property insurance)	Cost	\$ 3,441,319	\$ 3,654,300	\$ 3,986,400	p)
7604	Social Security and Medicare Contributions	Cost	\$ 85,924	\$ 141,300	\$ 141,600	
	Totals		\$ 51,144,545	\$ 61,210,600	\$ 63,235,700	
<p>m) Increase is due to the addition of on-site nursing services (\$250,000), an internal communications strategy consultant (\$50,000), and focus group and survey consulting services (\$50,000).</p> <p>n) Increase is due to an expected increase in the number of classes and attendees if COVID-19 global pandemic restrictions are lifted.</p> <p>o) Increase is due to the need for fire extinguishers and fire supplies (\$24,900), and additional safety equipment, materials, and supplies (\$21,200), offset by the one-time request for safety equipment in 2021 for the Maintenance & Operations Department not requested for 2022 (\$6,000).</p> <p>p) Increase is due to an increase in the estimates for the property insurance premium (\$200,000), casualty insurance premium (\$76,000), and cyber insurance (\$60,000).</p>						

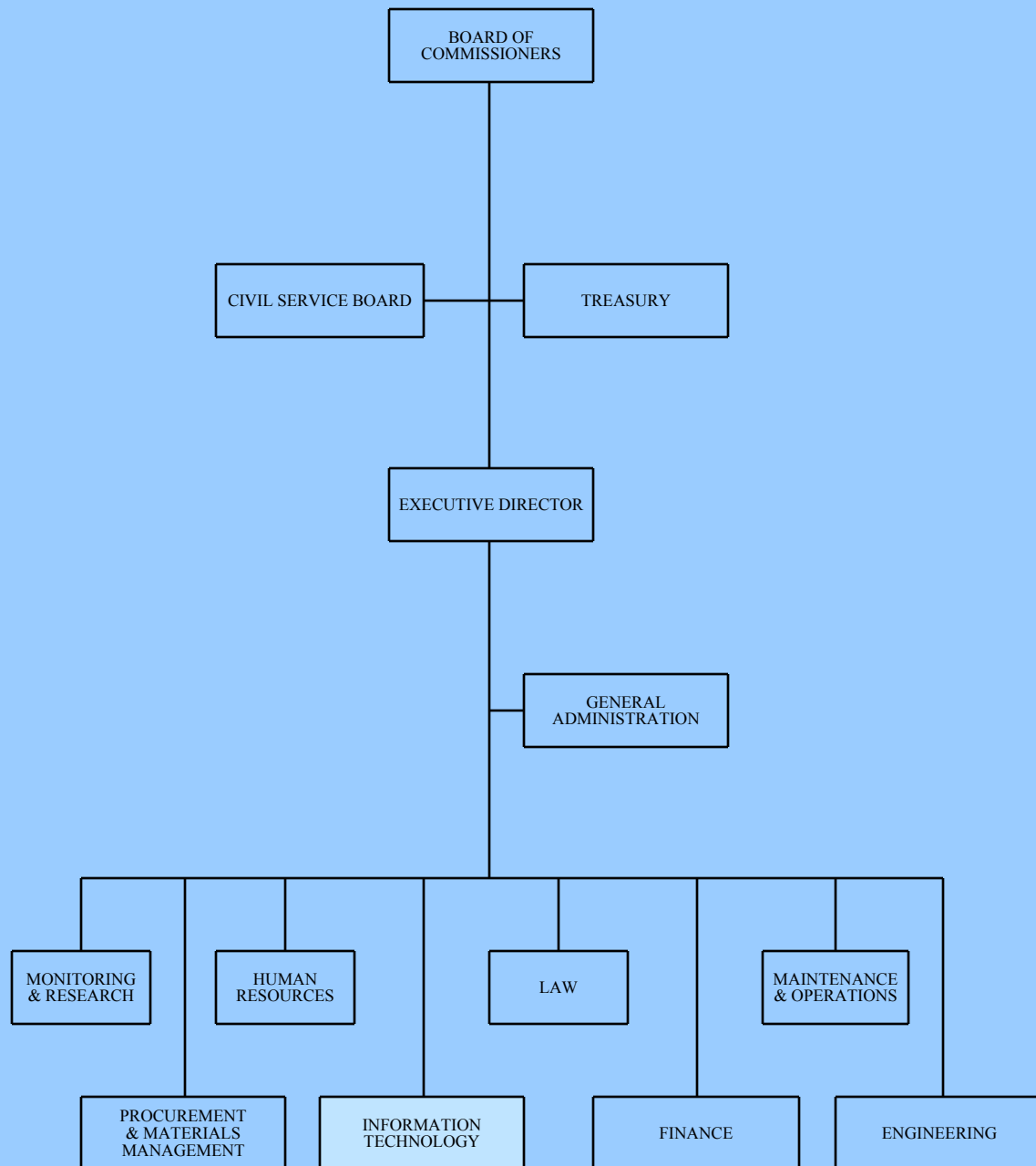
101 25000	Fund: Corporate Department: Human Resources	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 6,031,622	\$ 6,917,700	\$ 6,917,700	\$ 4,032,056	\$ 5,886,200	\$ 7,109,200	\$ —
601060	Compensation Plan Adjustments	51,236	415,300	415,300	235,518	323,400	260,200	—
601070	Social Security and Medicare Contributions	85,924	141,300	141,300	64,606	92,200	141,600	—
601090	Employee Claims	75,507	83,300	100,100	90,936	91,000	100,000	—
601100	Tuition and Training Payments	262,473	668,300	651,500	257,655	492,300	876,500	—
601250	Health and Life Insurance Premiums	40,190,299	47,059,000	47,059,000	29,531,174	39,442,400	47,900,200	—
601300	Personal Services, N.O.C. (Not Otherwise Classified)	592	460,000	460,000	—	—	460,000	—
100	TOTAL PERSONAL SERVICES	46,697,651	55,744,900	55,744,900	34,211,945	46,327,500	56,847,700	—
612010	Travel	380	1,400	1,400	—	500	4,400	—
612030	Meals and Lodging	1,146	7,800	7,800	—	6,900	15,300	—
612050	Compensation for Personally-Owned Automobiles	82	1,300	1,300	—	600	1,300	—
612080	Motor Vehicle Operating Services	—	100	100	—	100	100	—
612250	Court Reporting Services	9,887	16,000	16,000	10,000	12,000	16,000	—
612260	Medical Services	77,760	170,800	170,800	130,800	112,700	451,300	—
612290	Insurance Premiums	3,657,819	3,870,800	3,870,800	341,113	3,870,800	4,221,400	—
612330	Rental Charges	8,427	18,500	18,500	8,055	13,500	26,500	—
612360	Advertising	—	3,000	3,000	550	3,000	31,000	—
612430	Payments for Professional Services	364,694	797,100	792,100	544,879	710,000	1,027,000	—
612490	Contractual Services, N.O.C.	11,142	79,400	39,400	26,850	36,000	83,400	—
612780	Safety Repairs and Services	71,277	151,500	151,500	137,606	144,500	160,000	—
612820	Computer Software Maintenance	—	60,000	105,000	95,599	93,000	—	—
200	TOTAL CONTRACTUAL SERVICES	4,202,614	5,177,700	5,177,700	1,295,452	5,003,600	6,037,700	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	10,343	43,800	43,800	25,542	24,000	28,500	—
623720	Books, Maps, and Charts	1,003	1,000	1,000	125	1,000	1,000	—
623780	Safety and Medical Supplies	219,365	228,700	228,700	201,742	239,000	282,800	—
623990	Materials and Supplies, N.O.C.	1,404	8,500	8,500	156	8,500	8,000	—
300	TOTAL MATERIALS AND SUPPLIES	232,115	282,000	282,000	227,565	272,500	320,300	—

101 25000	Fund: Corporate Department: Human Resources	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
634780	Safety and Medical Equipment	12,166	6,000	6,000	—	—	—	—
634820	Computer Software	—	—	—	—	—	30,000	—
400	TOTAL MACHINERY AND EQUIPMENT	12,166	6,000	6,000	—	—	30,000	—
TOTAL HUMAN RESOURCES		\$ 51,144,546	\$ 61,210,600	\$ 61,210,600	\$ 35,734,962	\$ 51,603,600	\$ 63,235,700	\$ —
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				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	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	
HP18	Human Resources Manager	—	—		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 252	Executive Unit	7	7	659,914	8	794,207
254	Employee Selection Section					
HP18	Human Resources Manager	1	1		1	
HP16	Senior Human Resources Analyst	2	2		2	
HP14	Human Resources Analyst	6	6		6	
HP13	Senior Administrative Specialist	2	2		2	
HP11	Administrative Specialist	2	2		2	
TOTAL 254	Employee Selection Section	13	13	1,319,526	13	1,330,950
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 - Machinist Trainee	—	7		7	
NR1027	Apprentice - Operating Engineer Trainee	6	6		6	
TOTAL 255	Employee Development Section	32	39	1,797,625	39	1,840,597
256	Classification, Compensation, & Benefits Section					
HP19	Human Resources Manager #2 (New Grade HP18)	1	1		1	
HP17	Senior Human Resources Analyst #2 (New Grade HP16)	2	2		2	
HP14	Human Resources Analyst	3	3		3	
HP13	Senior Administrative Specialist	—	1		1	

Fund: Corporate Dept: Human Resources		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP11	Administrative Specialist	1	—		—	
HP11	Administrative Specialist #4	1	—		—	
TOTAL 256	Classification, Compensation, & Benefits Section	8	7	824,525	7	845,480
257	Risk Management Section					
HP19	Risk Manager #1	—	1		—	
HP19	Risk Manager #2 (New Grade HP18)	1	—		—	
HP18	Risk Manager	—	1		1	
HP17	Claims Administrator #2 (New Grade HP16)	1	1		1	
HP17	Senior Risk Analyst #2 (New Grade HP16)	1	—		—	
HP16	Senior Risk Analyst	—	1		1	
HP16	Emergency Planning Program Coordinator	—	1		1	
HP14	Budget & Management Analyst	—	—		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 257	Risk Management Section	4	6	703,542	6	635,607
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		—	
HP14	Human Resources Analyst	2	2		3	
HP11	Administrative Specialist	2	2		2	
TOTAL 258	Employee Relations Section	8	8	889,139	8	804,510
259	Safety Section					
HP18	Safety Manager	1	1		1	
HP16	Senior Safety Specialist	—	1		3	
HP15	Safety Coordinator #2 (Safety Specialist) (New Grade HP14)	3	3		1	
HP14	Safety Specialist	6	7		9	
HP11	Administrative Specialist	1	1		1	
TOTAL 259	Safety Section	11	13	1,382,469	15	1,517,947
TOTAL	Human Resources	83	93	7,576,739	96	7,769,299
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 7, 2021

Mr. Brian A. Perkovich
Executive Director
O F F I C E

Dear Sir:

Subject: 2022 Program for the Information Technology Department

The Information Technology Department's program for 2022, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the department's 2022 initiatives in alignment with, and in support of the Strategic 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, 2022 major initiatives and challenges, and 2021 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 2022.

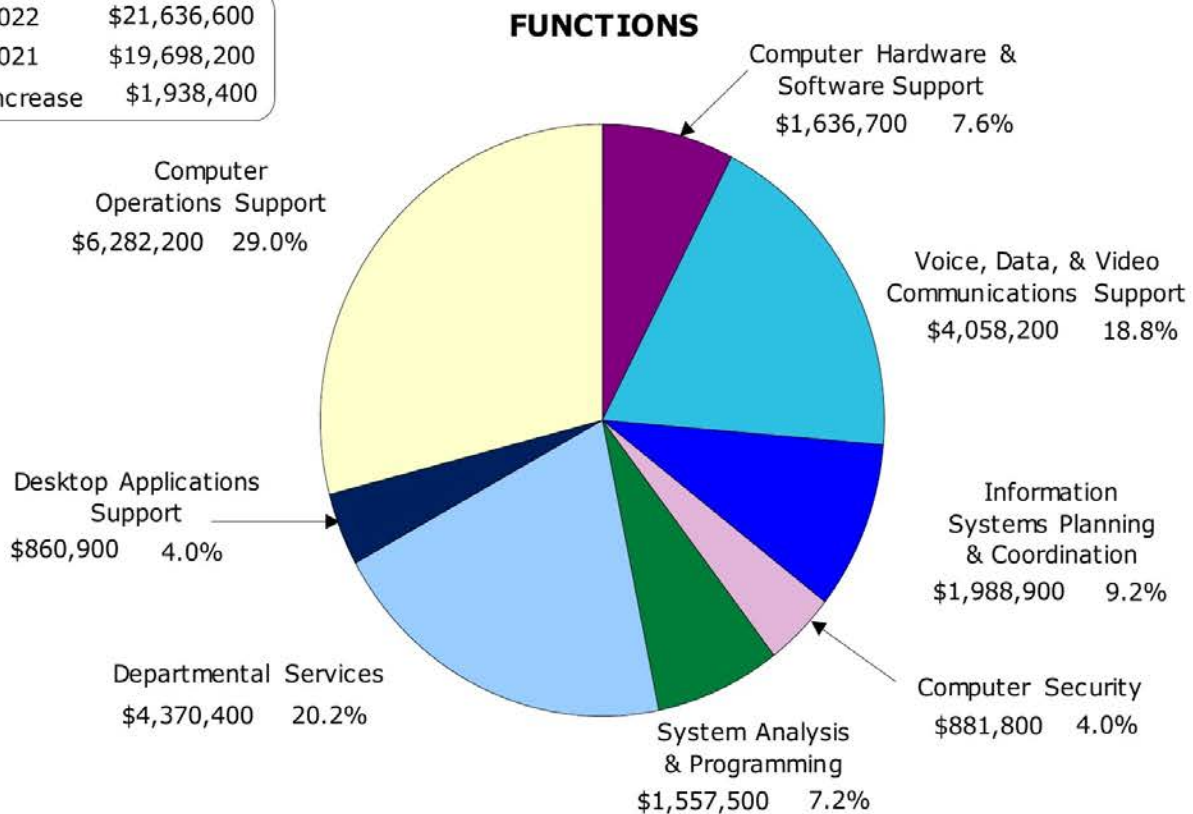
Respectfully submitted,



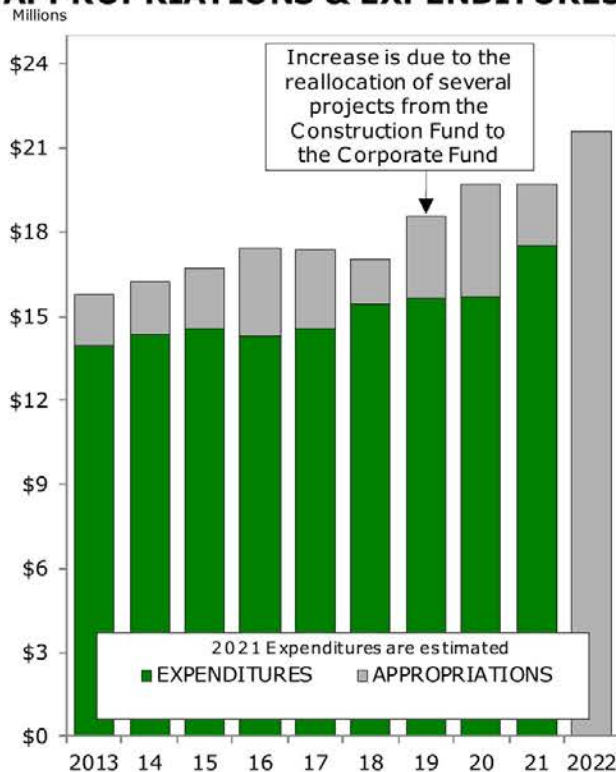
John H. Sudduth
Director of Information Technology

INFORMATION TECHNOLOGY

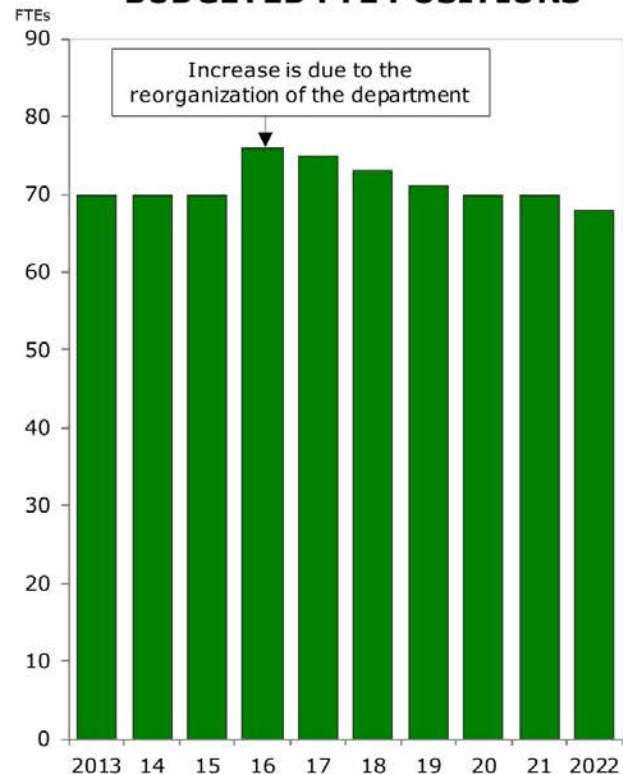
2022	\$21,636,600
2021	\$19,698,200
Increase	\$1,938,400



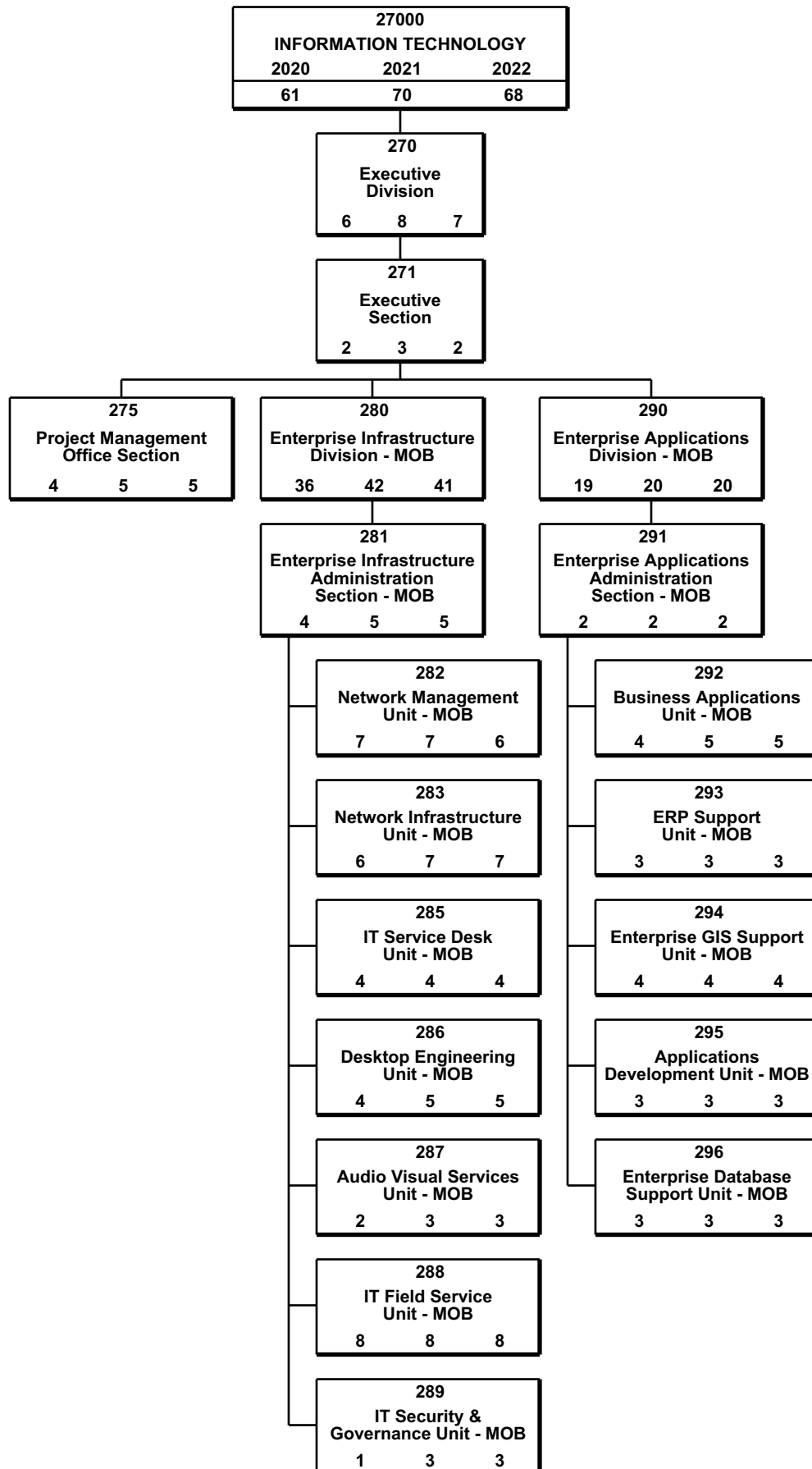
APPROPRIATIONS & EXPENDITURES



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 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 2021 Major Accomplishments

- Continued the implementation of the IT Infrastructure Strategy, including initiating the distribution of new hardware solutions as part of the program to enable District employees to work remote;
- Implemented additional cyber security protection, including the rollout of multi-factor authentication, e-mail filtering and advanced intrusion detection;
- Continued the replacement of antiquated communication lines in the effort to reduce telecommunications cost and the upgrade of the District's desk phone system, transforming the District's phone system to digital from analog;
- Completed the implementation of the IT service catalog, which will increase transparency, by detailing the services offered by the ITD;
- Began the process of enhancing the District's website in order to allow the various departments to provide easy and transparent access to clear, consistent, and accurate information about the District and its areas of responsibility.

2022 Appropriation and Position Summary

The 2022 appropriation for the ITD is \$21,636,600, an increase of \$1,938,400, or 9.8 percent, from 2021. The staffing level has decreased from 70 to 68 positions, which includes the transfer of one Senior Budget and Management Analyst to General Administration and the drop of one Senior Systems Administrator. One Network Engineer was reclassified to a Network Analyst.

2022 Budget Highlights

The following budget highlights support the District's Strategic Plan Goal of Enterprise Resilience. The District is committed to ensuring ongoing services that are reliable, equitable, and cost-effective. The initiatives highlighted below will prepare for disruptive manmade and natural events, and strengthen the MWRD's operational positions.

Assure agency resilience and readiness for effective response to emergencies that could put at risk the health and safety of employees, negatively affect operations, disrupt essential services, or put at risk the general public

- The District's Enterprise Storage Area Network (SAN) is a critical asset for the District's operation. The SAN stores working files as well as hosts any on-premises applications used by the District, including the Enterprise Resource Planning system. The SAN provides a level of resiliency and redundancy as it contains multiple copies/backups of District data and applications. The preservation of these backups is a key strategy against potential ransom-ware attacks. The current system is over six years old and needs to be replaced so as to provide the latest features for business continuity management;
- Dependency on technology and changes in MWRD culture demand a computing environment that allows staff to be effective while not physically at a District facility. The Teleworker Roll-out project includes the implementation of the computing hardware, software, services, policy, and governance needed to procure, maintain, and secure technology and network resources to District staff. With the goal of providing a workplace that meets the evolving needs of the District, the roll out of this project will occur over the next three years;
- In order to assure agency resilience and readiness for effective response to emergencies and achieve lower costs, the ITD will continue the transition to enhanced cellular service through FirstNet® which is provided by AT&T®. FirstNet® is the first high-speed, nationwide wireless broadband network dedicated to public safety agencies and first responders. The scope of this project is to replace SIM cards on feature phones, swap out all iOS devices used by District first responders that do not currently support FirstNet® in order to facilitate the use of FirstNet® Ready features including Push to Talk, and achieve a lower cost for the District's cellular service;
- Certain database systems still in use by various District departments have reached end of life in regards to product support. In order to maintain data integrity, the ITD will work with consultants to facilitate the conversion of data from the older systems to new database platforms that will be supported going forward;
- Continue the upgrade of the District's desk phone system, including the integration of cloud support.

Standardize operations - streamline and automate internal processes

- In order to improve the experience of both internal and external users, the ITD will develop a web-application for the issuance of local sewer permits by the District's Local Sewer Systems Section. The application will provide access to the approval process (workflow) for the lifetime of a permit. External users will be able to submit, edit, and review permits online. Notifications will be sent to internal staff when external users make any changes. External users will receive notifications on any high level status changes. This new solution will increase efficiency in the permit issuing process and lead to a stronger relationship between the District and the general public.

Maintain strong fiscal management; identify and leverage opportunities for cost reduction and cost recovery

- Conduct an Enterprise Resource Planning needs assessment in order to better address the needs of a changing District. This assessment will include the feasibility of transitioning certain Enterprise systems to the cloud as well as the implementation of changes to the graphical user interface system of these systems to better serve the needs of various departments.

The Information Technology Department will continue to evaluate additional consolidation of infrastructure and software technologies to streamline administration, leading to reduced costs and optimized performance.

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.		\$ 1,636,700	7.6 %
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.		\$ 4,058,200	18.8 %
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.		\$ 1,988,900	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.		\$ 1,557,500	7.2 %
5. COMPUTER OPERATIONS SUPPORT: The ITD operates one on-site computer room and one co-location data center which together house the District's systems, storage area networks, network servers, and ancillary equipment.		\$ 6,282,200	29.0 %
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.		\$ 4,370,400	20.2 %
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.		\$ 881,800	4.0 %
8. DESKTOP APPLICATIONS SUPPORT: The assigned staff will continue to provide applications and technical support to approximately 1,971 computer system users.		\$ 860,900	4.0 %
Totals		\$ 21,636,600	100.0 %

MEASURABLE GOALS:	2020	2021	2022
	Actual	Estimated	Proposed
1. Cyber Security - 95% of high level cyber security vulnerabilities mitigated within 2 business days.	0%	0%	95%
2. Customer Service - Ensure Service Desk user satisfaction remains at or above 95%.	98.5%	98.5%	95%
3. Customer Service - 95% of service tickets resolved in 5 business days	0%	0%	95%
4. Employee development - Ensure 95% of District staff has completed cyber security training	0%	0%	95%

27000 INFORMATION TECHNOLOGY**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:		2020	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
7381	Systems Analysis and Programming	\$ 1,436,549	2022 12	\$ 1,557,500	\$ 8,400	0.5	
			2021 12	\$ 1,549,100			
7382	Desktop Applications Support	\$ 1,206,191	2022 5	\$ 860,900	\$ (257,500)	(23.0)	a)
			2021 5	\$ 1,118,400			
7383	Voice, Data, and Video Communications Support	\$ 2,630,145	2022 11	\$ 4,058,200	\$ (159,700)	(3.8)	b)
			2021 11	\$ 4,217,900			
7384	Central Computer Hardware and Proprietary Software Support	\$ 1,786,913	2022 8	\$ 1,636,700	\$ 96,600	6.3	c)
			2021 8	\$ 1,540,100			
7385	Computer Operations, Maintenance, and Support	\$ 3,716,570	2022 7	\$ 6,282,200	\$ 1,609,300	34.4	d)
			2021 7	\$ 4,672,900			
7387	Computer Security	\$ 221,621	2022 4	\$ 881,800	\$ 200,400	29.4	e)
			2021 4	\$ 681,400			
7388	Information Systems Planning	\$ 701,365	2022 5	\$ 1,226,800	\$ 310,200	33.8	f)
			2021 5	\$ 916,600			
7389	Information Systems Coordination	\$ 458,428	2022 3	\$ 762,100	\$ (80,900)	(9.6)	
			2021 4	\$ 843,000			
7800	Information Technology Services	\$ 3,432,145	2022 13	\$ 4,244,700	\$ 210,800	5.2	g)
			2021 14	\$ 4,033,900			
7604	Social Security and Medicare Contributions	\$ 104,222	2022 —	\$ 125,700	\$ 800	0.6	
			2021 —	\$ 124,900			
Totals		\$15,694,149	2022 68	\$21,636,600	\$ 1,938,400	9.8 %	
			2021 70	\$ 19,698,200			
<p>a) Decrease is due to the reallocation of workstation replacement to better differentiate between equipment procured for life cycle replacement of the computer fleet and new equipment (\$241,100) and reduced demand for miscellaneous computer supplies (\$28,100).</p> <p>b) Decrease is due to the carry forward of the website redesign project (\$150,000), the reallocation of salaries to more accurately reflect current activities (\$108,800), and the cancellation of the Wi-Fi upgrade at the Stickney WRP (\$35,000), offset by the increased demand for switched ethernet services (\$83,600) and new and lifecycle replacement of cell phone hardware (\$52,900).</p> <p>c) Increase is due to the increased demand for data consulting services (\$42,000), CommVault® professional services (\$31,000), co-location services (\$9,000), Mimecast® software maintenance (\$7,900), and Cisco® Firepower Software Maintenance (\$2,000).</p> <p>d) Increase is due to the increased demand for 3Par Enterprise SANS storage and maintenance (\$1,400,000), Microsoft license support (\$164,800), Avaya Private Branch Exchange and Intuity Audix maintenance (\$102,000), and Logic Monitor maintenance (\$69,000), offset by the decreased demand for HP server maintenance and replacement (\$90,000) and Citrix user license maintenance (\$37,400).</p> <p>e) Increase is due to the increased demand for IT security consulting (\$200,000).</p> <p>f) Increase is due to the increased demand for Enterprise Resource Planning needs assessment (\$150,000), IT project management consulting services (\$126,400), and general IT consulting services (\$75,000), offset by the reallocation of salaries to more accurately reflect current activities (\$46,200).</p> <p>g) Increase is due to the implementation of a new Laboratory Information Management system (\$230,000), computer related hardware requested by various departments (\$100,500), return to work training software maintenance (\$38,000), and Wi-Fi controllers and access points (\$35,000), offset by the termination of the previous Laboratory Information Management system (\$132,000) and the completed implementation of return to work training software in 2021 (\$80,000).</p>							

27000 INFORMATION TECHNOLOGY**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
7380	Information Technology and Telecommunications					
7381	Systems Analysis and Programming	Application Modules Supported	90	90	90	
		Cost	\$ 1,436,549	\$ 1,549,100	\$ 1,557,500	
		Cost/Module	\$ 15,961.66	\$ 17,212.22	\$ 17,305.56	
7382	Desktop Applications Support	# of Service Calls	14,689	18,000	18,500	
		Cost	\$ 1,206,191	\$ 1,118,400	\$ 860,900	a)
		Cost/Service Call	\$ 82.12	\$ 62.13	\$ 46.54	a)
7383	Voice, Data, and Video Communications Support	Cost	\$ 2,630,145	\$ 4,217,900	\$ 4,058,200	b)
7384	Central Computer Hardware and Proprietary Software Support	Cost	\$ 1,786,913	\$ 1,540,100	\$ 1,636,700	c)
7385	Computer Operations, Maintenance, and Support	Cost	\$ 3,716,570	\$ 4,672,900	\$ 6,282,200	d)
7387	Computer Security	Cost	\$ 221,621	\$ 681,400	\$ 881,800	e)
7388	Information Systems Planning	Cost	\$ 701,365	\$ 916,600	\$ 1,226,800	f)
7389	Information Systems Coordination	Cost	\$ 458,428	\$ 843,000	\$ 762,100	
7800	Information Technology Services	# of Users	1,906	1,940	1,971	
		Cost	\$ 3,432,145	\$ 4,033,900	\$ 4,244,700	g)
		Cost/User	\$ 1,800.71	\$ 2,079.33	\$ 2,153.58	
7604	Social Security and Medicare Contributions	Cost	\$ 104,222	\$ 124,900	\$ 125,700	
		Totals	\$ 15,694,149	\$ 19,698,200	\$ 21,636,600	
<p>a) Decrease is due to the reallocation of workstation replacement to better differentiate between equipment procured for life cycle replacement of the computer fleet and new equipment (\$241,100) and reduced demand for miscellaneous computer supplies (\$28,100).</p> <p>b) Decrease is due to the carry forward of the website redesign project (\$150,000), the reallocation of salaries to more accurately reflect current activities (\$108,800), and the cancellation of the Wi-Fi upgrade at the Stickney WRP (\$35,000), offset by the increased demand for switched ethernet services (\$83,600) and new and lifecycle replacement of cell phone hardware (\$52,900).</p> <p>c) Increase is due to the increased demand for data consulting services (\$42,000), CommVault® professional services (\$31,000), co-location services (\$9,000), Mimecast® software maintenance (\$7,900), and Cisco® Firepower Software Maintenance (\$2,000).</p> <p>d) Increase is due to the increased demand for 3Par Enterprise SANS storage and maintenance (\$1,400,000), Microsoft license support (\$164,800), Avaya Private Branch Exchange and Intuity Audix maintenance (\$102,000), and Logic Monitor maintenance (\$69,000), offset by the decreased demand for HP server maintenance and replacement (\$90,000) and Citrix user license maintenance (\$37,400).</p> <p>e) Increase is due to the increased demand for IT security consulting (\$200,000).</p> <p>f) Increase is due to the increased demand for Enterprise Resource Planning needs assessment (\$150,000), IT project management consulting services (\$126,400), and general IT consulting services (\$75,000), offset by the reallocation of salaries to more accurately reflect current activities (\$46,200).</p> <p>g) Increase is due to the implementation of a new Laboratory Information Management system (\$230,000), computer related hardware requested by various departments (\$100,500), return to work training software maintenance (\$38,000), and Wi-Fi controllers and access points (\$35,000), offset by the termination of the previous Laboratory Information Management system (\$132,000) and the completed implementation of return to work training software in 2021 (\$80,000).</p>						

101 27000	Fund: Corporate Department: Information Technology	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 7,563,351	\$ 8,650,200	\$ 8,650,200	\$ 5,196,220	\$ 7,535,400	\$ 8,387,600	\$ —
601060	Compensation Plan Adjustments	78,500	271,600	271,600	149,186	152,700	247,900	—
601070	Social Security and Medicare Contributions	104,222	124,900	124,900	77,255	113,400	125,700	—
601100	Tuition and Training Payments	13,902	37,000	37,000	6,400	25,000	35,000	—
100	TOTAL PERSONAL SERVICES	7,759,975	9,083,700	9,083,700	5,429,061	7,826,500	8,796,200	—
612010	Travel	1,317	2,000	2,000	—	—	2,000	—
612030	Meals and Lodging	2,095	5,000	5,000	—	—	5,000	—
612040	Postage, Freight, and Delivery Charges	664	1,500	1,500	1,500	700	1,500	—
612050	Compensation for Personally- Owned Automobiles	1,301	1,500	1,500	536	1,300	1,500	—
612210	Communication Services	1,371,920	2,430,500	2,761,500	2,741,289	2,761,500	2,523,100	—
612330	Rental Charges	85,200	91,000	91,000	90,200	78,100	100,000	—
612430	Payments for Professional Services	103,784	1,024,300	824,300	727,594	418,700	1,428,200	—
612490	Contractual Services, N.O.C.	1,244	10,000	10,000	2,575	2,600	10,000	—
612810	Computer Equipment Maintenance	193,577	375,000	375,000	144,314	243,100	675,000	—
612820	Computer Software Maintenance	3,927,355	4,669,400	4,538,400	4,248,014	4,452,900	5,054,800	—
612840	Communications Equipment Maintenance (Includes Software)	572,458	743,200	743,200	695,787	690,000	797,800	—
200	TOTAL CONTRACTUAL SERVICES	6,260,915	9,353,400	9,353,400	8,651,809	8,648,900	10,598,900	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	5,523	15,500	15,500	15,500	10,000	18,500	—
623800	Computer Software	319,254	241,600	241,600	184,803	178,500	226,600	—
623810	Computer Supplies	1,072,427	734,000	712,000	496,732	652,000	556,000	—
623850	Communications Supplies	46,248	65,000	87,000	41,971	27,000	175,400	—
300	TOTAL MATERIALS AND SUPPLIES	1,443,452	1,056,100	1,056,100	739,006	867,500	976,500	—
634810	Computer Equipment	137,920	205,000	205,000	15,869	190,000	1,215,000	—
634820	Computer Software	91,888	—	—	—	—	—	—
634840	Communications Equipment (Includes Software)	—	—	—	—	—	50,000	—
400	TOTAL MACHINERY AND EQUIPMENT	229,808	205,000	205,000	15,869	190,000	1,265,000	—
TOTAL INFORMATION TECHNOLOGY		\$ 15,694,150	\$ 19,698,200	\$ 19,698,200	\$ 14,835,745	\$ 17,532,900	\$ 21,636,600	\$ —

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.

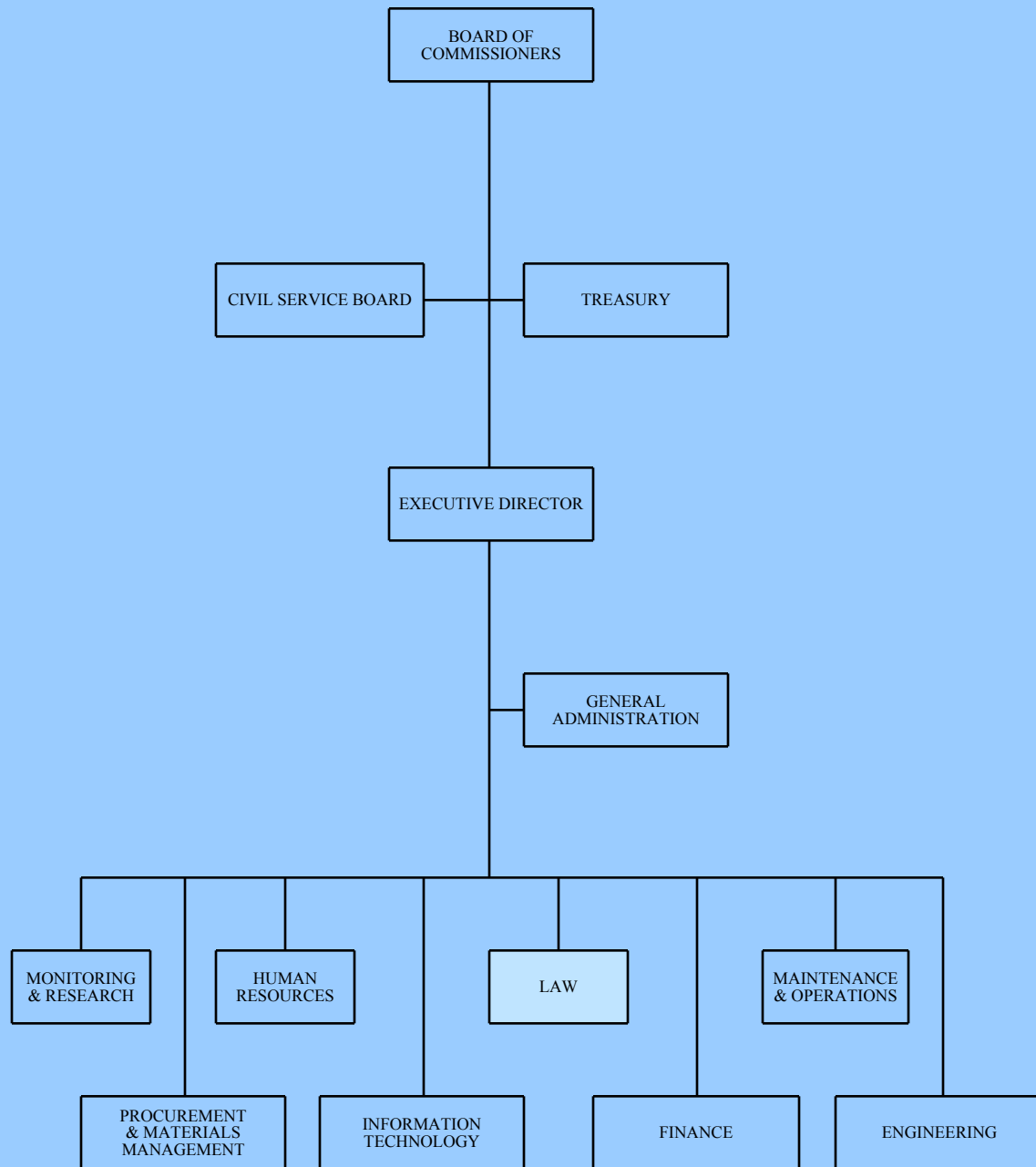
Fund: Corporate Dept: Information Technology		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
270	Executive Division					
271	Executive Section					
EX17	Director of Information Technology	1	1		1	
EX06	Secretary to Officer	1	1		1	
HP16	Senior Budget & Management Analyst	—	1		—	
TOTAL 271	Executive Section	2	3	458,723	2	357,059
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	617,866	5	624,658
TOTAL 270	Executive Division	6	8	1,076,589	7	981,717
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	734,629	5	734,629
282	Network Management Unit - MOB					
HP18	Senior Systems Administrator	1	1		1	
HP18	Senior Systems Administrator #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	1,004,598	6	858,603

Fund: Corporate Dept: Information Technology		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
283	Network Infrastructure Unit - MOB					
HP18	Senior Network Engineer	1	1		1	
HP16	Network Engineer	4	4		3	
HP14	Network Analyst	—	1		2	
NR1541	Telecommunications Specialist #1	1	1		1	
TOTAL 283	Network Infrastructure Unit - MOB	6	7	843,008	7	802,374
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	310,515	4	321,734
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	664,007	5	669,942
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	315,340	3	326,057
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	—		—	
HP15	Computer Systems Coordinator #2 (IT Support Analyst II) (New Grade HP13)	2	2		1	
HP13	IT Support Analyst II	4	5		6	
TOTAL 288	IT Field Service Unit - MOB	8	8	794,825	8	773,888

Fund: Corporate Dept: Information Technology		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
289	IT Security & Governance Unit - MOB					
HP18	Senior IT Security Administrator	1	2		2	
HP16	IT Security Administrator	—	1		1	
TOTAL 289	IT Security & Governance Unit - MOB	1	3	391,468	3	391,468
TOTAL 280	Enterprise Infrastructure Division - MOB	36	42	5,058,391	41	4,878,695
290	Enterprise Applications Division - MOB					
291	Enterprise Applications Administration Section - MOB					
HP19	Information Technology Manager	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 291	Enterprise Applications Administration Section - MOB	2	2	227,367	2	227,367
292	Business Applications Unit - MOB					
HP18	Senior Applications Administrator	1	1		1	
HP17	Webmaster #1	1	1		1	
HP16	Applications Administrator	1	2		2	
HP14	Applications Analyst	1	1		1	
TOTAL 292	Business Applications Unit - MOB	4	5	641,534	5	641,533
293	ERP Support Unit - MOB					
HP17	Senior Systems Programmer #1	2	2		2	
HP16	Applications Administrator	1	1		1	
TOTAL 293	ERP Support Unit - MOB	3	3	420,969	3	420,969
294	Enterprise GIS Support Unit - MOB					
HP18	Senior Applications Administrator	1	1		1	
HP16	Applications Administrator	—	1		1	
HP16	Applications Administrator #2 (GIS Analyst) (New Grade HP14)	1	1		1	
HP14	GIS Analyst	2	1		1	
TOTAL 294	Enterprise GIS Support Unit - MOB	4	4	494,516	4	494,516
295	Applications Development Unit - MOB					
HP18	Senior Applications Developer	1	1		1	
HP16	Applications Developer	1	1		1	

Fund: Corporate Dept: Information Technology		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP14	Applications Analyst	1	1		1	
TOTAL 295	Applications Development Unit - MOB	3	3	362,477	3	373,193
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	412,055	3	412,055
TOTAL 290	Enterprise Applications Division - MOB	19	20	2,558,917	20	2,569,633
TOTAL	Information Technology	61	70	8,693,898	68	8,430,045
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



Kari K. Steele
President
Barbara J. McGowan
Vice President
Marcelino Garcia
Chairman Of Finance
Cameron Davis
Kimberly Du Buclet
Josina Morita
Eira L. Corral Sepúlveda
Debra Shore
Mariyana Spyropoulos

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 7, 2021

Mr. Brian A. Perkovich
Executive Director
O F F I C E

Dear Sir:

Subject: 2022 Program for the Law Department

The Law Department's program for 2022, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of 2022 initiatives in alignment with and in support of the Strategic 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, 2022 major initiatives and challenges, and 2021 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 2022.

Respectfully submitted,

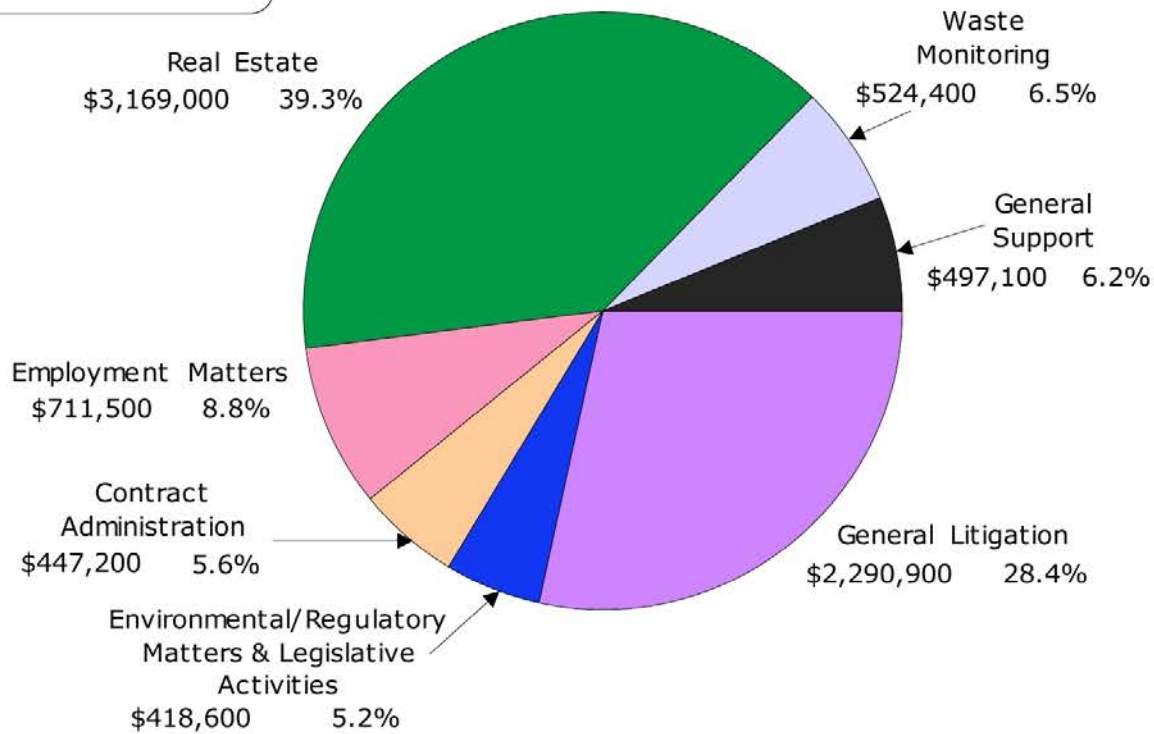


Susan T. Morakalis
General Counsel

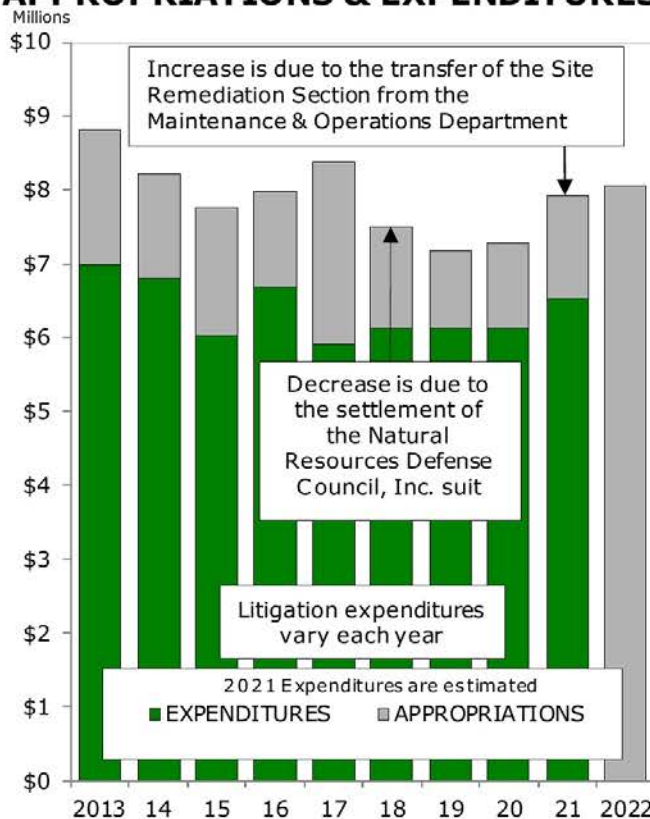
LAW

FUNCTIONS

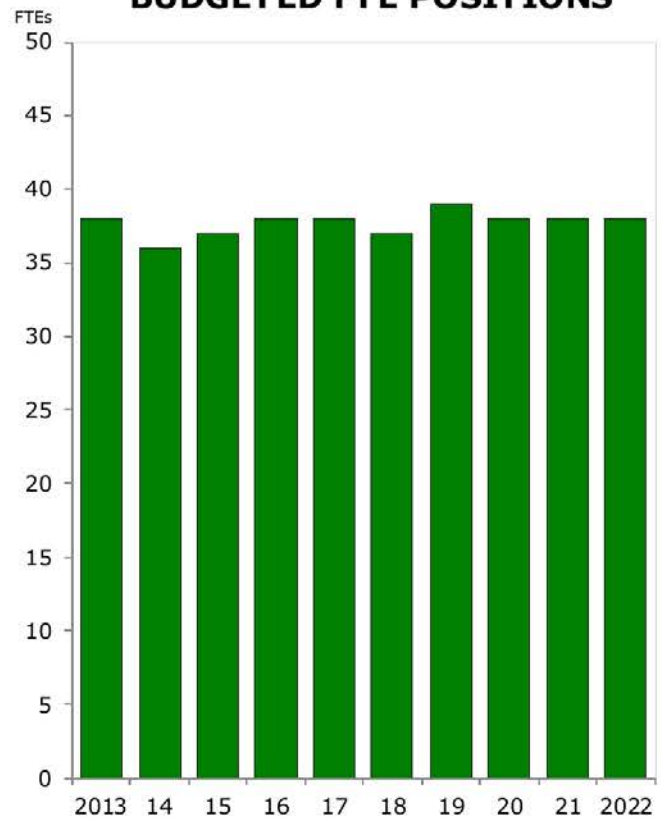
2022	\$8,058,700
2021	\$7,939,900
Increase	\$118,800

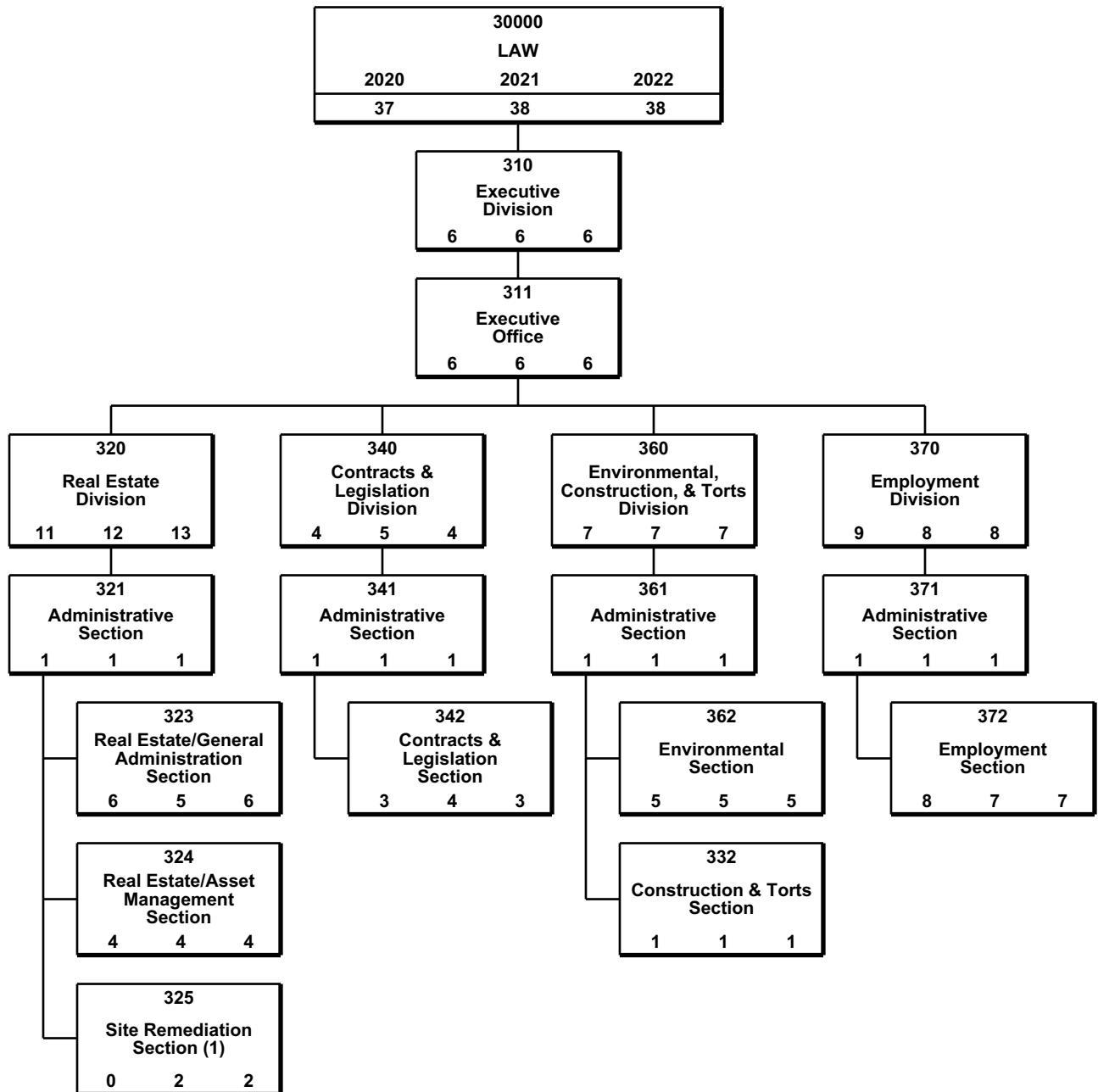


APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



LAW

(1) Effective 01/01/21, two positions in Section 325 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 2021 Major Accomplishments

- Negotiated the renewal and modification of National Pollutant Discharge Elimination System permits for several District WRPs;
- Finalized intergovernmental agreements with over 20 governmental entities for stormwater projects;
- Explored and/or partnered with local municipalities to find District parcels that could be used for open space and natural habitat revitalization including at Dead Stick Pond with the Chicago Park District and the Centennial Trail Area with the Village of Lemont;
- Assisted with a broad overhaul of proposal, bidding and contract documents to modernize, standardize, and provide a more user friendly process while minimizing risk to the District;
- Obtained passage of Senate Bill 1805 through the Illinois General Assembly and signature by the Illinois Governor into Public Act 101-0670, allowing the District to transfer revenue from any lawfully available source to the District's Retirement Fund, upon a favorable vote by 2/3 of the District's Board.

2022 Appropriation and Position Summary

The 2022 appropriation for the Law Department is \$8,058,700, an increase of \$118,800, or 1.5 percent, from 2021. The staffing level remains unchanged at 38 positions.

2022 Budget Highlights

The following budget highlights support the District's Strategic Plan Goal of Resource Management, maintaining a high level of performance on the core mission of protecting the public health and area waterways while exploring opportunities to recover, reuse, and monetize resources.

Maintain high level of permit compliance as requirements evolve, continue efforts to improve water quality

- 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 collaborated with other petitioners seeking to be part of the Time Limited Water Quality Standard ("TLWQS") for the Chlorides Water Quality Standard that went into effect in July 2018. The TLWQS is currently pending before the Illinois Pollution Control Board ("IPCB") and once the IPCB issues its Order, the District and other Petitioners will jointly form a new workgroup whose membership will work together to comply with the IPCB order, including data gathering, reporting, education, and training requirements.

Pursue resource recovery opportunities to increase sustainability and recover costs

- The Law Department assists operating departments with implementation and administration of the District's Resource Recovery Program. 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 provides counsel and support to the District's Board of Commissioners, technical staff, and financial professionals in connection with various renewable energy initiatives as well as efforts to beneficially reuse biosolids, a byproduct of the District's wastewater treatment operations, and obtaining high strength organic waste to aid in the biological removal of phosphorus from the District's effluent water.

The following budget highlights support the District's Strategic Plan Goal of Stormwater Management to mitigate flooding across Cook County.

Develop comprehensive framework to guide proactive implementation of stormwater solutions across Cook County

- The Environmental, Construction and Torts Division drafts any necessary amendments to and provides counsel on the District's Watershed Management Ordinance (WMO). This Division is also responsible for all variance petitions and enforcement actions under the WMO and actively participates in technical advisory committee meetings.

Partner with local communities to significantly increase stormwater management projects

- The Environmental, Construction and Torts Division assists in the review and negotiation of intergovernmental agreements with municipalities to establish the legal framework for regional and local stormwater management projects and flood prone property acquisitions. Staff participates in informational meetings with local communities to explain and answer questions about the District's legal requirements for participation in green infrastructure projects;
- The Real Estate Division assists in the right-of-way acquisition for stormwater projects, including the Addison Creek Channel Improvement Project, the Flood Control Project on Midlothian Creek in Robbins, the Streambank Stabilization on Melvina Ditch, and the 135th Street Flood Mitigation Project in Crestwood.

The following budget highlights support the District's Strategic Plan Goal of Enterprise Resilience, ensuring ongoing services that are reliable, equitable, and cost-effective, while strengthening the MWRD's operational and financial positions.

Standardize operations - streamline and automate internal processes, scale lessons learned from pandemic response

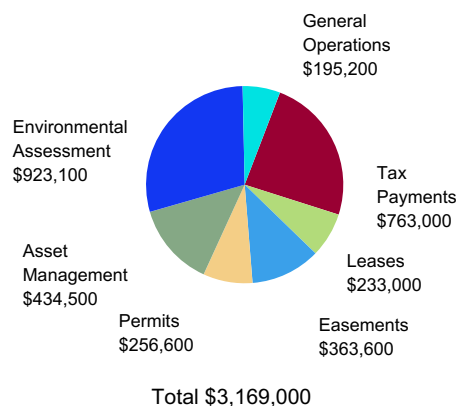
- The Law Department uses technology to ensure reliable and cost effective legal representation for the District. Incorporating lessons learned throughout the COVID-19 global pandemic, the Law Department enhanced the use of an electronic Legal Files Document and Case Management System. Relevant data is shared with the Human Resources Department's Risk Management Information System. This data is essential for analysis and reporting on risk arising from the litigation of claims. During 2021, the Law Department added an electronic discovery hosting software solution to meet litigation needs. This solution allows the District to meet its legal obligations by collecting, cataloging and sharing all documents relevant to an active litigation matters.

Maintain strong fiscal management, identify and leverage opportunities for cost reduction and cost recovery

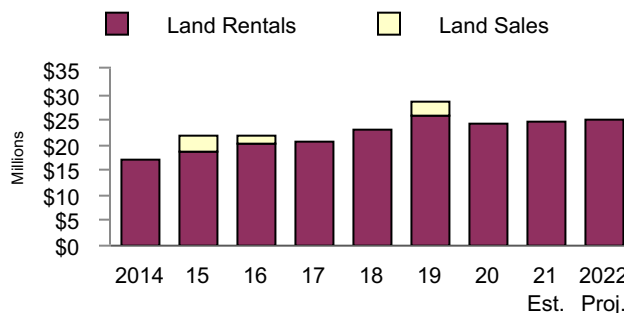
- The District currently owns approximately 24,000 acres of land located in Cook, Will, DuPage, and Fulton Counties in Illinois, about half of which are adjacent to the 76.1 miles of navigable waterways it helps manage, including the Cal-Sag Channel, Chicago Sanitary and Ship Canal (Main Channel), and the North Shore Channel. The majority of the District's land holdings are dedicated to corporate purposes, but 4,900 acres in Cook County, 450 acres in DuPage County, and 670 acres in Will County are leased to other parties. The District pursues a multi-pronged approach that prioritizes public access and recreation opportunities. Approximately 80 percent of leased land is held by other governmental agencies (park districts, municipalities, and forest preserve districts) for the express purpose of enhancing public access to parks, hiking and bicycle trails, and passive recreational use along the waterways.

The remaining parcels are leased to private parties for industrial and business purposes. The District requires that lessees incorporate Green Infrastructure into leases whenever possible, improve the aesthetics, and ensure the protection of District lands. 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.

2022 Real Estate Program Budget



**Real Estate Income
Land Sales, Leases, Easements, &
Permits**



Land Sale Details
 2015 - 4.2 acres sold to the IL State Toll Highway Authority
 2016 - 4.4 acres sold to the City of Chicago
 2019 - 17.2 acres sold to the IL State Toll Highway Authority

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.		\$ 2,290,900	28.4 %
2. Handle all environmental matters and monitor all state legislation and legislative activities.		\$ 418,600	5.2 %
3. Provide legal services regarding employment-related matters such as civil service matters, employment discrimination law, labor relations, and labor arbitration.		\$ 711,500	8.8 %
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.		\$ 3,169,000	39.3 %
Through its leasing and easement grant activities, the Real Estate Division will generate approximately \$25 million in income in 2022.			
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.		\$ 524,400	6.5 %
6. Review proposed contracts, execute awarded contracts, review bond surety, and insurance matters.		\$ 447,200	5.6 %
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.		\$ 497,100	6.2 %
Totals		\$ 8,058,700	100.0 %

MEASURABLE GOALS:		Unit of Measure	2020 Actual	2021 Estimated	2022 Proposed
1. Revise lease procedures and policies to enhance the marketability of District real estate while increasing the use of Green Infrastructure.		Millions	\$24.3	\$24.5	\$25.0
2. Conduct training on Freedom of Information Act requests.		Training Sessions	1	0	1
3. Preparation of draft Intergovernmental Agreements for technical projects within 30 days of referral.		Percentage Completed	80%	91%	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	70%	95%	100%

30000 LAW**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:		2020	Budgeted		Change	
Number	Name	Actual	FTEs	Dollars	Dollars	Percent
4300	Stormwater Management	\$ 290,771	2022	2 \$ 312,700	\$ 9,400	3.1
			2021	2 \$ 303,300		
4660	Waste Monitoring	\$ 198,560	2022	1 \$ 211,700	\$ 7,000	3.4
			2021	1 \$ 204,700		
7000	General Support (excluding program numbers 7350 - 7369 and 7604)	\$ 564,068	2022	3 \$ 516,700	\$ (28,400)	(5.2)
			2021	3 \$ 545,100		
7350	General Legal Matters	\$ 2,876,102	2022	19 \$ 3,765,900	\$ 50,900	1.4
			2021	20 \$ 3,715,000		
7360	Real Estate Operations	\$ 2,121,096	2022	13 \$ 3,169,000	\$ 76,800	2.5
			2021	12 \$ 3,092,200		
7604	Social Security and Medicare Contributions	\$ 70,026	2022	— \$ 82,700	\$ 3,100	3.9
			2021	— \$ 79,600		
Totals		\$ 6,120,623	2022	38 \$ 8,058,700	\$ 118,800	1.5 %
			2021	38 \$ 7,939,900		

30000 LAW**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
4300	Stormwater Management					
	Provide Legal Representation and Administrative Support for:					
4324	Watershed Management Ordinance Administration	Cost	46,354	47,700	40,900	
4344	Flood Mitigation Projects Contracted with Other Governments	Cost	\$ 105,722	\$ 109,200	\$ 171,000	a)
4345	Land and Easements (Stormwater)	Cost	\$ 138,695	\$ 146,400	\$ 100,800	b)
4660	Waste Monitoring					
	Provide Legal Representation and Administrative Support for:					
4662	User Charge Ordinance - Tax-Exempt Users	Cases	10	20	15	
		Cost	\$ 16,568	\$ 17,500	\$ 18,300	
		Cost/Case	\$ 1,656.80	\$ 875.00	\$ 1,220.00	
4663	User Charge - Large Commercial/Industrial Users	Cases	21	20	20	
		Cost	\$ 129,506	\$ 129,800	\$ 133,400	
		Cost/Case	\$ 6,166.95	\$ 6,490.00	\$ 6,670.00	
4667	Sewage and Waste Control Ordinance - Significant Industrial Users	Cases	9	12	15	
		Cost	\$ 52,486	\$ 57,400	\$ 60,000	
		Cost/Case	\$ 5,831.78	\$ 4,783.33	\$ 4,000.00	
7000	General Support (excluding program numbers 7350 - 7369 and 7604)	Cost	\$ 564,068	\$ 545,100	\$ 516,700	
7350	General Legal Matters					
	Provide Prosecution and Defense Services to Protect the Interests of the District:					
7351	Legislative	Cost	\$ 178,338	\$ 187,700	\$ 132,900	c)
7352	Financial Matters	Cost	\$ 123,946	\$ 109,900	\$ 119,500	
7353	Environmental and Regulatory Matters	Cost	\$ 398,924	\$ 406,000	\$ 285,700	d)
7354	Contract Administration	Cost	\$ 487,360	\$ 549,800	\$ 447,200	e)
7355	Litigation	Cost	\$ 1,122,872	\$ 1,637,500	\$ 1,895,000	f)
7356	Employment Matters	Cost	\$ 445,011	\$ 591,700	\$ 691,900	g)
7359	General Legal Services	Cost	\$ 119,651	\$ 232,400	\$ 193,700	h)
a) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$60,300). b) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$45,200). c) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$54,100). d) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$118,600). e) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$103,300). f) Increase is due to the addition of electronic discovery hosting as a service to support litigation (\$142,100) and the reallocation of salaries to more accurately reflect current activities (\$110,500). g) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$93,500). h) Decrease is due to an anticipated reduction in retirements (39,200).						

30000 LAW**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
7360	Real Estate Operations					
	Provide Administration of All District Land:					
7361	Real Estate Leases - Administration of Leases and Granting of Leases	Leases	193	185	203	
		Cost	\$ 201,143	\$ 214,000	\$ 233,000	
		Cost/Lease	\$ 1,042.19	\$ 1,156.76	\$ 1,147.78	
7362	Real Estate Easements - Administration of Easements and Granting of New Easements	Easements	416	413	426	
		Cost	\$ 280,609	\$ 290,500	\$ 363,600	i)
		Cost/Easement	\$ 674.54	\$ 703.39	\$ 853.52	i)
7363	Real Estate Permits - Administration of Permits and Granting of New Permits	Permits	59	60	69	
		Cost	\$ 214,577	\$ 222,100	\$ 256,600	j)
		Cost/Permit	\$ 3,636.90	\$ 3,701.67	\$ 3,718.84	
7367	Real Estate Asset Management - Administer Plan to Increase Revenue by Lease/Sale of Real Estate Holdings	Cost	\$ 428,756	\$ 406,800	\$ 434,500	
7368	Real Estate Environmental Assessment - Administer Activities Related to Environmental Assessment and Remediation of Real Estate Holdings	Cost	\$ 107,039	\$ 924,800	\$ 923,100	
7369	Other Real Estate Operations, Including Development of Agenda, Providing Information, Tax Litigation, and Support Services to the Board of Commissioners	Cost	\$ 206,126	\$ 203,500	\$ 195,200	k)
	Payment of Real Estate Taxes	Cost	\$ 682,846	\$ 830,500	\$ 763,000	
7604	Social Security and Medicare Contributions	Cost	\$ 70,026	\$ 79,600	\$ 82,700	
	Totals		\$ 6,120,623	\$ 7,939,900	\$ 8,058,700	
i) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$75,200).						
j) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$36,100).						
k) Decrease is due to a revised estimate of real estate taxes (\$67,500) and real estate filing fees (\$6,000).						

101 30000	Fund: Corporate Department: Law	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 4,858,923	\$ 5,496,400	\$ 5,496,400	\$ 3,575,337	\$ 5,115,500	\$ 5,568,000	\$ —
601060	Compensation Plan Adjustments	120,329	156,900	156,900	126	500	133,600	—
601070	Social Security and Medicare Contributions	70,026	79,600	79,600	52,821	70,200	82,700	—
601100	Tuition and Training Payments	9,868	15,000	15,000	3,281	10,000	16,100	—
100	TOTAL PERSONAL SERVICES	5,059,146	5,747,900	5,747,900	3,631,565	5,196,200	5,800,400	—
612010	Travel	258	5,400	5,400	16	2,100	5,400	—
612030	Meals and Lodging	663	13,800	9,800	479	4,500	13,800	—
612040	Postage, Freight, and Delivery Charges	665	900	900	746	800	900	—
612050	Compensation for Personally-Owned Automobiles	481	5,100	5,100	227	800	5,100	—
612090	Reprographic Services	2,698	17,000	17,000	16,746	48,000	12,000	—
612250	Court Reporting Services	17,490	25,000	29,000	25,000	13,000	27,000	—
612410	Governmental Service Charges	—	500	500	500	500	500	—
612430	Payments for Professional Services	268,538	1,088,000	1,088,000	617,730	427,900	1,230,600	—
612490	Contractual Services, N.O.C.	74,723	108,600	108,600	76,036	62,000	102,600	—
612520	Waste Material Disposal Charges	—	70,000	70,000	70,000	70,000	70,000	—
612780	Safety Repairs and Services	—	8,000	8,000	8,000	2,500	8,000	—
200	TOTAL CONTRACTUAL SERVICES	365,515	1,342,300	1,342,300	815,480	632,100	1,475,900	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	3,092	6,000	6,000	3,071	3,000	6,200	—
623720	Books, Maps, and Charts	9,271	13,000	13,000	12,975	11,000	13,000	—
623990	Materials and Supplies, N.O.C.	—	200	200	—	—	200	—
300	TOTAL MATERIALS AND SUPPLIES	12,363	19,200	19,200	16,046	14,000	19,400	—
667130	Taxes on Real Estate	683,599	830,500	830,500	555,908	693,600	763,000	—
700	TOTAL FIXED AND OTHER CHARGES	683,599	830,500	830,500	555,908	693,600	763,000	—
TOTAL LAW		\$ 6,120,623	\$ 7,939,900	\$ 7,939,900	\$ 5,018,999	\$ 6,535,900	\$ 8,058,700	\$ —

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.

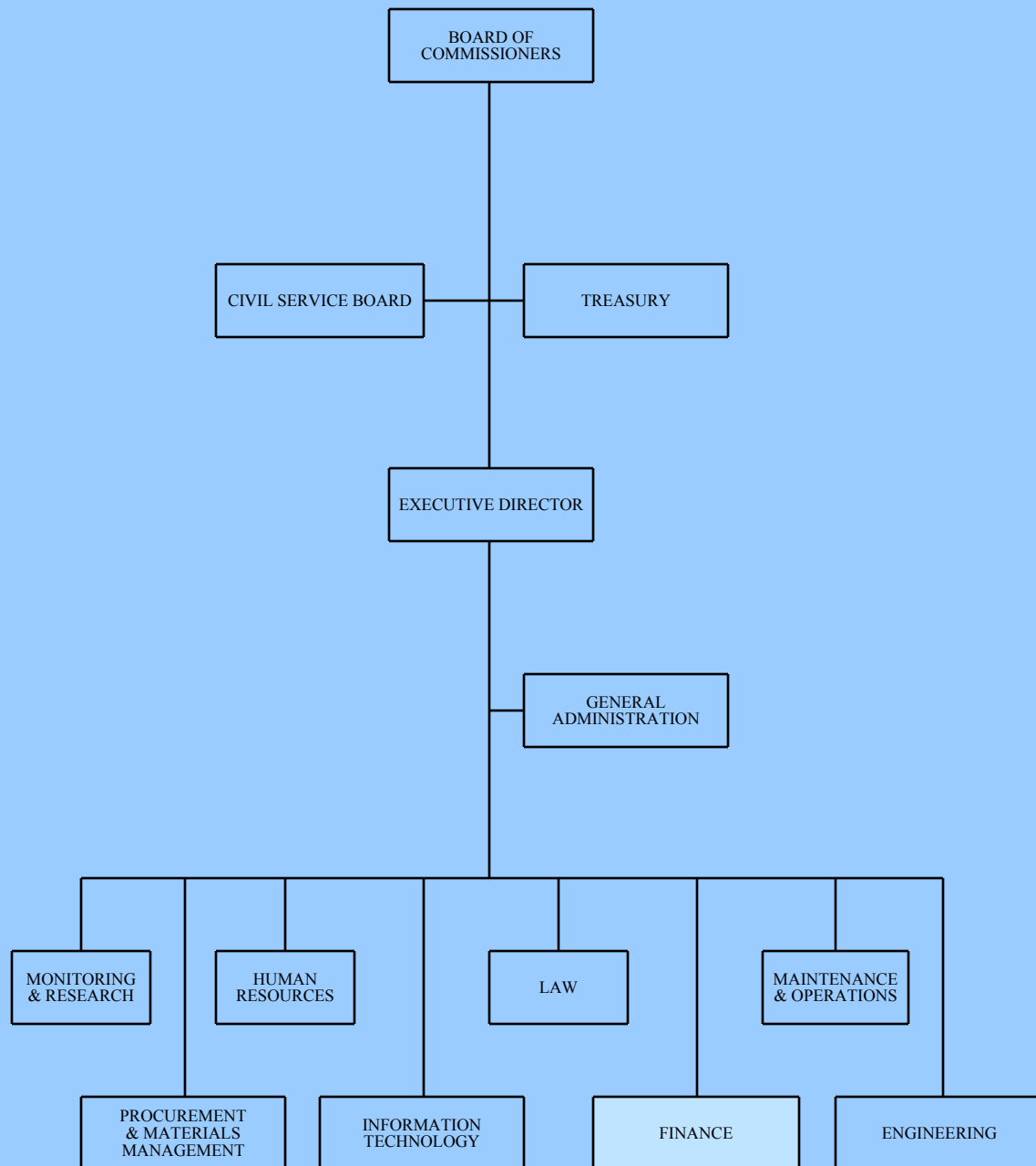
Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.

Fund: Corporate Dept: Law		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	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		1	
EX06	Secretary to Officer	1	1		1	
HP13	Senior Administrative Specialist	1	1		1	
TOTAL 311	Executive Office	6	6	1,048,152	6	1,104,086
TOTAL 310	Executive Division	6	6	1,048,152	6	1,104,086
320	Real Estate Division					
321	Administrative Section					
HP22	Head Assistant Attorney	1	1		1	
TOTAL 321	Administrative Section	1	1	224,907	1	234,907
323	Real Estate / General Administration Section					
HP20	Principal Attorney	1	1		1	
HP18	Senior Attorney	1	1		2	
HP15	Senior Legal Assistant	2	2		2	
HP13	Investigator #1	1	—		—	
HP11	Administrative Specialist	1	1		1	
TOTAL 323	Real Estate / General Administration Section	6	5	637,984	6	766,407
324	Real Estate / Asset Management Section					
HP18	Senior Attorney	1	1		1	
HP13	Legal Assistant	1	1		1	
HP13	Senior Administrative Specialist	2	2		2	
TOTAL 324	Real Estate / Asset Management Section	4	4	392,287	4	398,605
325	Site Remediation Section					
HP20	Engineer of Site Remediation	—	1		1	

Fund: Corporate Dept: Law		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP17	Site Remediation Specialist	—	1		1	
TOTAL 325	Site Remediation Section	—	2	355,003	2	355,003
TOTAL 320	Real Estate Division	11	12	1,610,182	13	1,754,922
340	Contracts & Legislation Division					
341	Administrative Section					
HP22	Head Assistant Attorney	1	1		1	
TOTAL 341	Administrative Section	1	1	234,907	1	234,907
342	Contracts & Legislation Section					
HP20	Principal Attorney	1	1		1	
HP18	Senior Attorney	1	2		1	
HP15	Senior Legal Assistant	1	1		—	
HP13	Legal Assistant	—	—		1	
TOTAL 342	Contracts & Legislation Section	3	4	567,995	3	396,076
TOTAL 340	Contracts & Legislation Division	4	5	802,901	4	630,983
360	Environmental, Construction, & Torts Division					
361	Administrative Section					
HP22	Head Assistant Attorney	1	1		1	
TOTAL 361	Administrative Section	1	1	204,907	1	214,907
362	Environmental Section					
HP20	Principal Attorney	1	1		1	
HP18	Senior Attorney	2	2		2	
HP13	Legal Assistant	1	1		1	
HP12	Secretary #2 (Administrative Specialist) (New Grade HP11)	1	—		—	
HP11	Administrative Specialist	—	1		1	
TOTAL 362	Environmental Section	5	5	623,592	5	592,277
332	Construction & Torts Section					
HP18	Senior Attorney	1	1		1	
TOTAL 332	Construction & Torts Section	1	1	125,950	1	132,268
TOTAL 360	Environmental, Construction, & Torts Division	7	7	954,448	7	939,452

Fund: Corporate Dept: Law		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
370	Employment Division					
371	Administrative Section					
HP22	Head Assistant Attorney	1	1		1	
TOTAL 371	Administrative Section	1	1	244,907	1	244,907
372	Employment Section					
HP20	Principal Attorney	2	2		2	
HP18	Senior Attorney	4	3		3	
HP15	Senior Legal Assistant	—	—		1	
HP13	Legal Assistant	1	1		—	
HP12	Secretary #2 (Administrative Specialist) (New Grade HP11)	—	1		1	
HP11	Administrative Specialist	1	—		—	
TOTAL 372	Employment Section	8	7	863,239	7	921,959
TOTAL 370	Employment Division	9	8	1,108,146	8	1,166,866
TOTAL	Law	37	38	5,523,831	38	5,596,309
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



Kari K. Steele
President
Barbara J. McGowan
Vice President
Marcelino Garcia
Chairman Of Finance
Cameron Davis
Kimberly Du Buclet
Josina Morita
Eira L. Corral Sepúlveda
Debra Shore
Mariyana Spyropoulos

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 7, 2021

Mr. Brian A. Perkovich
Executive Director
O F F I C E

Dear Sir:

Subject: 2022 Program for the Finance Department

The Finance Department's program for 2022, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the department's 2022 initiatives in alignment with and in support of the Strategic 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, 2022 major initiatives and challenges, and 2021 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 2022.

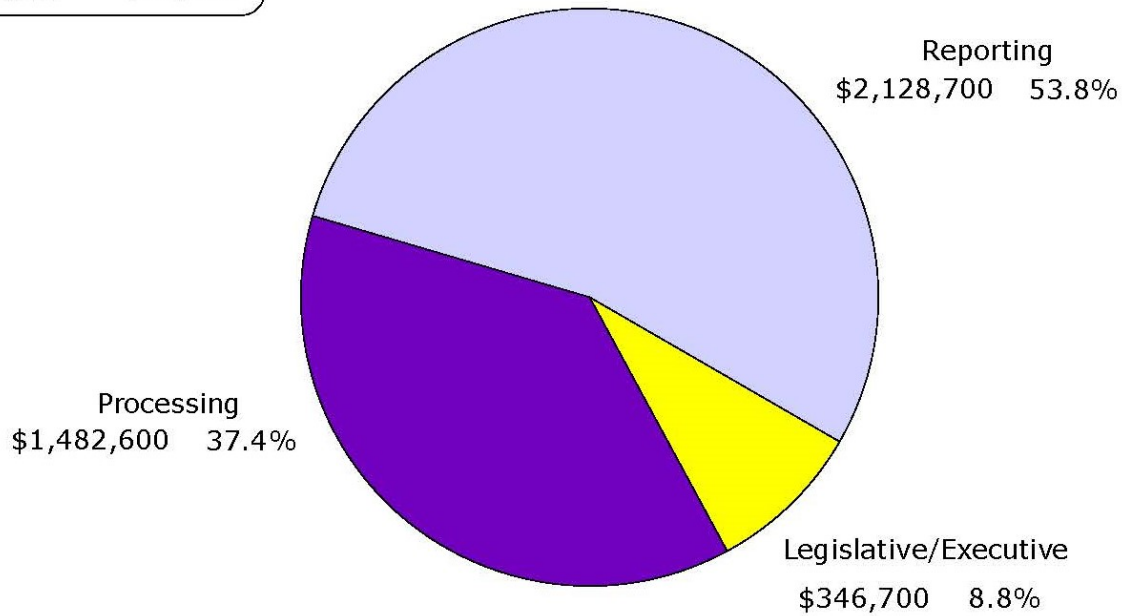
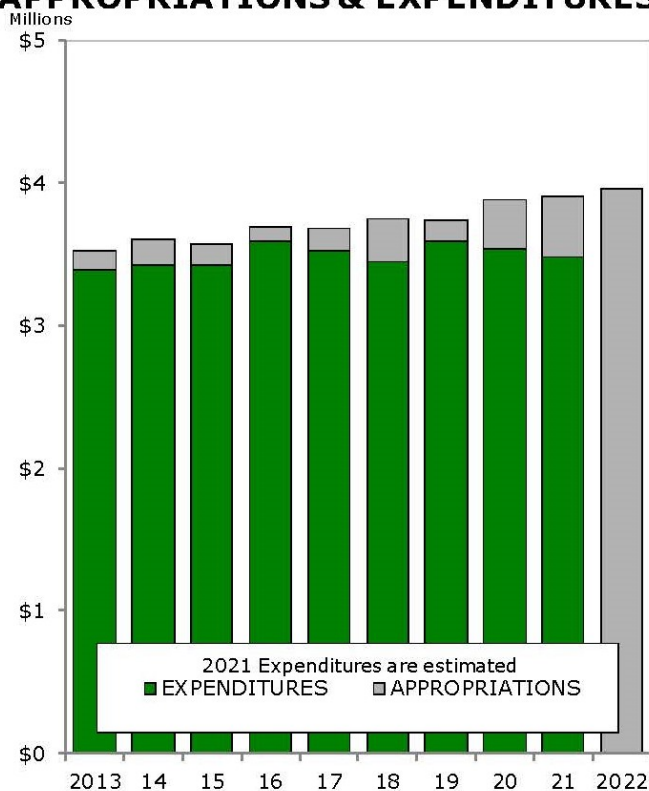
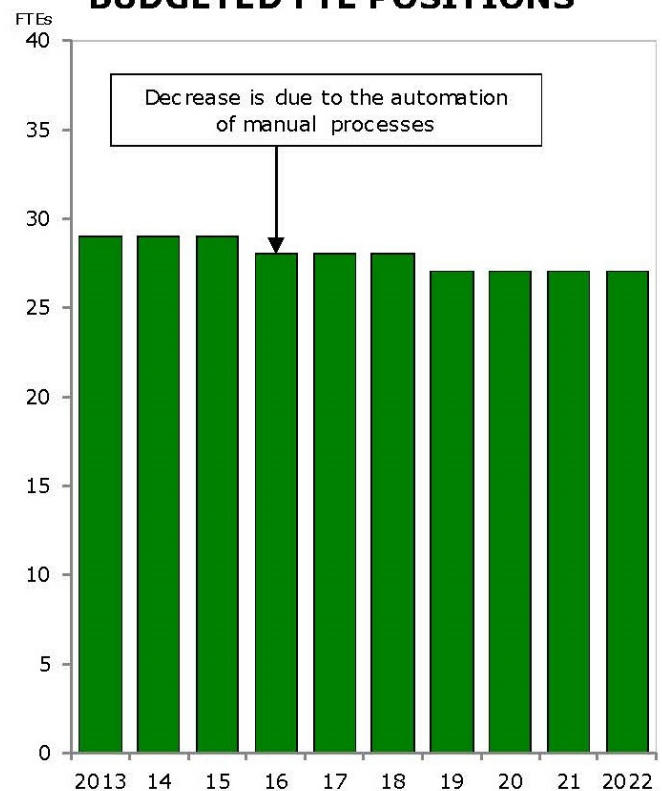
Respectfully submitted,



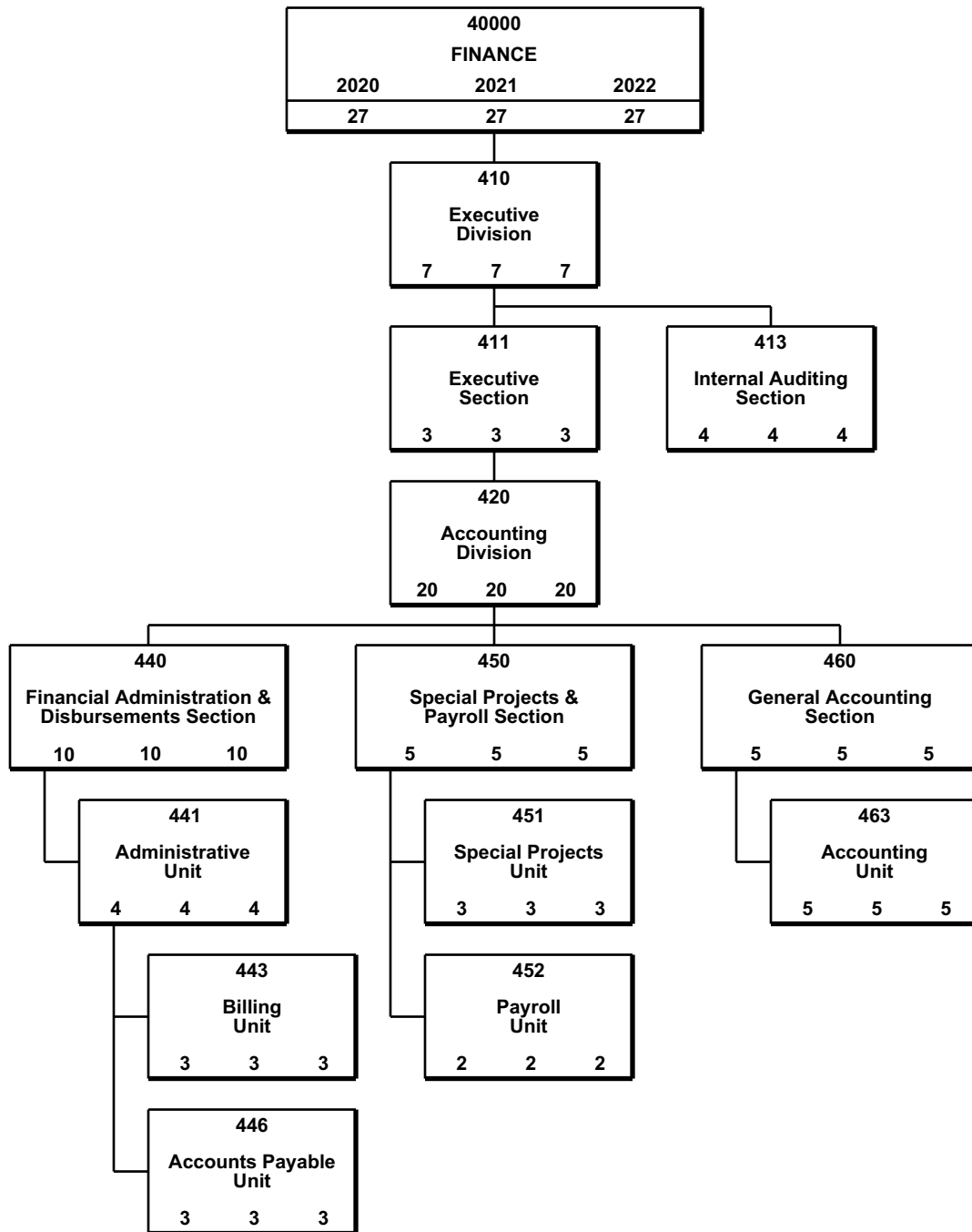
Jacqueline Torres
Clerk/Director of Finance

FINANCE**FUNCTIONS**

2022	\$3,958,000
2021	\$3,901,000
Increase	\$57,000

**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 Metropolitan Water Reclamation District stakeholders.

Departmental Summary

The Finance Department's primary responsibilities include:

- Auditing and reporting the District's financial information and auditing of operational performance, compliance, and internal controls;
- Processing the District's 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 2021 Major Accomplishments

- Upgraded Workforce EmpCenter, the District's electronic time and attendance system to enhance performance, optimize management reports, and improve system functionality;
- Continued with the initiative to become a paperless office place and converted over 500 vendors from check payment method to Automated Clearing House (ACH) payment method. ACH payments increased from approximately 47 percent of total payments in 2020 to over 70 percent in 2021. 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 81 percent in 2020 to 82 percent in 2021;
- Fully integrated DirectBillr, an online platform to receive electronic payments (e-checks and credit cards). The District can now accept electronic payments for all types of revenue streams (excluding ad valorem taxes). Electronic payment volume increased 40 percent from 2020 to 2021 and is expected to increase to 70 percent in 2022;
- Assisted with overseeing the applications to FEMA and Cook County seeking reimbursement for COVID-19 global pandemic related expenses. Staff monitored the assignment of firefighter roles and transaction processing authorization changes within the District's SAP enterprise software modules and all banking authorization changes;
- Completed an annual audit plan consisting of 16 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 employee leave balances, reviewing consultant contract compliance, and reviewing implementation and segregation of duties for new online payment system.

2022 Appropriation and Position Summary

The 2022 appropriation for the Finance Department is \$3,958,000, an increase of \$57,000, or 1.5 percent, from 2021. The staffing level remains unchanged at 27 positions.

2022 Budget Highlights

The following budget highlights support the District's Strategic Plan Goal of Workforce Excellence. The District is committed to investing in its future by investing in its employees. The initiatives highlighted below will allow the District to continue to recruit, develop, and retain best-in-class employees as the foundation of the organization's ongoing success.

Foster a culture that recognizes the value of every employee and provide a workplace environment that meets evolving industry trends

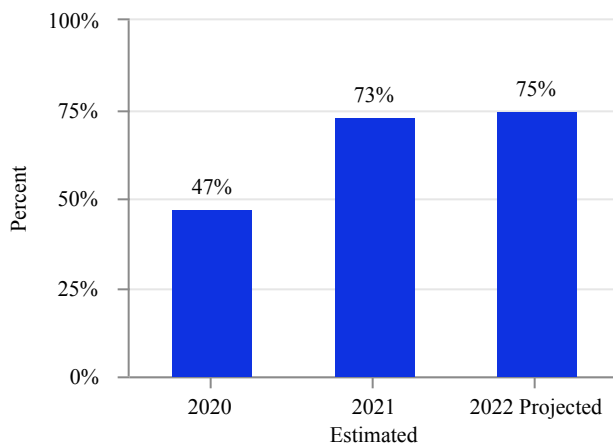
- Focus on employee recognition for excellence and continue to develop a workforce that is competent, motivated, and adaptive to change. Training efforts have resulted in promotions for 37 percent of staff in the last five years;
- Continue the department's cross-training program for professional and support staff to ensure that institutional knowledge is retained and improved through ongoing training, the utilization of eLearning platform, the encouragement of tuition reimbursement programs, and the expansion of webinar opportunities;
- Stay current with government accounting and financial reporting standards by actively participating in conferences and training. 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.

The following budget highlights support the District's Strategic Plan Goal of Enterprise Resilience. The initiative shown below reflects the District's dedication to making choices and decisions that strengthen the District's financial position, resulting in reliable and cost-effective services.

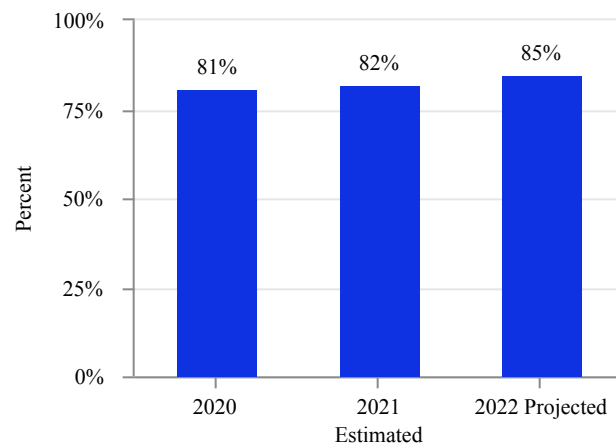
Standardize operations - streamline and automate internal processes, scale lessons learned from pandemic response

- Focus on excellence in delivering services and achieving compliance and 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;
- Implement GASB Statements, GASB 84, Fiduciary Activities, GASB 88, Certain Disclosures related to Debt, and GASB 92, Omnibus 2020;
- Improve the Accounts Payable System by increasing the number of vendors converted to ACH payment method and moving from paper invoices to electronic invoices. Additionally, the Finance Department will increase the acceptance of electronic payments for all types of revenue streams (excluding ad valorem taxes).

Vendor Conversion from Check to ACH Payment Method



Conversion from Paper to Electronic Invoices



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.	\$ 1,482,600	37.4 %
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.	\$ 2,128,700	53.8 %
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.	\$ 346,700	8.8 %
Totals		\$ 3,958,000	100.0 %

MEASURABLE GOALS:		2020 Actual	2021 Estimated	2022 Proposed
1.	Maintain 100 percent compliance with the Prompt Payment Act.	100%	100%	100%
2.	Maintain a 95 percent or better collection rate for user charge and other fees.	95%	95%	95%
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:		2020 Actual	Budgeted		Change	
Number	Name		FTEs	Dollars	Dollars	Percent
4663	User Charge Ordinance - Large Commercial/Industrial Users	\$ 288,134	2022 4	\$ 337,900	\$ 46,400	15.9
			2021 3	\$ 291,500		
7394	Transaction Processing	\$ 1,179,189	2022 10	\$ 1,144,700	\$ (113,500)	(9.0)
			2021 11	\$ 1,258,200		
7396	Reporting	\$ 326,040	2022 11	\$ 2,080,300	\$ 120,000	6.1
			2021 11	\$ 1,960,300		
7398	Legislative/Executive	\$ —	2022 2	\$ 346,700	\$ 4,800	1.4
			2021 2	\$ 341,900		
7604	Social Security and Medicare Contributions	\$ 44,307	2022 —	\$ 48,400	\$ (700)	(1.4)
			2021 —	\$ 49,100		
Totals		\$ 1,837,670	2022 27	\$ 3,958,000	\$ 57,000	1.5 %
			2021 27	\$ 3,901,000		

40000 FINANCE**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated
4660	Waste Monitoring				
4663	User Charge Ordinance - Large Commercial/Industrial Users	Cost	\$ 288,134	\$ 291,500	\$ 337,900
7390	Accounting and Auditing				
7394	Transaction Processing	Transactions	76,200	74,000	76,000
		Cost	\$ 1,179,189	\$ 1,258,200	\$ 1,144,700
		Cost/Transaction	\$ 15.47	\$ 17.00	\$ 15.06
7396	Reporting	Cost	\$ 326,040	\$ 1,960,300	\$ 2,080,300
7398	Legislative/Executive	Cost	\$ —	\$ 341,900	\$ 346,700
7604	Social Security and Medicare Contributions	Cost	\$ 44,307	\$ 49,100	\$ 48,400
	Totals		\$ 1,837,670	\$ 3,901,000	\$ 3,958,000

101 40000	Fund: Corporate Department: Finance	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 3,072,798	\$ 3,270,200	\$ 3,270,200	\$ 2,068,327	\$ 3,017,300	\$ 3,237,700	\$ —
601060	Compensation Plan Adjustments	101,826	77,700	77,700	31,386	34,000	109,900	—
601070	Social Security and Medicare Contributions	44,307	49,100	49,100	31,006	49,100	48,400	—
601100	Tuition and Training Payments	2,913	30,000	30,000	2,604	15,000	30,000	—
100	TOTAL PERSONAL SERVICES	3,221,844	3,427,000	3,427,000	2,133,323	3,115,400	3,426,000	—
612010	Travel	20	10,000	10,000	—	—	10,000	—
612030	Meals and Lodging	—	12,000	12,000	—	—	12,000	—
612040	Postage, Freight, and Delivery Charges	345	500	500	20	500	500	—
612050	Compensation for Personally-Owned Automobiles	109	200	200	—	200	200	—
612090	Reprographic Services	2,360	2,500	2,500	2,015	2,500	2,500	—
612250	Court Reporting Services	41,304	50,000	50,000	50,000	50,000	50,000	—
612340	Discount Lost	2,391	3,000	3,000	2,181	3,000	3,000	—
612430	Payments for Professional Services	251,144	370,300	370,300	264,692	301,300	428,800	—
612490	Contractual Services, N.O.C.	761	2,500	2,500	760	2,500	2,500	—
612800	Repairs to Office Furniture and Equipment	5,000	6,500	6,500	—	—	6,500	—
200	TOTAL CONTRACTUAL SERVICES	303,433	457,500	457,500	319,668	360,000	516,000	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	9,845	15,000	15,000	4,581	7,500	15,000	—
623720	Books, Maps, and Charts	500	1,000	1,000	—	1,000	500	—
623990	Materials and Supplies, N.O.C.	—	500	500	—	500	500	—
300	TOTAL MATERIALS AND SUPPLIES	10,345	16,500	16,500	4,581	9,000	16,000	—
TOTAL FINANCE		\$ 3,535,622	\$ 3,901,000	\$ 3,901,000	\$ 2,457,572	\$ 3,484,400	\$ 3,958,000	\$ —

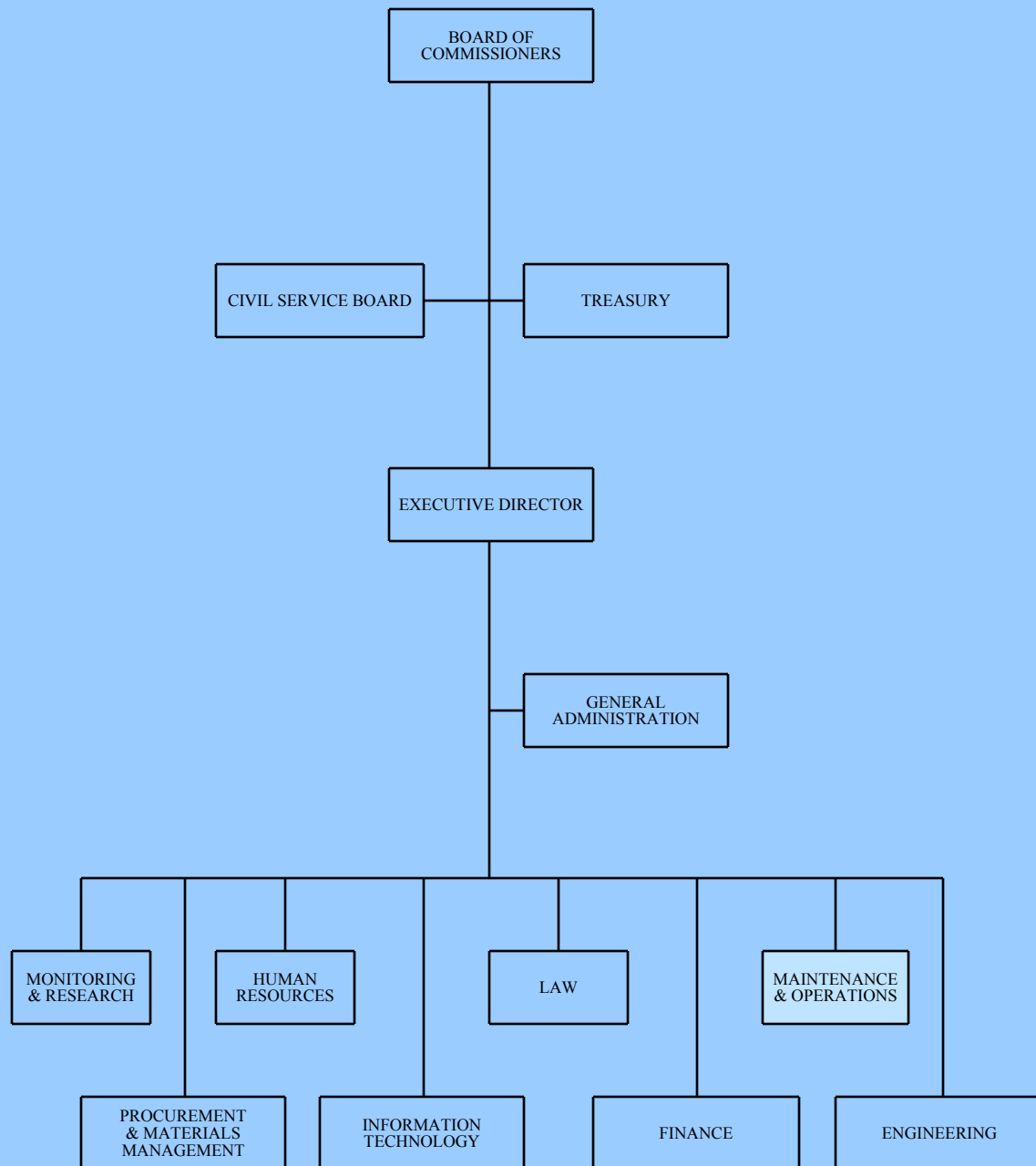
NOTES: 1. Amounts may not add up due to rounding.

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.

Fund: Corporate Dept: Finance		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
410	Executive Division					
411	Executive Section					
EX13	Clerk/Director of Finance	1	1		1	
HP21	Comptroller	—	1		1	
HP21	Comptroller #4	1	—		—	
EX06	Secretary to Officer	1	1		1	
TOTAL 411	Executive Section	3	3	529,157	3	543,307
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	545,062	4	550,996
TOTAL 410	Executive Division	7	7	1,074,219	7	1,094,303
420	Accounting Division					
440	Financial Administration & Disbursements Section					
441	Administrative Unit					
HP19	Accounting Manager #2 (New Grade HP18)	1	1		—	
HP18	Accounting Manager	—	—		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	545,218	4	484,305
443	Billing Unit					
HP12	Accounting Associate	3	3		3	
TOTAL 443	Billing Unit	3	3	232,723	3	236,861
446	Accounts Payable Unit					
HP13	Accounting Clerk III #2 (Accounting Associate) (New Grade HP12)	1	1		1	

Fund: Corporate Dept: Finance		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP12	Accounting Associate	2	2		2	
TOTAL 446	Accounts Payable Unit	3	3	235,818	3	231,682
TOTAL 440	Financial Administration & Disbursements Section	10	10	1,013,759	10	952,848
450	Special Projects & Payroll Section					
451	Special Projects Unit					
HP19	Accounting Manager #2 (New Grade HP18)	1	—		—	
HP18	Accounting Manager	—	1		1	
HP16	Financial Analyst	1	1		1	
HP14	Budget & Management Analyst	1	1		1	
TOTAL 451	Special Projects Unit	3	3	322,799	3	347,566
452	Payroll Unit					
HP16	Financial Analyst	2	2		2	
TOTAL 452	Payroll Unit	2	2	248,200	2	248,200
TOTAL 450	Special Projects & Payroll Section	5	5	570,999	5	595,767
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	627,777	5	610,949
TOTAL 460	General Accounting Section	5	5	627,777	5	610,949
TOTAL 420	Accounting Division	20	20	2,212,534	20	2,159,564
TOTAL	Finance	27	27	3,286,754	27	3,253,867
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 7, 2021

Mr. Brian A. Perkovich
Executive Director
O F F I C E

Dear Sir:

Subject: 2022 Program for the Maintenance & Operations Department

The Maintenance & Operations Department's program for 2022, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the department's 2022 initiatives in alignment with and in support of the Strategic 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, 2022 major initiatives and challenges, and 2021 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 2022.

Respectfully submitted,

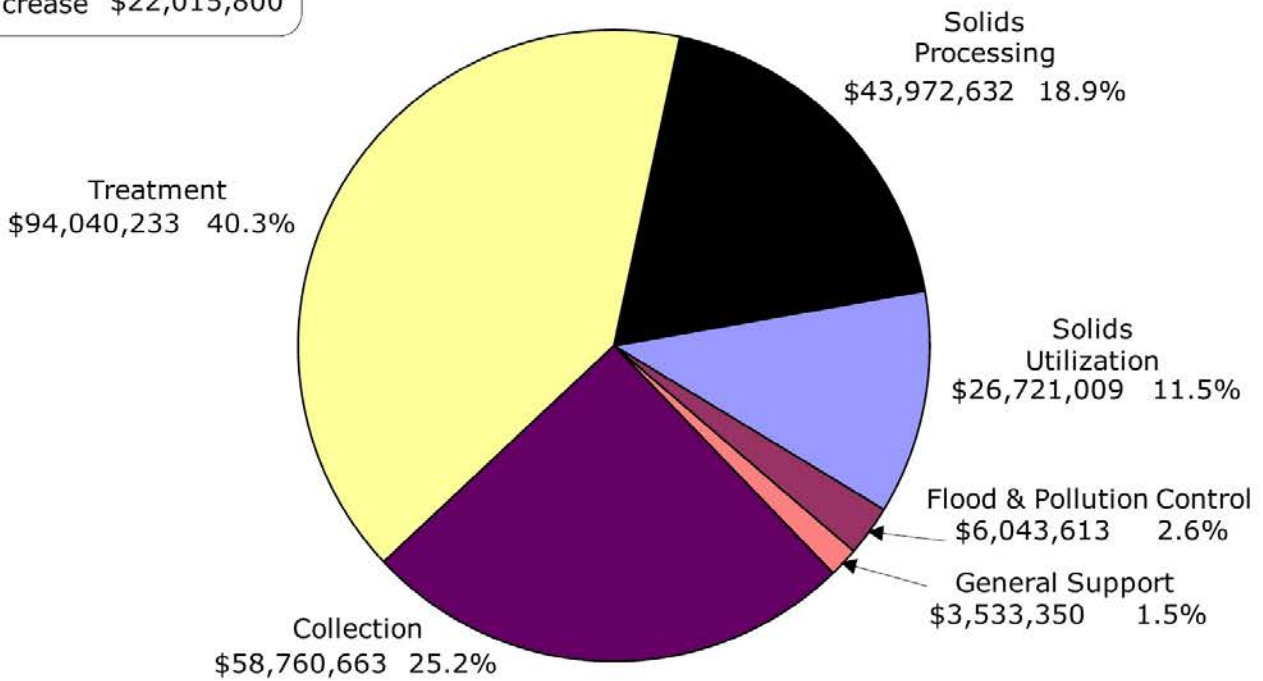


John P. Murray
Director of Maintenance & Operations

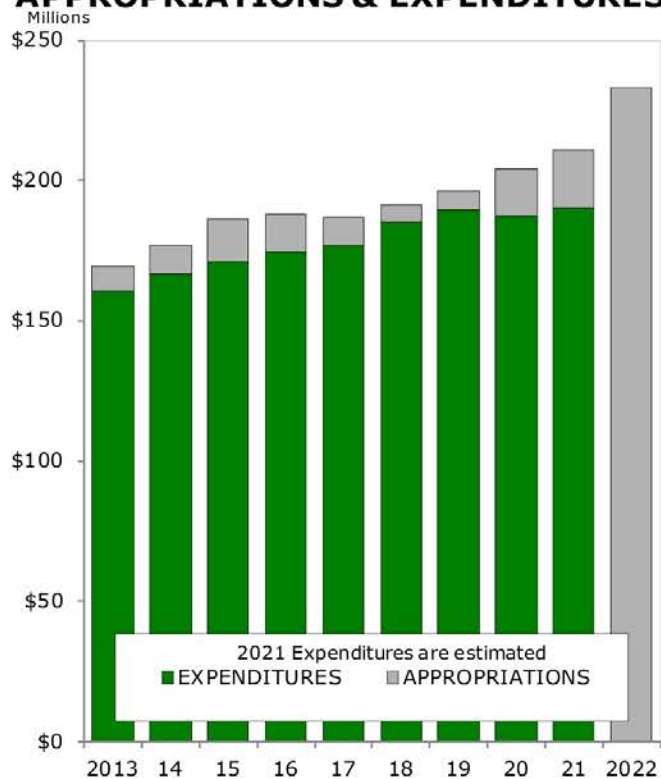
MAINTENANCE & OPERATIONS – ALL DIVISIONS

2022 \$233,071,500
 2021 \$211,055,700
 Increase \$22,015,800

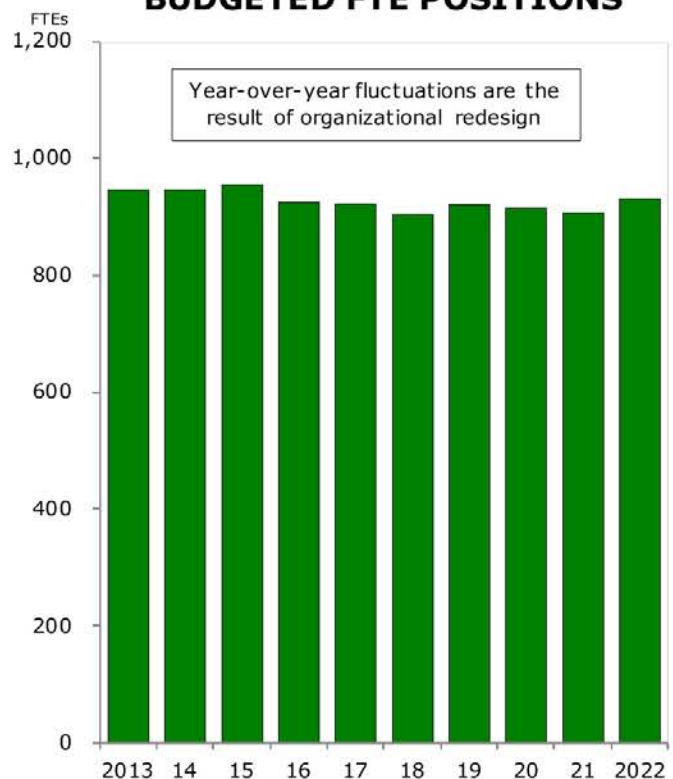
FUNCTIONS



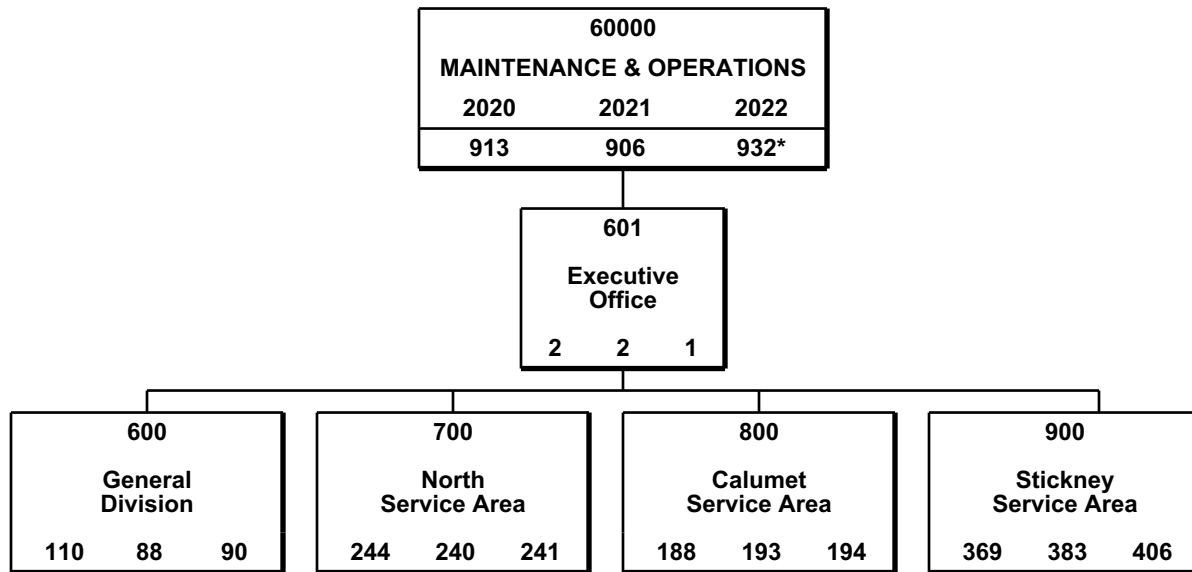
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



MAINTENANCE & OPERATIONS - ALL DIVISIONS



- * The 2022 position total for the Maintenance & Operations Department is 932. There are an additional 28 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 489.1 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 2021 Major Accomplishments

- Amid a COVID-19 global pandemic, ensured that maintenance and operations continued uninterrupted while maintaining 100 percent National Pollutant Discharge Elimination System (NPDES) permit compliance;
- Managed several projects with the purpose of maintaining and operating District facilities at an optimal level. Major projects include the installation of additional scum pumps in Battery D at the Stickney WRP, which will alleviate clogging in the final tank lines, thereby reducing equipment downtime; the installation of a centrifugal primary sludge pump at the Egan WRP, which will reduce annual maintenance costs by \$45,000; the installation of a new 30kWh diesel-powered generator at the Lockport Powerhouse Controlling Works, and the Phase I replacement of the lamps in the ultraviolet disinfection facility at the O'Brien WRP, which uses innovative technology to reduce pathogenic bacteria in the water from being released into the North Shore Channel;
- Contributed to process optimization by integrating innovative equipment and systems at the WRPs, a strategy that supports Enterprise Resilience. At the Lemont WRP, a second high-efficiency turbo blower with lower operating costs was installed to provide 100 percent redundancy and at the O'Brien WRP, a water quality sensor was installed to provide real-time monitoring for effluent leaving the ultraviolet disinfection facility, which will allow operators to make quick adjustments to remain in compliance with NPDES permitting and provide high-quality effluent;
- Capitalized on favorable weather patterns and conditions to optimize the performance of the composted biosolids and beneficial reuse programs with the goal of matching or exceeding the prior year's strong results. In a show of in-house product support, exceptional quality biosolids were used to grow a community pumpkin patch at the Calumet WRP;
- Joined the campaign to "Save the Monarchs", a statewide initiative to conserve the breeding and feeding habitat of the monarch butterfly and other regional pollinators. Milkweed and other native plants have been planted throughout the District's WRPs to provide support along the migration route for millions of monarch butterflies.

2022 Appropriation and Position Summary

The 2022 appropriation for the M&O Corporate Fund is \$233,071,500, an increase of \$22,015,800, or 10.4 percent, from 2021. The Corporate Fund staffing level has increased from 906 to 932 positions. The increase is due to the addition of one Assistant Civil Engineer, one Engineering Technician III, one Engineering Technician IV, one Laborer Foreman, and 24 Maintenance Laborer Class A Shift positions. When a new Laborer position is filled, a vacant Laborer position will be dropped, so the headcount will remain unchanged. The concurrent actions will result in the transfer of a position to a different section or shift according to collective bargaining rules. The staffing level increase is partially offset by the drop of one Administrative Specialist, and one Secretary to Officer. An additional 28 positions are funded in the Stormwater Management Fund. The total 2022 position count is 960, compared to the total 2021 position count of 933.

2022 Budget Highlights

The following budget highlights support the District's Strategic Plan Goal of Resource Management, defined as maintaining a high level of performance while fulfilling the District's core mission of protecting the public health and area waterways and pursuing opportunities to recover and reuse resources. The initiatives described below exemplify the District's goal of maintaining and operating its facilities and assets to provide that high level of service.

Maintain an exceptional level of compliance with NPDES permits in the face of more stringent regulatory requirements, aging infrastructure, changing weather patterns, and new demands for waterway activity

- Continue the decades long tradition of outstanding permit compliance as recognized by the National Association of Clean Water Agencies. In 2020, the District achieved an overall compliance rate of 100 percent and was honored with six Platinum Peak Performance awards, a distinction given to WRPs that have achieved 100 percent permit compliance for five consecutive years. The following facilities earned Platinum status: the Calumet WRP for 29 years, the Lemont WRP for 24 years, the Kirie WRP for 16 years, the O'Brien WRP for 15 years, the Hanover Park WRP for 13 years, and the Egan WRP for seven years. The Stickney WRP received a Gold Peak Performance award for having no permit violations for the entire 2020 calendar year.

Adhere to a rigorous asset management plan to maintain the District's facilities at levels sufficient to meet operational and permit requirements

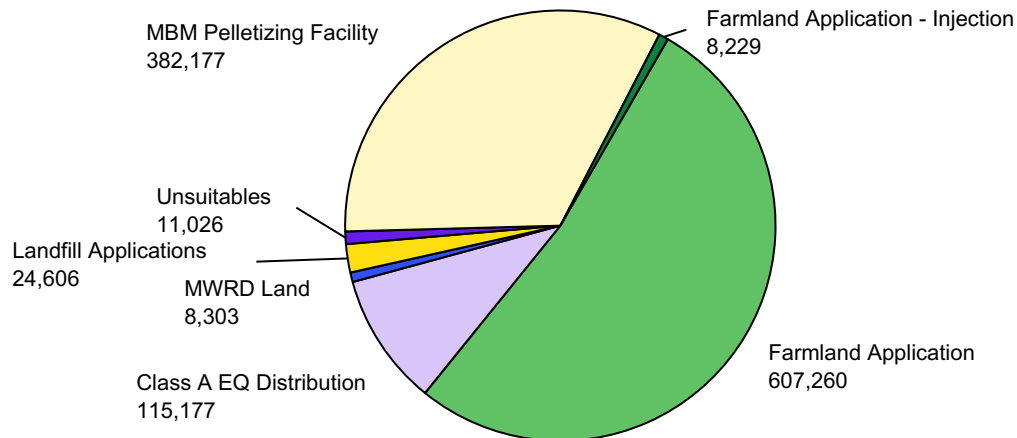
- Provide funding for the following preventative and predictive maintenance projects: apply protective coatings to various equipment to reduce the corrosion that develops in a harsh operating environment; install sprockets, chains, and appurtenances in preliminary and grit tanks for improved sludge, scum, and grit removal; install gas monitoring equipment for workplace health and safety; and rehabilitate and repair the railroad system, which is used to convey biosolids to the drying sites. As with any strong asset management program, project selection is guided by the asset or system's criticality, condition, and failure risk.

Prioritize resource recovery and reuse, the reduction of greenhouse gases, and the creation of a more sustainable environment

- Optimize the operations of the phosphorus recovery system at the Stickney WRP. The presence of phosphorus in the wastewater treatment process affords another resource recovery and reuse opportunity. The removal of nitrogen and phosphorus from wastewater has emerged as a worldwide concern because these compounds can incite algae blooms in receiving waters. In response, the Illinois Environmental Protection Agency adopted regulations that limit phosphorus contained in treated effluent to 1.0 mg/L monthly average. The stricter limits will become effective for the three largest plants by 2027, beginning with the Stickney WRP in 2021. 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 result is fertilizer pellets rich in phosphorus, nitrogen, and magnesium that are dried and bagged for sale by Ostara;
- Allocate \$500,000 to purchase Renewable Energy Credits to mitigate indirect greenhouse gas emissions associated with purchased electrical energy. The Renewable Energy Credits, which are legal instruments used in renewable electrical energy markets to account for renewable energy, guarantee that the energy is provided from renewable sources that produce low- or zero-emissions. This and other options will undergo continual evaluation as the District's plan to achieve energy neutrality is refined;
- Continue to develop a biosolids market using a variety of 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. The bulking agents required to produce high-quality composted biosolids are received through the District's Recovery Program, which offers a greener alternative for disposal of organic material, such as yard waste and wood chips. Free bulk distribution is offered to area residents, non-profit organizations, golf courses, and public entities at the District's WRPs. By encouraging bulk compost users to pick up material from the District's compost generation sites, the cost of transporting biosolids, in both financial and environmental terms, is reduced;
- Update the approach used to track the production and distribution costs of Exceptional Quality (EQ) biosolids relative to non-EQ biosolids applied to farmland.

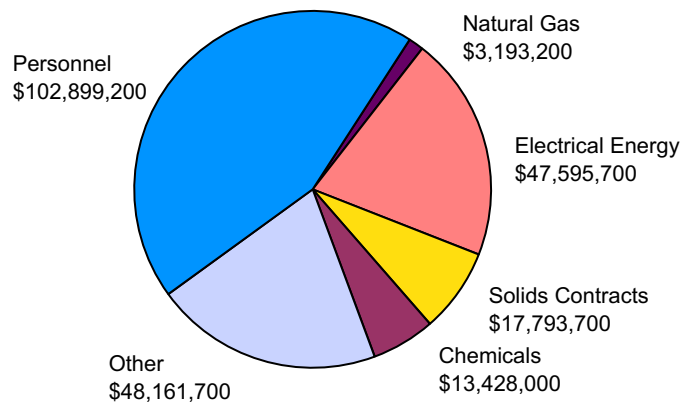
Effective Resource Management includes pursuing opportunities to recover and reuse resources. One of the District's primary resources is biosolids, which are produced for reuse as a safe and environmentally friendly alternative to commercial fertilizer. The following charts on this and the next page illustrate how biosolids have been beneficially reused over the years, the 2022 appropriations by major line item, the 2022 appropriations by service area.

Recover Resources: Biosolids Reuse (in Dry Tons) 2011 - 2020



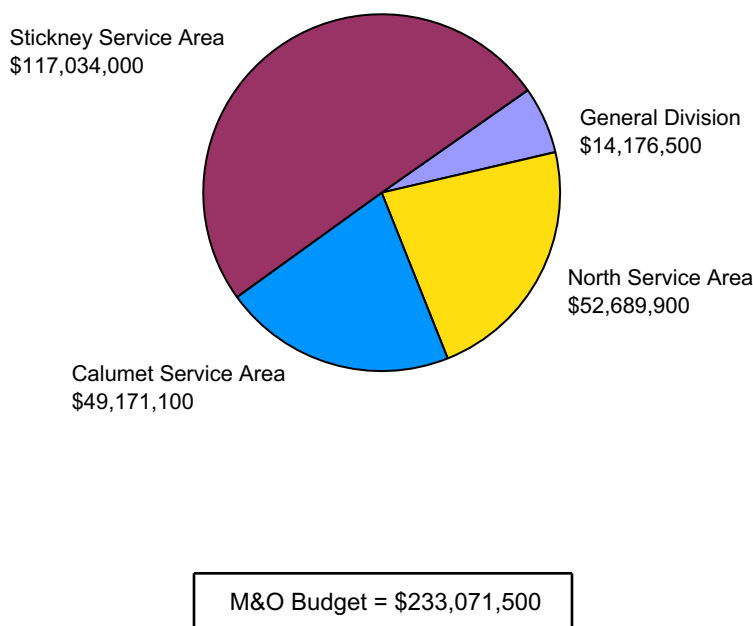
Total: 1,156,778 Dry Tons

2022 Appropriations by Major Line Item



M&O Budget = \$233,071,500

2022 Appropriations by Service Area



The following budget highlights support the District's Strategic Plan Goal of Workforce Excellence, which expresses the principle that investing in the future means investing in employees. The initiatives described below demonstrate the department's understanding that employees are the foundation of the District's ongoing success.

Cultivate an employee population that evolves with industry trends and strategic direction and is well prepared for advancement

- Continue to optimize the department's staffing configuration. Recognizing that the modern WRP is increasingly reliant on technology and complex control systems, the department recently hired a process control engineer with a background in process instrumentation and computer control systems for water reclamation plants, pumping stations, and flood control reservoirs. The department has also added several entry-level engineers over the last few years with the goal of building a deep pool of candidates ready for future promotion. A workforce that combines current academic knowledge with institutional knowledge will be well positioned to overcome challenges and capitalize on opportunities, both internal and external;
- Promote employee development in an environment increasingly defined by technology. In 2022, underutilized space at the Kirie WRP will be modified and furnished with the necessary technology to provide employees virtual access to health, safety, regulatory, and professional development classes.

The following budget highlights support the District's Strategic Plan Goal of Community Engagement. The initiatives shown below illustrate the District's determination to serve as a critical community asset, a responsive neighbor, and an inclusive business partner.

Collaborate with similarly motivated agencies and organizations to advance the mission and goals of the District

- Recently joined the new Chicago Area Waterways watershed group, which will focus on meeting the goals and objectives of the Chloride Time-Limited Water Quality Standard, more commonly known as the Chloride Variance. The group will apply best management practices to reduce the use of chloride in the Chicago Area Waterways and develop action items based on the requirements in the Chloride Variance to ensure that the new requirements are implemented in a thorough and consistent manner;
- Maintain membership in the DuPage River Salt Creek Workgroup (DRSCW), a non-profit organization formed by local communities, water reclamation plants, and environmental organizations to address water quality issues at the watershed level. The watershed projects sponsored by the group are in the Salt Creek, and the East and West Branch DuPage River Watersheds, which are the receiving streams for the Egan and Hanover Park WRPs. Under an agreement with the DRSCW, the District will provide funding for the group's capital improvement program, with the District's portion currently

calculated at \$4,000,000 based on the million gallons per day of discharge from the Egan and Hanover Park WRPs. To meet its obligation, the District will fund and manage one of the capital projects according to District standards and policies. The agreement benefits both the DRSCW and the District as the group's watershed projects are given priority over other construction projects and the District's deadline to meet the more stringent phosphorus limit requirements at the Egan and Hanover Park WRPs is extended while the projects are implemented and their impact on the watersheds is evaluated.

The following budget highlights support the District's Strategic Plan Goal of Enterprise Resilience. The initiatives described below reflect the District's dedication to making choices and decisions that strengthen the District's operational position, resulting in reliable, equitable, and cost-effective services.

Streamline, automate, and improve internal processes

- Test a process optimization platform at the Kirie WRP for its ability to reduce chemical usage for odor control. The project also includes developing models to optimize chemical usage for disinfection. As with any pilot study, the results will be evaluated for feasibility, cost, and the potential for adverse consequences before proceeding with a full-scale implementation;
- Install a turbo blower at the Kirie WRP as a pilot test for larger turbo blowers. While the District uses turbo blowers for smaller applications, turbo blowers powerful enough for the larger WRPs have not been commercially available. The turbo blower is more efficient than a centrifugal blower because it modulates the flow rate using variable inlet guide vanes and a variable speed drive along with magnetic bearings to reduce friction. Based on data given by the manufacturer, who will install the equipment at no cost to the District, the turbo blower should reduce energy consumption by 20 to 30 percent;
- Implement the ideas for workflow and process improvements that were developed while navigating the COVID-19 global pandemic. For example, in the North Service Area, which is comprised of four WRPs, administrative duties were scaled to serve the needs of the entire division, rather than a single WRP. Staffing efficiencies have been and will continue to be realized due to the changes implemented during the pandemic;
- Continue to upgrade the department's distributed control systems, which are vital to running a modern WRP. A distributed control system is an automated control system that is distributed throughout the WRP to provide commands to process equipment. Technology is a cornerstone of effective Resource Management and is essential to meeting environmental regulations and enhancing system quality and efficiency.

Actively pursue opportunities for energy efficiency, which is a major contributor to Enterprise Resilience

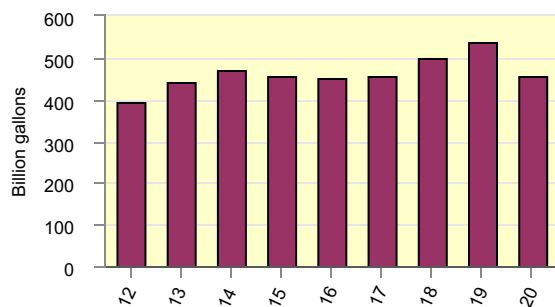
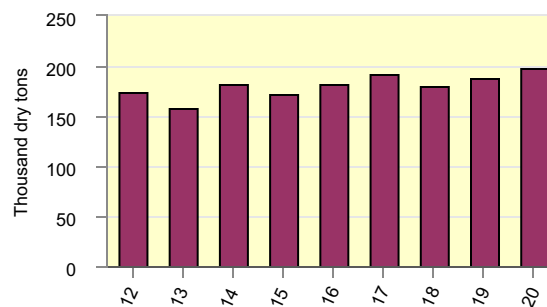
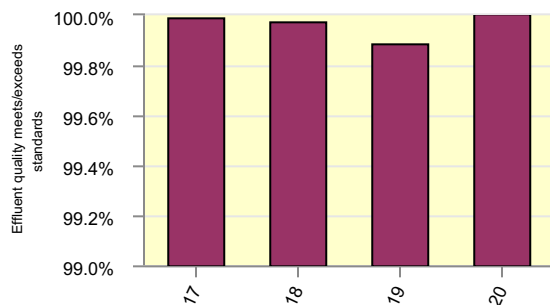
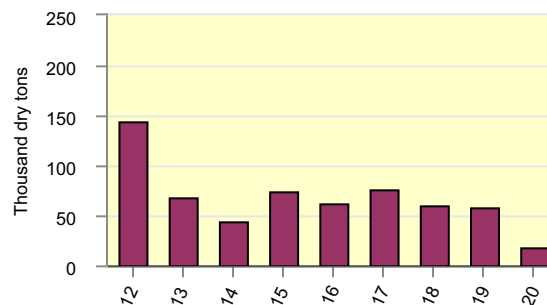
- Maintain ongoing efforts to decrease the costs of electrical energy, which include purchasing energy at discounted rates and participating in an energy curtailment program that pays participants for using less energy during peak loads (since 1997 approximately \$18.7 million in revenue has been received);
- Work towards achieving net energy neutrality by 2035, using various strategies such as implementing energy efficiencies to reduce energy consumption and increasing the use of renewable energy, including the biogas that is produced in-house during the wastewater treatment process.

Consider environmental costs when procuring equipment and services, a practice that contributes to Enterprise Resilience

- Continue to replace gas powered in-plant transportation carts with electric powered carts;
- Use battery-operated mowers and chainsaws for sewer maintenance work to reduce the carbon footprint;
- Attend training sessions to advance the sustainable procurement initiative. For instance, in 2021, staff attended a training session to understand the requirements for achieving a cleaner mobility program, including the types and capabilities of electric vehicles and how to develop the infrastructure needed to support and maintain them;
- Complete the installation of charging stations for electric vehicles at the Stickney and Calumet WRPs. The data collected from these stations will be used to create a plan for future replacements.

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 489.1 billion gallons of wastewater through its seven treatment facilities and through a contract agreement with the Fox River Water Reclamation District.		\$ 152,800,896	65.5 %
2 . SOLIDS PROCESSING: The M&O Department will remove and process approximately 192,500 dry tons of concentrated sewage through various systems, including heated digestion, centrifuging, concentration, and aging low solids sludge and centrifuge cake in lagoons.		\$ 43,972,632	18.9 %
3 . SOLIDS UTILIZATION: The M&O Department will utilize approximately 102,950 dry tons of biosolids for application at final utilization sites, such as farm applications and daily and final cover at sanitary landfills.		\$ 26,721,009	11.5 %
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.		\$ 6,043,613	2.6 %
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.		\$ 3,533,350	1.5 %
Departmental Totals		\$ 233,071,500	100.0 %

Collection & Treatment**Solids Processing****NPDES Permit Compliance****Solids Utilization**

60000 M&O - ALL DIVISIONS**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:			2020		Budgeted		Change	
Number	Name		Actual		FTEs	Dollars	Dollars	Percent
1000	Collection		\$ 49,363,826		2022 248	\$ 58,760,663	\$ 5,587,468	10.5
					2021 245	\$ 53,173,195		
1100	Surface Interceptor Systems		\$ 3,819,731		2022 27	\$ 4,176,600	\$ 103,700	2.5
					2021 27	\$ 4,072,900		
1200	Tunnel and Reservoir System		\$ 12,205,864		2022 44	\$ 14,241,500	\$ 1,984,800	16.2
					2021 42	\$ 12,256,700		
1300	Pumping Station Facilities		\$ 15,723,575		2022 75	\$ 19,317,500	\$ 2,141,000	12.5
					2021 74	\$ 17,176,500		
1900	Collection - Indirect Costs		\$ 17,614,656		2022 102	\$ 21,025,063	\$ 1,357,968	6.9
					2021 102	\$ 19,667,095		
2000	Treatment		\$ 67,403,189		2022 394	\$ 92,619,933	\$10,115,875	12.3
					2021 380	\$ 82,504,058		
2000	Pre-Treatment		\$ 3,649,953		2022 35	\$ 3,628,700	\$ (5,000)	(0.1)
					2021 28	\$ 3,633,700		
2100	Primary Treatment		\$ 3,691,754		2022 42	\$ 3,613,000	\$ 33,300	0.9
					2021 37	\$ 3,579,700		
2200	Secondary Treatment		\$ 21,906,107		2022 97	\$ 29,016,700	\$ 4,157,200	16.7
					2021 93	\$ 24,859,500		
2300	Tertiary Treatment		\$ 3,046,202		2022 17	\$ 4,404,400	\$ 668,800	17.9
					2021 17	\$ 3,735,600		
2900	Treatment - Indirect Costs		\$ 35,109,173		2022 203	\$ 51,957,133	\$ 5,261,575	11.3
					2021 205	\$ 46,695,558		
3000	Solids Processing		\$ 36,849,051		2022 206	\$ 43,972,632	\$ 3,448,035	8.5
					2021 200	\$ 40,524,597		
3100	Thickening		\$ 7,614,477		2022 38	\$ 6,985,800	\$ 276,300	4.1
					2021 38	\$ 6,709,500		
3200	Stabilization		\$ 6,389,925		2022 42	\$ 6,932,400	\$ 405,700	6.2
					2021 42	\$ 6,526,700		
3300	Dewatering		\$ 9,994,953		2022 43	\$ 14,204,300	\$ 1,553,600	12.3
					2021 40	\$ 12,650,700		
3900	Solids Processing - Indirect Costs		\$ 12,849,696		2022 83	\$ 15,850,132	\$ 1,212,435	8.3
					2021 80	\$ 14,637,697		
Note: Explanations of significant changes are provided by individual division.								

60000 M&O - ALL DIVISIONS**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:			2020		Budgeted		Change	
Number	Name		Actual		FTEs	Dollars	Dollars	Percent
4000	Flood & Pollution Control	\$	4,601,278		2022 24	\$ 6,043,613	\$ 675,679	12.6
					2021 23	\$ 5,367,934		
4200	Waterways Control and Stormwater Reservoirs	\$	2,630,427		2022 19	\$ 2,886,300	\$ 314,400	12.2
					2021 18	\$ 2,571,900		
4210	Maintenance of Waterways	\$	99,764		2022 —	\$ 214,100	\$ 54,900	34.5
					2021 —	\$ 159,200		
4300	Stormwater Management	\$	32,664		2022 —	\$ —	\$ (32,300)	(100.0)
					2021 —	\$ 32,300		
4400	Aeration Facilities	\$	1,066,290		2022 2	\$ 1,251,100	\$ 111,500	9.8
					2021 2	\$ 1,139,600		
4900	Flood & Pollution Control - Indirect Costs	\$	772,133		2022 3	\$ 1,692,113	\$ 227,179	15.5
					2021 3	\$ 1,464,934		
5000	Solids Utilization	\$	23,979,856		2022 41	\$ 26,721,009	\$ 1,868,577	7.5
					2021 39	\$ 24,852,432		
5100	Solids Drying	\$	6,767,927		2022 10	\$ 6,828,800	\$ 683,600	11.1
					2021 9	\$ 6,145,200		
5200	Solids Distribution	\$	12,848,967		2022 8	\$ 13,930,000	\$ 1,280,600	10.1
					2021 8	\$ 12,649,400		
5900	Solids Utilization - Indirect Costs	\$	4,362,962		2022 23	\$ 5,962,209	\$ (95,623)	(1.6)
					2021 22	\$ 6,057,832		
7000	General Support (excluding program numbers 7368 & 7604)	\$	2,848,372		2022 19	\$ 3,533,350	\$ 312,566	9.7
					2021 19	\$ 3,220,784		
7368	Real Estate Environmental Assessment	\$	740,896		2022 —	\$ —	\$ —	—
					2021 —	\$ —		
7604	Social Security and Medicare Contributions	\$	1,369,509		2022 —	\$ 1,420,300	\$ 7,600	0.5
					2021 —	\$ 1,412,700		
Departmental Totals		\$	187,155,977		2022 932	\$ 233,071,500	\$22,015,800	10.4 %
					2021 906	\$ 211,055,700		

* The 2022 position total for the M&O Department is 960, which includes 28 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		2020 Actual	2021 Budgeted	2022 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	456,517	512,800	489,100
		Cost	\$ 116,767,015	\$ 135,677,253	\$ 151,380,596
		Cost/Mil. Gallons	\$ 255.78	\$ 264.58	\$ 309.51
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	198,816	191,500	192,500
		Cost	\$ 36,849,051	\$ 40,524,597	\$ 43,972,632
		Cost/Dry Ton	\$ 185.34	\$ 211.62	\$ 228.43
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	\$ 921,865	\$ 989,900	\$ 1,245,900
	Generate Electrical Energy at Lockport Powerhouse to Obtain Approximately \$0.8 million in Revenue	kWh	37,608,633	26,700,000	33,000,000
		Cost	\$ 556,270	\$ 611,100	\$ 544,600
		Cost/kWh	\$ 0.0148	\$ 0.0229	\$ 0.0165
		* Revenue Generated	\$ 1,110,422	\$ 800,000	\$ 825,000
	Minimize Diversion of Lake Michigan Water in Accordance with the U.S. Supreme Court Decree	Mil. Gal./Year Diversion	48,794	60,152	60,152
		Cost	\$ 466,641	\$ 415,300	\$ 421,900
		Cost/Mil. Gal./Year	\$ 9.56	\$ 6.90	\$ 7.01
	Operation of Detention Reservoirs	Reservoirs	37	37	37
		Cost	\$ 534,816	\$ 555,600	\$ 673,900
		Cost/Reservoir	\$ 14,454.49	\$ 15,016.22	\$ 18,213.51
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	\$ 250,599	\$ 159,200	\$ 214,100
4300	Stormwater Management	Cost	\$ 32,664	\$ 32,300	\$ —
4400	Aeration Facilities	Cost	\$ 1,066,290	\$ 1,139,600	\$ 1,251,100
4900	Flood & Pollution Control - Indirect Costs	Cost	\$ 772,133	\$ 1,464,934	\$ 1,692,113
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	18,549	100,000	102,950
		Cost	\$ 19,529,062	\$ 19,666,732	\$ 21,352,609
		Cost/Dry Ton	\$ 1,052.84	\$ 196.67	\$ 207.41
5271	Pelletizer Disposal	Dry Tons	39,912	40,000	40,000
	Control Management and Disposal of Solids by Private Contracts	Cost	\$ 4,450,794	\$ 5,185,700	\$ 5,368,400
		Cost/Dry Ton	\$ 111.52	\$ 129.64	\$ 134.21
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	\$ 2,848,372	\$ 3,220,784	\$ 3,533,350
7368	Real Estate Environmental Assessment	Cost	\$ 740,896	\$ —	\$ —
7604	Social Security and Medicare Contributions	Cost	\$ 1,369,509	\$ 1,412,700	\$ 1,420,300
Departmental Totals			\$ 187,155,977	\$ 211,055,700	\$ 233,071,500

Note: Explanations of significant changes are provided by individual division.

* Revenue generated not included in total costs.

101 60000	Fund: Corporate Department: Maintenance & Operations Division: All Divisions	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 91,767,447	\$ 93,864,800	\$ 93,864,800	\$ 63,395,533	\$ 91,444,900	\$ 94,608,300	\$ —
601060	Compensation Plan Adjustments	6,433,933	5,187,300	5,187,300	3,799,663	5,002,300	6,865,600	—
601070	Social Security and Medicare Contributions	1,369,509	1,412,700	1,412,700	988,301	1,358,200	1,420,300	—
601080	Salaries of Nonbudgeted Employees	31,629	107,000	107,000	23,874	23,900	5,000	—
601100	Tuition and Training Payments	37,275	193,200	193,200	56,494	63,400	220,300	—
100	TOTAL PERSONAL SERVICES	99,639,793	100,765,000	100,765,000	68,263,865	97,892,700	103,119,500	—
612010	Travel	1,941	24,000	24,000	—	3,000	26,400	—
612030	Meals and Lodging	30,802	59,400	59,400	19,894	31,600	75,200	—
612040	Postage, Freight, and Delivery Charges	126	—	—	—	—	—	—
612050	Compensation for Personally-Owned Automobiles	70,956	121,100	121,100	53,593	96,400	121,100	—
612080	Motor Vehicle Operating Services	96	1,600	1,600	178	700	1,600	—
612150	Electrical Energy	35,525,465	37,423,700	37,423,700	20,092,763	33,007,300	47,595,700	—
612160	Natural Gas	2,251,851	3,476,600	3,226,600	1,455,674	3,217,900	3,193,200	—
612170	Water and Water Services	1,873,906	2,332,500	2,182,500	1,045,120	2,126,900	1,906,900	—
612240	Testing and Inspection Services	137,907	244,500	267,500	246,358	192,600	277,700	—
612330	Rental Charges	130,395	143,200	143,200	137,095	129,700	168,100	—
612410	Governmental Service Charges	3,445,176	4,388,500	4,040,100	2,829,069	4,062,800	4,083,200	—
612420	Maintenance of Grounds and Pavements	1,056,484	1,436,800	1,805,200	1,783,389	1,240,700	1,943,400	—
612430	Payments for Professional Services	464,223	281,900	226,900	179,751	219,800	102,100	—
612490	Contractual Services, N.O.C.	450,187	572,300	572,300	549,634	519,900	657,900	—
612520	Waste Material Disposal Charges	13,535,721	12,227,400	13,475,200	11,501,962	9,207,900	13,203,700	—
612530	Farming Services	37,100	90,000	40,000	40,000	40,000	90,000	—
612590	Sludge Disposal	3,778,109	4,500,000	4,500,000	4,500,000	4,000,000	4,500,000	—
612600	Repairs to Collection Facilities	2,221,222	4,097,400	3,221,200	3,007,789	2,676,400	4,325,500	—
612620	Repairs to Waterway Facilities	41,690	77,600	77,600	64,084	62,400	482,900	—
612650	Repairs to Process Facilities	5,021,511	12,064,100	11,830,100	11,395,765	8,119,800	16,556,400	—
612670	Repairs to Railroads	358,561	642,800	888,200	881,385	461,600	719,000	—
612680	Repairs to Buildings	468,822	1,333,800	1,312,800	1,273,562	1,098,300	1,275,000	—
612760	Repairs to Material Handling and Farming Equipment	284,665	754,300	854,300	847,614	713,100	357,900	—
612780	Safety Repairs and Services	284,972	379,500	379,500	378,481	370,100	413,700	—
612790	Repairs to Marine Equipment	48,005	—	—	—	—	—	—
612820	Computer Software Maintenance	8,599	9,000	9,000	8,919	9,000	9,600	—

101 60000	Fund: Corporate Department: Maintenance & Operations Division: All Divisions	LINE ITEM ANALYSIS						
		2020	2021				2022	
		Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
612860	Repairs to Vehicle Equipment	80,153	147,000	147,000	144,946	110,800	192,700	—
612990	Repairs, N.O.C.	1,438	27,500	27,500	22,200	22,500	23,000	—
200	TOTAL CONTRACTUAL SERVICES	71,610,083	86,856,500	86,856,500	62,459,225	71,741,200	102,301,900	—
623030	Metals	21,515	30,500	30,500	27,102	28,200	30,500	—
623070	Electrical Parts and Supplies	1,916,958	3,146,500	3,056,300	2,939,466	2,868,800	3,465,100	—
623090	Plumbing Accessories and Supplies	444,262	787,300	779,300	651,845	622,300	796,200	—
623110	Hardware	4,108	6,900	6,900	6,485	5,100	10,900	—
623130	Buildings, Grounds, Paving Materials, and Supplies	100,311	166,800	166,800	144,954	107,700	158,700	—
623170	Fiber, Paper, and Insulation Materials	4,709	13,500	13,500	5,300	5,300	5,500	—
623190	Paints, Solvents, and Related Materials	24,403	6,400	14,400	13,937	15,100	6,400	—
623250	Vehicle Parts and Supplies	136,815	200,000	200,000	197,381	152,400	215,000	—
623270	Mechanical Repair Parts	3,595,297	4,747,400	4,747,400	4,525,029	4,580,500	5,370,600	—
623300	Manhole Materials	3,990	70,000	30,000	—	63,000	70,000	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	32,325	49,800	49,800	39,139	42,100	63,800	—
623530	Farming Supplies	—	4,000	4,000	3,912	3,500	4,000	—
623560	Processing Chemicals	8,154,534	11,527,500	11,652,500	10,288,791	9,617,100	13,428,000	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	28,661	36,100	36,100	31,270	31,200	31,500	—
623660	Cleaning Supplies	1,412	6,000	6,000	2,336	2,900	6,500	—
623680	Tools and Supplies	211,022	245,100	245,100	234,850	223,000	274,200	—
623700	Wearing Apparel	2,266	4,100	4,100	1,929	1,800	4,100	—
623780	Safety and Medical Supplies	41,079	69,200	69,200	47,747	40,700	55,200	—
623800	Computer Software	63,796	36,300	35,300	19,245	32,600	36,300	—
623810	Computer Supplies	34,263	24,500	29,700	27,827	27,700	40,400	—
623820	Fuel	194,352	315,600	315,600	313,921	267,900	355,500	—
623840	Gases	208	600	600	600	600	—	—
623850	Communications Supplies	12,749	15,000	15,000	14,912	15,000	15,000	—
623860	Lubricants	9,072	16,200	17,200	15,999	14,300	42,200	—
623990	Materials and Supplies, N.O.C.	54,505	106,500	106,500	94,424	71,600	101,600	—
300	TOTAL MATERIALS AND SUPPLIES	15,092,613	21,631,800	21,631,800	19,648,401	18,840,400	24,587,200	—
634600	Equipment for Collection Facilities	—	90,000	20,500	20,467	20,500	115,000	—

101 60000	Fund: Corporate Department: Maintenance & Operations Division: All Divisions	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
634620	Equipment for Waterway Facilities	—	135,000	142,000	140,349	136,700	—	—
634650	Equipment for Process Facilities	135,160	561,400	557,400	553,294	508,700	805,000	—
634670	Railroad Equipment	—	25,000	25,000	24,958	25,000	—	—
634760	Material Handling and Farming Equipment	60,216	333,000	320,600	319,087	319,200	715,000	—
634860	Vehicle Equipment	525,227	568,000	680,100	677,449	679,300	1,089,900	—
634990	Machinery and Equipment, N.O.C.	92,886	90,000	56,800	55,765	49,000	338,000	—
400	TOTAL MACHINERY AND EQUIPMENT	813,489	1,802,400	1,802,400	1,791,369	1,738,400	3,062,900	—
TOTAL MAINTENANCE & OPERATIONS		\$187,155,978	\$ 211,055,700	\$ 211,055,700	\$ 152,162,860	\$190,212,700	\$ 233,071,500	\$ —

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.

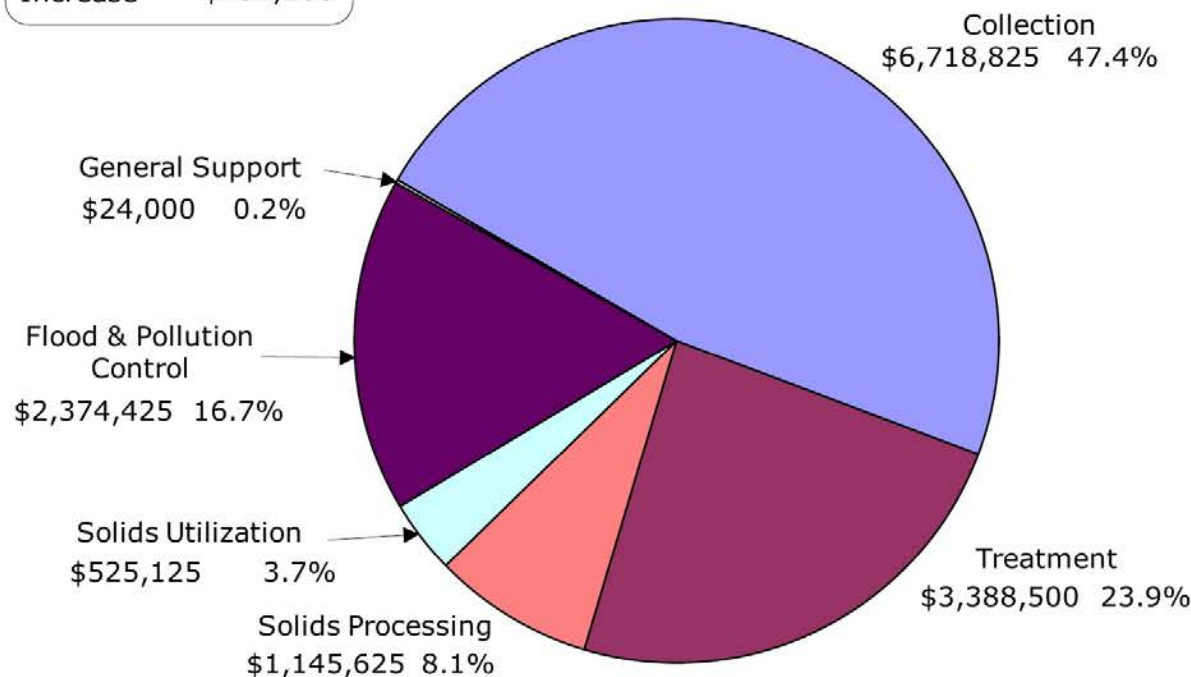
Additionally, Estimated Expenditure may either exceed Adjusted Appropriation when transfers of funds are anticipated or be less than Expenditure (Committed Budget plus Disbursement) when not all commitments are anticipated to be completed by year-end.

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.

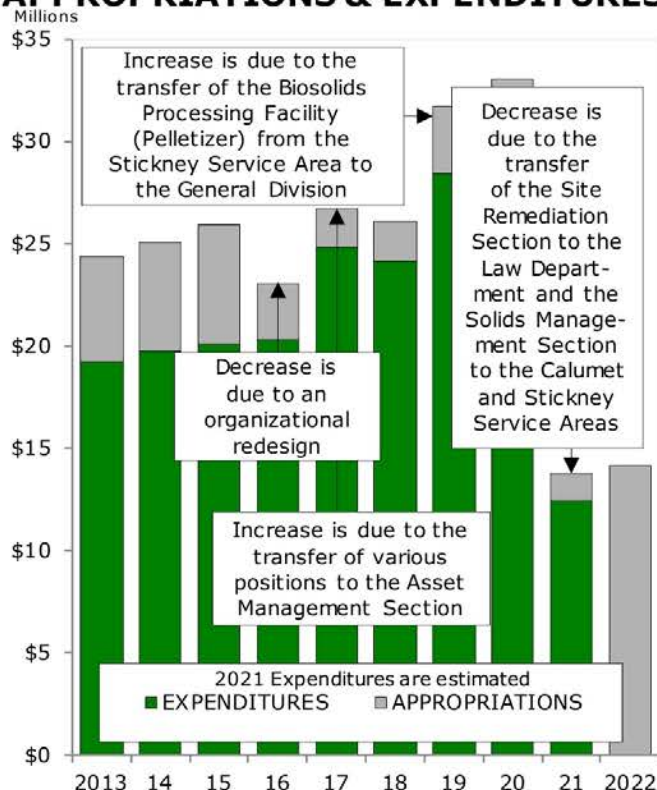
MAINTENANCE & OPERATIONS – GENERAL DIVISION

2022	\$14,176,500
2021	\$13,745,300
Increase	\$431,200

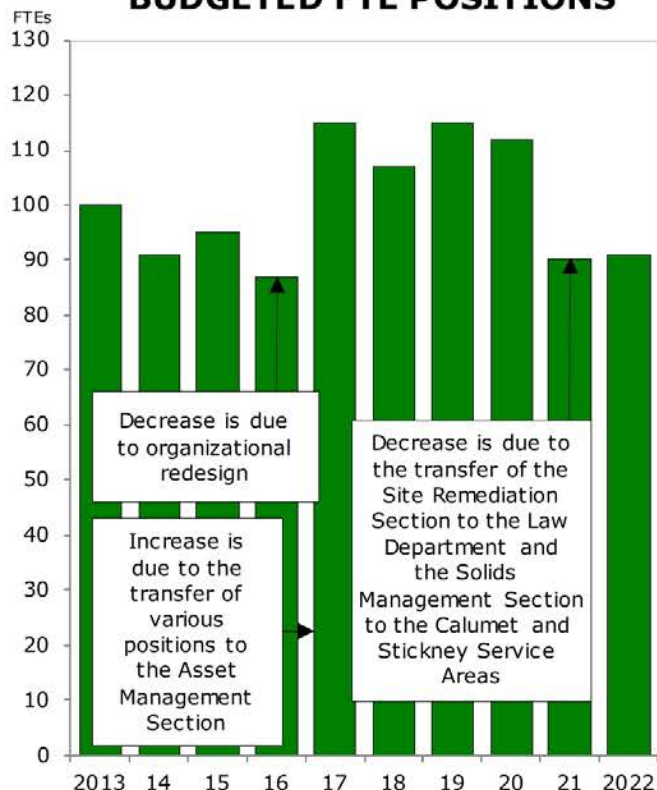
FUNCTIONS



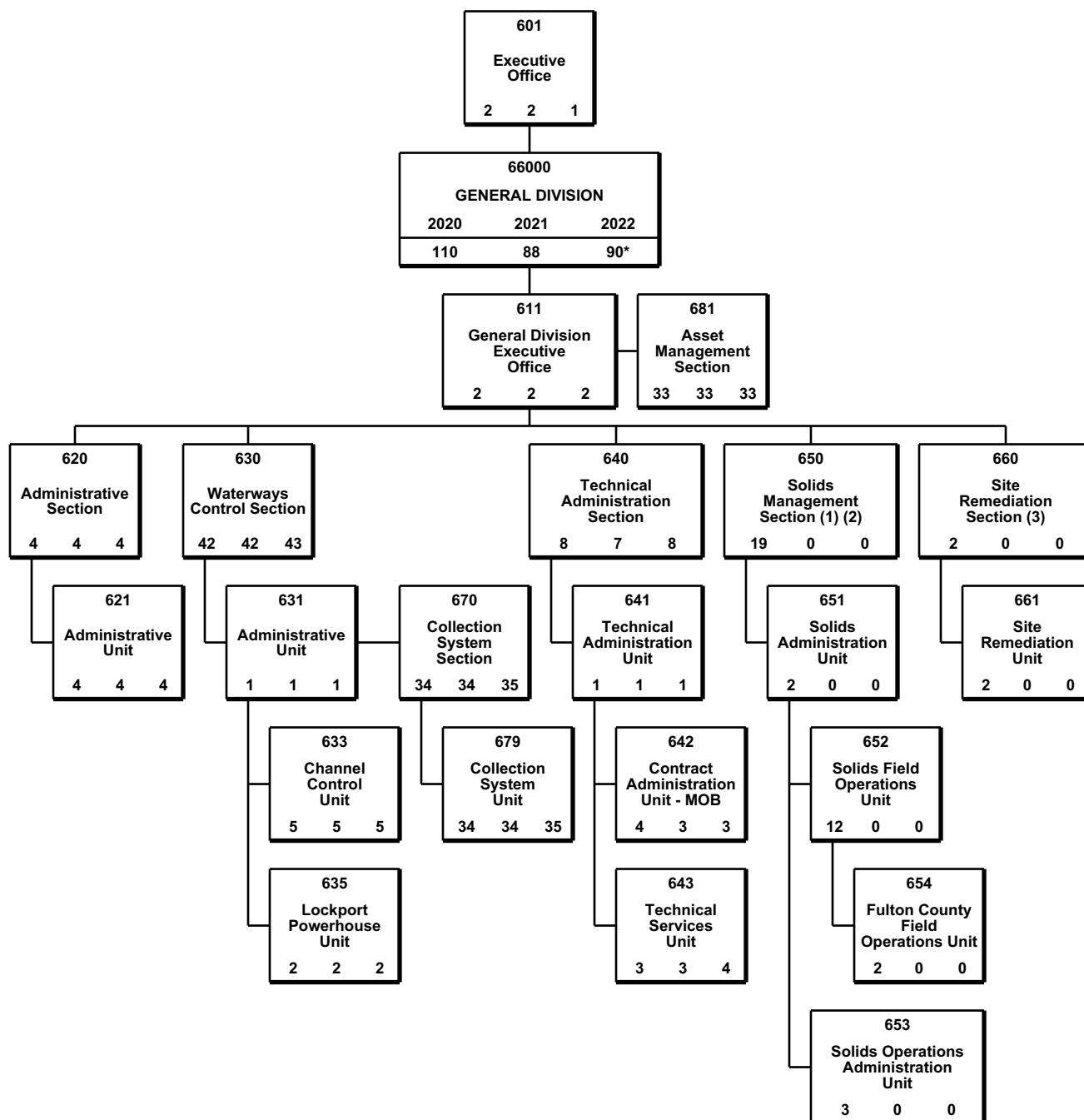
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



MAINTENANCE & OPERATIONS - GENERAL DIVISION



* In 2022, 19 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, five 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 Branch 950 in the Maintenance & Operations - Stickney Service Area.
- (3) Effective 01/01/21, two positions from Section 660 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.		\$ 10,107,325	71.3 %
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.		\$ 1,145,625	8.1 %
3. SOLIDS UTILIZATION: The General Division provides administrative support for management and coordination of biosolids processing and utilization of District-wide activities.		\$ 525,125	3.7 %
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 33 million kWh of electrical energy resulting in approximately \$0.8 million in revenue.		\$ 2,374,425	16.7 %
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.		\$ 24,000	0.2 %
Division Totals		\$ 14,176,500	100.0 %

MEASURABLE GOALS:		2020	2021	2022
	Unit of Measure	Actual	Estimated	Proposed
1. The operation of the Lockport Powerhouse will generate the equivalent of \$0.8 million worth of electrical energy revenue in 2022.	kWh Generated	37,608,633	30,000,000	33,000,000
	<i>* Revenue Generated</i>	<i>\$ 1,110,422</i>	<i>\$ 1,000,000</i>	<i>\$ 825,000</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	48,794	60,152	60,152
3. The Solids Management Section will oversee the utilization of 0 dry tons of biosolids in 2022. (North Service Area's 700 dry tons of solids remain in that division.)	Dry Tons	94,059	—	—
<i>* Revenue generated not included in total costs.</i>				

66000 M&O - GENERAL DIVISION**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:		2020	Budgeted		Change	
Number	Name	Actual	FTEs	Dollars	Dollars	Percent
1000	Collection	\$ 5,908,279	2022 45	\$ 6,718,825	\$ 232,000	3.6
			2021 44	\$ 6,486,825		
1100	Surface Interceptor Systems	\$ 2,755,287	2022 20	\$ 3,073,000	\$ 27,500	0.9
			2021 20	\$ 3,045,500		
1200	Tunnel and Reservoir System	\$ 690,295	2022 7	\$ 1,045,300	\$ 27,600	2.7
			2021 7	\$ 1,017,700		
1300	Pumping Station Facilities	\$ 659,748	2022 6	\$ 658,800	\$ (33,100)	(4.8)
			2021 6	\$ 691,900		
1900	Collection - Indirect Costs	\$ 1,802,949	2022 12	\$ 1,941,725	\$ 210,000	12.1
			2021 11	\$ 1,731,725		
2000	Treatment	\$ 2,967,256	2022 23	\$ 3,234,000	\$ (20,500)	(0.6)
			2021 23	\$ 3,254,500		
2000	Pre-Treatment	\$ 132,508	2022 1	\$ 132,700	\$ 4,400	3.4
			2021 1	\$ 128,300		
2100	Primary Treatment	\$ 143,237	2022 2	\$ 162,300	\$ (5,800)	(3.5)
			2021 2	\$ 168,100		
2200	Secondary Treatment	\$ 423,804	2022 3	\$ 402,500	\$ (18,700)	(4.4)
			2021 3	\$ 421,200		
2300	Tertiary Treatment	\$ 56,369	2022 1	\$ 61,200	\$ —	—
			2021 1	\$ 61,200		
2900	Treatment - Indirect Costs	\$ 2,211,338	2022 16	\$ 2,475,300	\$ (400)	—
			2021 16	\$ 2,475,700		
3000	Solids Processing	\$ 1,180,367	2022 7	\$ 1,145,625	\$ 28,100	2.5
			2021 7	\$ 1,117,525		
3100	Thickening	\$ 239,678	2022 1	\$ 158,100	\$ (6,200)	(3.8)
			2021 1	\$ 164,300		
3200	Stabilization	\$ 85,819	2022 1	\$ 113,500	\$ 900	0.8
			2021 1	\$ 112,600		
3300	Dewatering	\$ 74,378	2022 —	\$ 31,300	\$ (4,700)	(13.1)
			2021 —	\$ 36,000		
3900	Solids Processing - Indirect Costs	\$ 780,492	2022 5	\$ 842,725	\$ 38,100	4.7
			2021 5	\$ 804,625		
a) Increase is due to an increased demand of calcium nitrate for odor control (\$60,000), the addition of one FTE position (\$57,600), and the SolarBee service (\$55,000).						

66000 M&O - GENERAL DIVISION**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:		2020	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
4000	Flood & Pollution Control	\$ 2,005,895	2022 13	\$ 2,374,425	\$ 200,300	9.2	
			2021 13	\$ 2,174,125			
4200	Waterways Control and Stormwater Reservoirs	\$ 1,532,761	2022 11	\$ 1,794,600	\$ 185,000	11.5	b)
			2021 10	\$ 1,609,600			
4210	Maintenance of Waterways	\$ 99,764	2022 —	\$ 98,800	\$ 51,700	109.8	c)
			2021 —	\$ 47,100			
4300	Stormwater Management	\$ 32,664	2022 —	\$ —	\$ (32,300)	(100.0)	d)
			2021 —	\$ 32,300			
4400	Aeration Facilities	\$ 138,689	2022 1	\$ 152,500	\$ 1,200	0.8	
			2021 1	\$ 151,300			
4900	Flood & Pollution Control - Indirect Costs	\$ 202,017	2022 1	\$ 328,525	\$ (5,300)	(1.6)	
			2021 2	\$ 333,825			
5000	Solids Utilization	\$19,304,205	2022 3	\$ 525,125	\$ 28,100	5.7	
			2021 3	\$ 497,025			
5100	Solids Drying	\$ 5,992,698	2022 —	\$ —	\$ —	—	
			2021 —	\$ —			
5200	Solids Distribution	\$11,782,542	2022 —	\$ —	\$ —	—	
			2021 —	\$ —			
5900	Solids Utilization - Indirect Costs	\$ 1,528,965	2022 3	\$ 525,125	\$ 28,100	5.7	
			2021 3	\$ 497,025			
7000	General Support (excludes program numbers 7368 and 7604)	\$ 67,826	2022 —	\$ 24,000	\$ 500	2.1	
			2021 —	\$ 23,500			
7368	Real Estate Environmental Assessment	\$ 740,896	2022 —	\$ —	\$ —	—	
			2021 —	\$ —			
7604	Social Security and Medicare Contributions	\$ 182,048	2022 —	\$ 154,500	\$ (37,300)	(19.4)	e)
			2021 —	\$ 191,800			
Division Totals		\$32,356,772	2022 91	\$ 14,176,500	\$ 431,200	3.1 %	*
			2021 90	\$ 13,745,300			
<p>b) Increase is due to the upgrade of the Centennial Fountain (\$248,800), offset by the completed purchase of a turbine shaft seal (\$75,000).</p> <p>c) Increase is due to the expansion joint replacement at the Main Street Bridge (\$50,000).</p> <p>d) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$32,300).</p> <p>e) Decrease is due to the calculation of Social Security and Medicare as a percentage of salaries (\$37,300).</p> <p>* The 2022 position total for the General Division is 91, with 19 positions budgeted in the Stormwater Management Fund.</p>							

66000 M&O - GENERAL DIVISION**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
1000-2900	Collection & Treatment					
	Technical and Administrative Support for Collection and Treatment Activities	Cost	\$ 8,875,535	\$ 9,741,325	\$ 9,952,825	a)
3000	Solids Processing					
	Technical and Administrative Support for Solids Removal and Processing	Cost	\$ 1,180,367	\$ 1,117,525	\$ 1,145,625	
4000	Flood & Pollution Control					
4200	Operation and Maintenance of the Waterways to Minimize Area Flooding and Pollution	Cost	\$ 921,865	\$ 989,900	\$ 1,245,900	b)
	Generate Electrical Energy at Lockport Powerhouse to Obtain Approximately \$0.8 million in Revenue	kWh	37,608,633	26,700,000	33,000,000	c)
		Cost	\$ 208,051	\$ 266,800	\$ 193,100	d)
		Cost/kWh	\$ 0.0055	\$ 0.0100	\$ 0.0059	d)
	<i>* Revenue Generated</i>		<i>\$ 1,110,422</i>	<i>\$ 800,000</i>	<i>\$ 825,000</i>	
	Minimize Diversion of Lake Michigan Water in Accordance with the U.S. Supreme Court Decree	Mil. Gal./Year	48,794	60,152	60,152	
		Cost	\$ 402,845	\$ 352,900	\$ 355,600	
		Cost/Mil. Gal./Year	\$ 8.26	\$ 5.87	\$ 5.91	
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	\$ 99,764	\$ 47,100	\$ 98,800	e)
4300	Stormwater Management	Cost	\$ 32,664	\$ 32,300	\$ —	f)
4400	Aeration Facilities	Cost	\$ 138,689	\$ 151,300	\$ 152,500	
4900	Flood & Pollution Control - Indirect Costs	Cost	\$ 202,017	\$ 333,825	\$ 328,525	
5000	Solids Drying/Utilization					
	Management and Coordination of the Solids Utilization Program	Dry Tons	94,059	—	—	
		Cost	\$ 15,526,096	\$ 497,025	\$ 525,125	
		Cost/Dry Ton	\$ 165.07	\$ —	\$ —	
5271	Pelletizer Disposal	Dry Tons	39,912	—	—	
	Control Management and Disposal of Solids by Private Contracts	Cost	\$ 3,778,109	\$ —	\$ —	
		Cost/Dry Ton	\$ 94.66	\$ —	\$ —	
a) Increase is due to the addition of two FTE positions (\$126,500), an increased demand of calcium nitrate for odor control (\$60,000) and the SolarBee service (\$55,000). b) Increase is due to the upgrade of the Centennial Fountain (\$248,800). c) Increase is due to the infrastructure improvements for the tailrace stop logs, headrace gates and the equipment at the Lockport Powerhouse (\$400,000). d) Decrease due to the completed purchase of a turbine shaft seal (\$75,000). e) Increase is due to the expansion joint replacement at the Main Street Bridge (\$50,000). f) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$32,300).						

66000 M&O - GENERAL DIVISION**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 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	\$ 67,826	\$ 23,500	\$ 24,000	
7368	Real Estate Environmental Assessment	Cost	\$ 740,896	\$ —	\$ —	
7604	Social Security and Medicare Contributions	Cost	\$ 182,048	\$ 191,800	\$ 154,500	g)
Division Totals			\$ 32,356,772	\$ 13,745,300	\$ 14,176,500	
g) Decrease is due to the calculation of Social Security and Medicare as a percentage of salaries (\$37,300).						
* Revenue generated not included in total costs.						

101 66000	Fund: Corporate Department: Maintenance & Operations Division: General	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 12,407,294	\$ 10,441,200	\$ 10,441,200	\$ 6,717,902	\$ 9,795,200	\$ 10,385,900	\$ —
601060	Compensation Plan Adjustments	695,170	603,300	603,300	438,578	570,100	857,600	—
601070	Social Security and Medicare Contributions	182,048	191,800	191,800	104,900	148,500	154,500	—
601080	Salaries of Nonbudgeted Employees	—	3,800	3,800	—	—	—	—
601100	Tuition and Training Payments	4,322	34,500	34,500	9,954	15,300	24,700	—
100	TOTAL PERSONAL SERVICES	13,288,834	11,274,600	11,274,600	7,271,334	10,529,100	11,422,700	—
612010	Travel	232	400	400	—	—	2,000	—
612030	Meals and Lodging	1,017	2,100	2,100	430	700	2,200	—
612040	Postage, Freight, and Delivery Charges	126	—	—	—	—	—	—
612050	Compensation for Personally-Owned Automobiles	7,343	9,100	9,100	2,615	7,400	9,100	—
612080	Motor Vehicle Operating Services	—	300	300	88	100	300	—
612150	Electrical Energy	54,133	54,000	54,000	19,496	53,300	67,900	—
612160	Natural Gas	7,179	3,800	3,800	2,175	3,000	3,800	—
612170	Water and Water Services	106,653	35,100	35,100	6,783	30,500	35,100	—
612240	Testing and Inspection Services	5,000	4,100	4,100	4,100	3,800	4,100	—
612330	Rental Charges	8,173	—	—	—	—	—	—
612410	Governmental Service Charges	17,100	15,700	15,700	14,307	15,500	16,000	—
612420	Maintenance of Grounds and Pavements	470,048	18,000	18,600	18,600	9,000	47,000	—
612430	Payments for Professional Services	445,683	87,900	89,400	89,240	129,200	8,500	—
612490	Contractual Services, N.O.C.	150,685	70,000	70,200	70,156	63,000	70,000	—
612520	Waste Material Disposal Charges	11,987,788	8,000	8,000	8,000	7,100	8,000	—
612590	Sludge Disposal	3,778,109	—	—	—	—	—	—
612600	Repairs to Collection Facilities	763,901	1,350,000	967,200	967,143	907,100	1,355,000	—
612620	Repairs to Waterway Facilities	41,690	67,600	67,600	64,084	62,400	482,900	—
612650	Repairs to Process Facilities	4,120	—	—	—	—	—	—
612680	Repairs to Buildings	13,489	12,000	12,000	9,850	10,200	22,000	—
612760	Repairs to Material Handling and Farming Equipment	240,102	—	—	—	—	—	—
612780	Safety Repairs and Services	7,625	7,500	7,500	7,500	6,800	7,500	—
612790	Repairs to Marine Equipment	48,005	—	—	—	—	—	—
612820	Computer Software Maintenance	8,599	—	—	—	—	—	—
612860	Repairs to Vehicle Equipment	24,771	42,000	42,000	42,000	24,500	62,900	—

101 66000	Fund: Corporate Department: Maintenance & Operations Division: General	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
612990	Repairs, N.O.C.	—	3,000	3,000	800	—	3,000	—
200	TOTAL CONTRACTUAL SERVICES	18,191,571	1,790,600	1,410,100	1,327,367	1,333,600	2,207,300	—
623070	Electrical Parts and Supplies	3,298	26,900	11,500	11,420	16,900	21,000	—
623090	Plumbing Accessories and Supplies	24,601	5,000	5,000	2,800	4,700	5,000	—
623110	Hardware	1,804	2,000	2,000	2,000	1,800	2,000	—
623130	Buildings, Grounds, Paving Materials, and Supplies	27,412	23,300	17,300	2,609	3,600	10,000	—
623250	Vehicle Parts and Supplies	76,976	2,500	2,500	1,336	1,400	2,500	—
623270	Mechanical Repair Parts	95,807	101,000	101,000	101,000	100,000	136,000	—
623300	Manhole Materials	3,990	70,000	30,000	—	63,000	70,000	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	3,649	10,500	9,500	6,620	4,700	10,500	—
623560	Processing Chemicals	124,249	195,000	195,000	185,051	152,000	232,700	—
623660	Cleaning Supplies	468	—	—	—	—	—	—
623680	Tools and Supplies	15,897	30,000	30,000	22,126	15,900	30,000	—
623700	Wearing Apparel	1,884	3,500	3,500	1,929	1,200	3,500	—
623780	Safety and Medical Supplies	14,626	25,000	25,000	22,875	10,100	15,000	—
623810	Computer Supplies	9,207	—	—	—	—	5,900	—
623820	Fuel	130,202	—	—	—	—	—	—
623990	Materials and Supplies, N.O.C.	16,682	2,400	2,400	—	—	2,400	—
300	TOTAL MATERIALS AND SUPPLIES	550,754	497,100	434,700	359,766	375,300	546,500	—
634620	Equipment for Waterway Facilities	—	135,000	142,000	140,349	136,700	—	—
634760	Material Handling and Farming Equipment	—	48,000	44,000	42,585	42,600	—	—
634860	Vehicle Equipment	325,614	—	—	—	—	—	—
400	TOTAL MACHINERY AND EQUIPMENT	325,614	183,000	186,000	182,934	179,300	—	—
TOTAL GENERAL DIVISION		\$ 32,356,773	\$ 13,745,300	\$ 13,305,400	\$ 9,141,401	\$ 12,417,300	\$ 14,176,500	\$ —

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				
		2020	2021		2022	
					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		—	
TOTAL 601	Executive Office	2	2	359,430	1	280,765
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	302,290	2	305,829
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	498,753	4	498,753
TOTAL 620	Administrative Section	4	4	498,753	4	498,753
630	Waterways Control Section					
631	Administrative Unit					
HP20	Managing Engineer	1	1		1	
TOTAL 631	Administrative Unit	1	1	180,199	1	188,987
633	Channel Control Unit					
NR6271	Systems Dispatcher	5	5		5	
TOTAL 633	Channel Control Unit	5	5	624,832	5	624,832
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				
		2020	2021		2022	
					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	259,002	2	259,002
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)		— (*1)	
HP14	Engineering Technician V	— (*1)	— (*1)		— (*2)	
NR8650	Maintenance Laborer Class A Shift	— (*2)	— (*2)		— (*2)	
TOTAL 639	Channel Maintenance Unit	—	—	—	—	—
TOTAL	Stormwater Management Fund Positions	(*4)	(*4)		(*5)	
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	
HP14	Engineering Technician V	6	6		6	
HP12	Engineering Technician IV	—	—		1	
HP11	Engineering Technician III	1	1		1	
NR8331	Laborer Foreman	6 (*1)	6 (*1)		6 (*1)	

Fund: Corporate Dept: Maintenance & Operations Division: General		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
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	34	34	3,159,033	35	3,250,606
TOTAL	Stormwater Management Fund Positions	(*6)	(*6)		(*6)	
TOTAL 670	Collection System Section	34	34	3,159,033	35	3,250,606
TOTAL	Stormwater Management Fund Positions	(*6)	(*6)		(*6)	
TOTAL 630	Waterways Control Section	42	42	4,223,065	43	4,323,427
TOTAL	Stormwater Management Fund Positions	(*18)	(*18)		(*19)	
640	Technical Administration Section					
641	Technical Administration Unit					
HP20	Managing Engineer	1	1		1	
TOTAL 641	Technical Administration Unit	1	1	171,408	1	180,198
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	—		—	
TOTAL 642	Contract Administration Unit - MOB	4	3	425,175	3	425,175
643	Technical Services Unit					
HP18	Principal Engineer	1	1		1	
HP17	Senior Engineer	1	1		1	
HP15	Associate Civil Engineer	1	1		1	
HP14	Assistant Civil Engineer	—	—		1	
TOTAL 643	Technical Services Unit	3	3	413,908	4	479,969
TOTAL 640	Technical Administration Section	8	7	1,010,491	8	1,085,342
650	Solids Management Section					
651	Solids Administration Unit					
HP20	Managing Engineer	1	—		—	

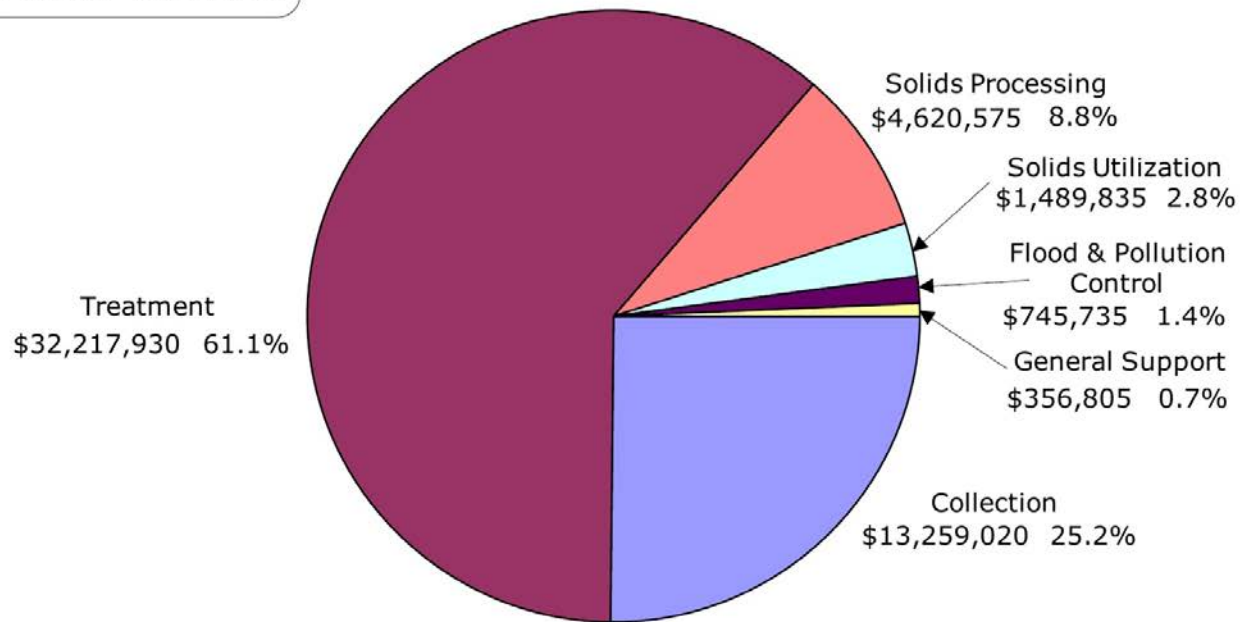
Fund: Corporate Dept: Maintenance & Operations Division: General		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP12	Administrative Assistant #2 (Administrative Specialist) (New Grade HP11)	1	—		—	
TOTAL 651	Solids Administration Unit	2	—	—	—	—
652	Solids Field Operations Unit					
HP18	Principal Engineer	1	—		—	
HP17	Senior Engineer	1	—		—	
HP15	Associate Civil Engineer	1	—		—	
HP14	Engineering Technician V	4	—		—	
HP14	Engineering Technician V #4	1	—		—	
HP12	Engineering Technician IV	3	—		—	
HP11	Engineering Technician III	1	—		—	
TOTAL 652	Solids Field Operations Unit	12	—	—	—	—
653	Solids Operations Administration Unit					
HP17	Senior Engineer	1	—		—	
HP12	Engineering Technician IV #4	1	—		—	
NR8651	Maintenance Laborer Class A	1	—		—	
TOTAL 653	Solids Operations Administration Unit	3	—	—	—	—
654	Fulton County Field Operations Unit					
HP12	Agricultural Technician II	1	—		—	
HP11	Agricultural Technician I	1	—		—	
TOTAL 654	Fulton County Field Operations Unit	2	—	—	—	—
TOTAL 650	Solids Management Section	19	—	—	—	—
660	Site Remediation Section					
661	Site Remediation Unit					
HP20	Engineer of Site Remediation	1	—		—	
HP17	Site Remediation Specialist	1	—		—	
TOTAL 661	Site Remediation Unit	2	—	—	—	—
TOTAL 660	Site Remediation Section	2	—	—	—	—

Fund: Corporate Dept: Maintenance & Operations Division: General		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
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	5		5	
HP15	Associate Mechanical Engineer	5	5		5	
HP14	Assistant Electrical Engineer	—	2		2	
HP14	Assistant Mechanical Engineer	3	3		3	
HP14	Engineering Technician V	2	2		2	
TOTAL 681	Asset Management Section	33	33	4,205,831	33	4,050,036
TOTAL	Maintenance & Operations General Division	112	90	10,599,861	91	10,544,152
TOTAL	Stormwater Management Fund Positions	(*18)	(*18)		(*19)	
NOTES: 1. Nineteen 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.						

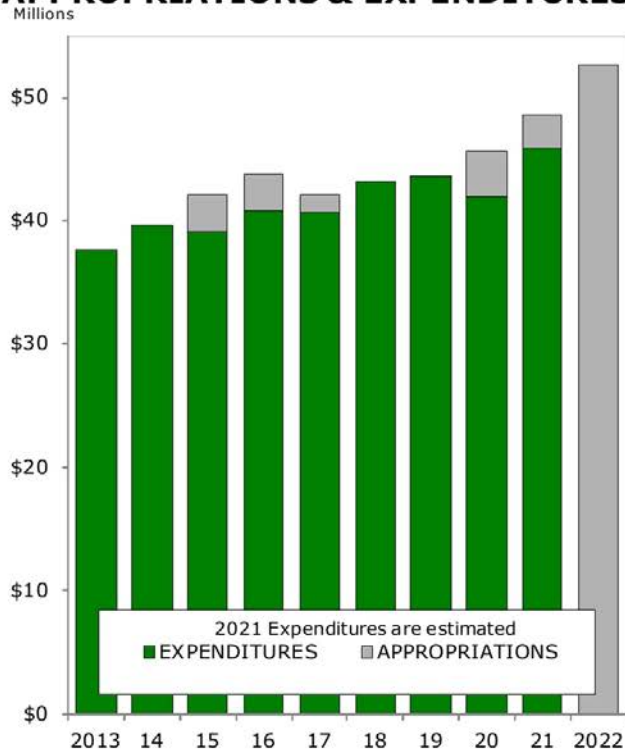
MAINTENANCE & OPERATIONS – NORTH SERVICE AREA

2022 \$52,689,900
2021 \$48,560,700
Increase \$4,129,200

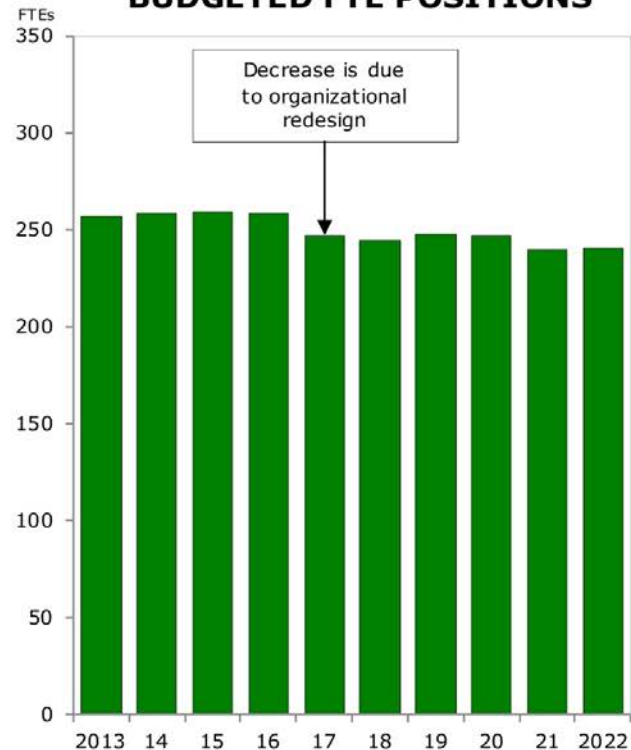
FUNCTIONS



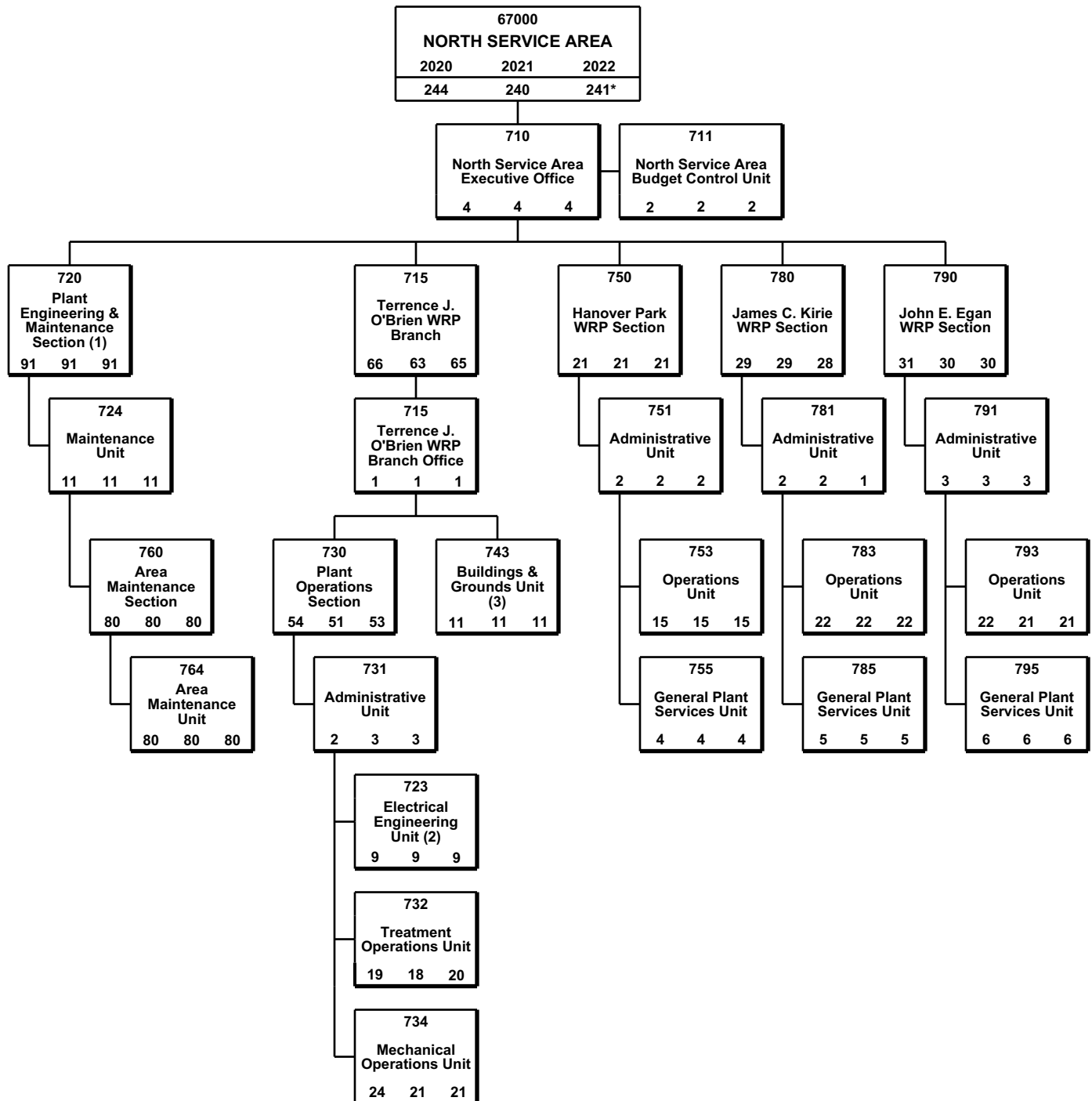
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



MAINTENANCE & OPERATIONS - NORTH SERVICE AREA

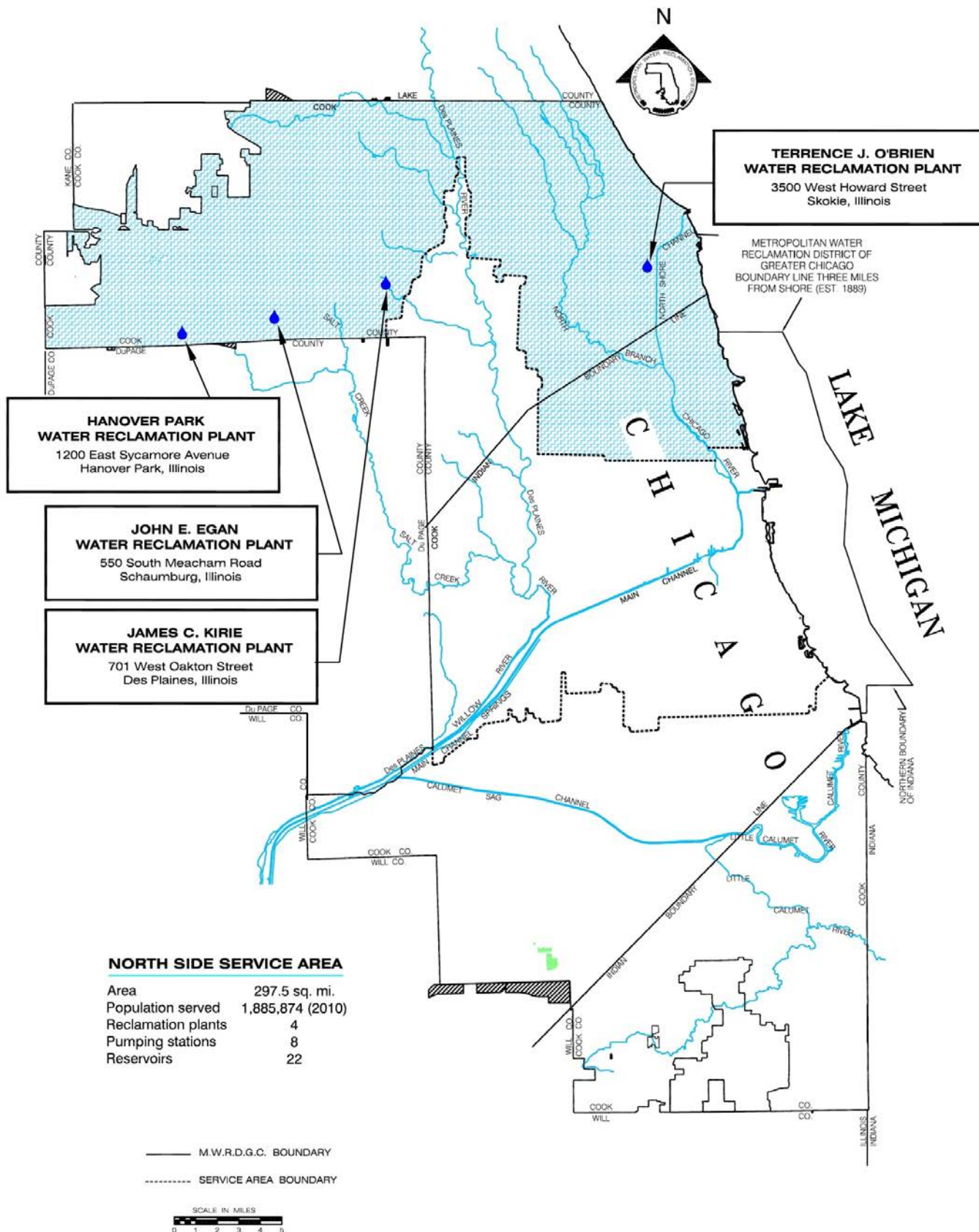


* In 2022, there are no positions funded by the Stormwater Management Fund.

(1) Effective 01/01/22, Section 720 was transferred out of Branch 715.

(2) Effective 01/01/22, Unit 723 was transferred from Section 720 to Section 730.

(3) Effective 01/01/22, Unit 743 was transferred from Section 720 to Branch 715.



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 116.8 billion gallons of wastewater through its treatment facilities and a contract agreement with the Fox River Water Reclamation District.				\$45,476,950	86.3 %
	Design:	Flows ^	CBOD *	SS *	
Terrence J. O'Brien Water Reclamation Plant		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 58,300 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**.				\$ 4,620,575	8.8 %
3. SOLIDS UTILIZATION: The North Service Area will provide support to utilize 700 dry tons of biosolids for the Fischer Farm in Hanover Park and other agricultural applications.				\$ 1,489,835	2.8 %
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.				\$ 745,735	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.				\$ 356,805	0.7 %
Division Totals				\$52,689,900	100.0 %
**CALSMA - Calumet Solids Management Area and LASMA - Lawndale Avenue Solids Management Area					

MEASURABLE GOALS:		2020	2021	2022
	Unit of Measure	Actual	Estimated	Proposed
1. The North Service Area will collect and treat approximately 116.8 billion gallons of wastewater in 2022.	Billion Gallons	104.2	116.8	116.8
2. The North Service Area will remove 58,300 dry tons and process 15,800 dry tons of concentrated sewage.	Dry Tons Process Solids	15,048	15,800	15,800
3. The North Service Area will obtain 100 percent permit compliance in 2022 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 700 dry tons of biosolids in 2022.	Dry Tons	681	700	700

67000 M&O - NORTH SERVICE AREA**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:		2020	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
1000	Collection	\$11,590,231	2022 66	\$ 13,259,020	\$ 1,059,160	8.7	
			2021 66	\$ 12,199,860			
1100	Surface Interceptor Systems	\$ 373,561	2022 3	\$ 335,400	\$ 1,200	0.4	
			2021 3	\$ 334,200			
1200	Tunnel and Reservoir System	\$ 2,006,167	2022 13	\$ 1,848,100	\$ 33,200	1.8	
			2021 13	\$ 1,814,900			
1300	Pumping Station Facilities	\$ 4,578,979	2022 25	\$ 5,942,900	\$ 745,000	14.3	a)
			2021 25	\$ 5,197,900			
1900	Collection - Indirect Costs	\$ 4,631,524	2022 25	\$ 5,132,620	\$ 279,760	5.8	b)
			2021 25	\$ 4,852,860			
2000	Treatment	\$24,201,486	2022 149	\$ 31,845,230	\$ 2,724,130	9.4	
			2021 148	\$ 29,121,100			
2000	Pre-Treatment	\$ 915,047	2022 6	\$ 766,300	\$ (118,800)	(13.4)	
			2021 6	\$ 885,100			
2100	Primary Treatment	\$ 614,075	2022 6	\$ 650,600	\$ 64,900	11.1	
			2021 6	\$ 585,700			
2200	Secondary Treatment	\$ 8,051,691	2022 44	\$ 10,337,300	\$ 1,398,900	15.7	c)
			2021 42	\$ 8,938,400			
2300	Tertiary Treatment	\$ 1,360,071	2022 11	\$ 1,819,400	\$ 131,600	7.8	
			2021 11	\$ 1,687,800			
2900	Treatment - Indirect Costs	\$13,260,602	2022 82	\$ 18,271,630	\$ 1,247,530	7.3	d)
			2021 83	\$ 17,024,100			
a) Increase is due to an increased cost of electrical energy (\$579,000) and an increased demand to rehabilitate pump rotating assemblies (\$170,000). b) Increase is due to compensation plan adjustments (\$250,500). c) Increase is due to an increased cost of electrical energy (\$1,014,300) and final tank painting (\$282,400). d) Increase is due to an increased cost of electrical energy (\$466,000), compensation plan adjustments (\$281,800), the construction of a paved access road to Fischer Farm (\$212,500), and an increased demand for pump rotating assembly repair parts (\$150,000).							

67000 M&O - NORTH SERVICE AREA**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:			Budgeted				Change	
Number	Name	2020 Actual		FTEs	Dollars		Dollars	Percent
3000	Solids Processing	\$ 3,739,805	2022	21	\$ 4,620,575	\$ 243,570		5.6
			2021	21	\$ 4,377,005			
3100	Thickening	\$ 523,681	2022	5	\$ 742,000	\$ 11,200		1.5
			2021	5	\$ 730,800			
3200	Stabilization	\$ 757,116	2022	5	\$ 778,900	\$ 16,700		2.2
			2021	5	\$ 762,200			
3300	Dewatering	\$ 844,939	2022	5	\$ 829,400	\$ (36,100)		(4.2)
			2021	5	\$ 865,500			
3900	Solids Processing - Indirect Costs	\$ 1,614,069	2022	6	\$ 2,270,275	\$ 251,770		12.5
			2021	6	\$ 2,018,505			
4000	Flood & Pollution Control	\$ 601,109	2022	2	\$ 745,735	\$ 61,370		9.0
			2021	2	\$ 684,365			
4200	Waterways Control and Stormwater Reservoirs	\$ 293,421	2022	2	\$ 363,800	\$ 40,200		12.4
			2021	2	\$ 323,600			
4400	Aeration Facilities	\$ 193,609	2022	—	\$ 216,100	\$ (5,200)		(2.4)
			2021	—	\$ 221,300			
4900	Flood & Pollution Control - Indirect Costs	\$ 114,079	2022	—	\$ 165,835	\$ 26,370		18.9
			2021	—	\$ 139,465			
5000	Solids Utilization	\$ 1,195,856	2022	2	\$ 1,489,835	\$ (47,600)		(3.1)
			2021	2	\$ 1,537,435			
5200	Solids Distribution	\$ 252,281	2022	—	\$ 374,100	\$ 5,000		1.4
			2021	—	\$ 369,100			
5900	Solids Utilization - Indirect Costs	\$ 943,575	2022	2	\$ 1,115,735	\$ (52,600)		(4.5)
			2021	2	\$ 1,168,335			
7000	General Support (excluding program number 7604)	\$ 227,413	2022	1	\$ 356,805	\$ 89,970		33.7
			2021	1	\$ 266,835			
7604	Social Security and Medicare Contributions	\$ 355,195	2022	—	\$ 372,700	\$ (1,400)		(0.4)
			2021	—	\$ 374,100			
Division Totals		\$41,911,095	2022	241	\$52,689,900	\$ 4,129,200		8.5 %
			2021	240	\$48,560,700			
<p>e) Increase is due to the addition of dump truck (\$175,000) and a Bobcat track loader (\$102,000), offset by a projected decrease in payments to the Fox River WRD (\$83,100).</p> <p>f) Increase is due to compensation plan adjustments (\$31,300).</p> <p>g) Increase is due to an increased demand for pump rotating assembly repair parts at the Kirie WRP (\$37,500) and compensation plan adjustments (\$31,300).</p> <p>* The 2022 position total for the North Service Area is 241, with no positions budgeted in the Stormwater Management Fund.</p>								

67000 M&O - NORTH SERVICE AREA**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 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	75,649	90,000	85,000	
		Cost	\$ 20,024,174	\$ 23,760,579	\$ 26,242,475	a)
		Cost/Mil. Gallons	\$ 264.70	\$ 264.01	\$ 308.74	
	John E. Egan Water Reclamation Plant	Mil. Gallons	8,956	9,050	9,050	
		Cost	\$ 5,493,086	\$ 5,934,583	\$ 6,316,242	b)
		Cost/Mil. Gallons	\$ 613.34	\$ 655.76	\$ 697.93	
	Hanover Park Water Reclamation Plant	Mil. Gallons	3,080	3,950	3,950	
		Cost	\$ 2,733,614	\$ 2,714,035	\$ 3,122,675	c)
		Cost/Mil. Gallons	\$ 887.54	\$ 687.10	\$ 790.55	
	James C. Kirie Water Reclamation Plant	Mil. Gallons	14,532	16,600	16,600	
		Cost	\$ 6,051,747	\$ 6,935,563	\$ 7,612,858	d)
		Cost/Mil. Gallons	\$ 416.44	\$ 417.81	\$ 458.61	
	Fox River Water Reclamation District	Mil. Gallons	1,999	2,200	2,200	
		Cost	\$ 1,489,096	\$ 1,976,200	\$ 1,810,000	e)
		Cost/Mil. Gallons	\$ 744.92	\$ 898.27	\$ 822.73	
3000	Solids Processing					
	Remove 58,300 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	15,048	15,800	15,800	
		Cost	\$ 3,739,805	\$ 4,377,005	\$ 4,620,575	f)
		Cost/Dry Ton	\$ 248.53	\$ 277.03	\$ 292.44	
	a) Increase is due to an increased cost of electrical energy for the O'Brien WRP (\$1,125,400), compensation plan adjustments (\$532,400), final tank painting (\$282,400), rehabilitation of rotating assemblies (\$170,000), electric vehicles and mowers for in-plant use (\$117,000), gas monitoring equipment (\$100,000), and landscape maintenance (\$100,000).					
	b) Increase is due to an increased cost of electrical energy for the Egan WRP (\$224,600) and the purchase of an Emerson Ovation Data Server (\$70,000).					
	c) Increase is due to the construction of a paved access road to Fischer Farm (\$297,500) and an increased cost of electrical energy for the Hanover Park WRP (\$69,900).					
	d) Increase is due to an increased cost of electrical energy for the Kirie WRP (\$592,000), an increased demand for pump rotating assembly repair parts (\$212,500), reconditioning circuit breakers (\$100,000), and the procurement of pedestal sump pumps (\$100,000), offset by the completion of the Emerson Enterprise upgrade (\$318,300) and process optimization platform installation (\$120,000).					
	e) Decrease is due to a projected decrease in payments to the Fox River WRD (\$166,200).					
	f) Increase is due to the procurement of a dump truck (\$175,000), a Bobcat track loader (\$102,000) and an increased cost of electrical energy (\$95,300), offset by a projected decrease in payments to the Fox River WRD (\$83,100).					

67000 M&O - NORTH SERVICE AREA**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 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	\$ 293,421	\$ 323,600	\$ 363,800	
		Cost/Reservoir	\$ 13,337.32	\$ 14,709.09	\$ 16,536.36	
4400	Aeration Facilities	Cost	\$ 193,609	\$ 221,300	\$ 216,100	
4900	Flood & Pollution Control - Indirect Costs	Cost	\$ 114,079	\$ 139,465	\$ 165,835	g)
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	681	1,000	700	h)
		Cost	\$ 1,195,856	\$ 1,537,435	\$ 1,489,835	
		Cost/Dry Ton	\$ 1,756.03	\$ 1,537.44	\$ 2,128.34	h)
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	\$ 227,413	\$ 266,835	\$ 356,805	i)
7604	Social Security and Medicare Contributions	Cost	\$ 355,195	\$ 374,100	\$ 372,700	
	Division Totals		\$ 41,911,095	\$ 48,560,700	\$ 52,689,900	
g) Increase is due to compensation plan adjustments (\$31,300). h) Decrease is due to a revised estimate of dry ton application based on currently accessible land at the Fischer Farm and other farm application sites. A lower dry ton estimate adversely increases the cost per ton ratio. i) Increase is due to an increased demand for pump rotating assembly repair parts at the Kirie WRP (\$37,500) and compensation plan adjustments (\$31,300).						

101 67000	Fund: Corporate Department: Maintenance & Operations Division: North Service Area	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 24,336,072	\$ 24,709,700	\$ 24,709,700	\$ 17,109,357	\$ 24,770,500	\$ 24,862,700	\$ —
601060	Compensation Plan Adjustments	1,270,837	1,177,700	1,177,700	998,494	1,174,400	1,790,100	—
601070	Social Security and Medicare Contributions	355,195	374,100	374,100	265,335	368,700	372,700	—
601080	Salaries of Nonbudgeted Employees	—	101,700	77,800	—	—	—	—
601100	Tuition and Training Payments	13,704	37,900	37,900	20,680	15,400	49,500	—
100	TOTAL PERSONAL SERVICES	25,975,808	26,401,100	26,377,200	18,393,866	26,329,000	27,075,000	—
612010	Travel	915	13,200	13,200	—	2,000	13,200	—
612030	Meals and Lodging	9,673	20,800	20,800	5,670	9,400	33,500	—
612050	Compensation for Personally-Owned Automobiles	11,696	22,000	22,000	13,058	17,000	22,000	—
612080	Motor Vehicle Operating Services	16	500	500	87	200	500	—
612150	Electrical Energy	7,331,545	8,084,000	8,084,000	4,491,488	7,054,000	10,281,500	—
612160	Natural Gas	444,859	691,100	691,100	294,681	529,200	691,100	—
612170	Water and Water Services	56,955	81,700	81,700	44,506	77,900	81,700	—
612240	Testing and Inspection Services	31,328	76,400	108,900	101,188	55,200	111,800	—
612330	Rental Charges	597	2,400	2,400	1,800	2,100	22,400	—
612410	Governmental Service Charges	3,238,583	4,182,100	3,833,700	2,643,965	3,857,300	3,876,500	—
612420	Maintenance of Grounds and Pavements	103,705	130,400	205,800	189,764	204,700	504,100	—
612490	Contractual Services, N.O.C.	1,418	500	1,000	670	700	4,000	—
612520	Waste Material Disposal Charges	527,429	672,800	672,800	662,971	554,900	677,800	—
612530	Farming Services	37,100	90,000	40,000	40,000	40,000	90,000	—
612600	Repairs to Collection Facilities	323,179	179,300	79,300	27,450	119,500	373,800	—
612650	Repairs to Process Facilities	766,726	3,503,100	3,430,800	3,017,529	3,038,700	3,436,000	—
612680	Repairs to Buildings	190,771	352,000	399,300	373,133	377,300	288,500	—
612760	Repairs to Material Handling and Farming Equipment	1,250	35,700	35,700	35,700	35,700	33,100	—
612780	Safety Repairs and Services	70,717	97,100	89,600	89,570	89,600	87,400	—
612860	Repairs to Vehicle Equipment	6,136	24,400	24,400	22,400	14,000	30,000	—
200	TOTAL CONTRACTUAL SERVICES	13,154,599	18,259,500	17,837,000	12,055,630	16,079,400	20,658,900	—
623030	Metals	5,181	10,000	10,000	7,502	9,500	10,000	—
623070	Electrical Parts and Supplies	825,793	1,436,200	1,153,200	1,124,076	1,156,200	1,447,500	—
623090	Plumbing Accessories and Supplies	149,142	198,900	198,900	173,824	193,100	190,000	—
623130	Buildings, Grounds, Paving Materials, and Supplies	22,865	30,200	39,200	39,115	23,300	29,100	—
623190	Paints, Solvents, and Related Materials	584	2,300	800	776	2,000	2,300	—

101 67000	Fund: Corporate Department: Maintenance & Operations Division: North Service Area	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623250	Vehicle Parts and Supplies	10,767	17,000	17,000	16,976	15,300	20,000	—
623270	Mechanical Repair Parts	792,609	928,600	928,600	894,372	986,900	1,272,800	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	13,719	15,300	16,300	16,283	15,000	21,800	—
623560	Processing Chemicals	463,621	755,800	730,800	610,056	649,100	804,200	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	26,052	27,500	27,500	25,723	23,500	22,000	—
623660	Cleaning Supplies	—	2,000	2,000	91	500	2,000	—
623680	Tools and Supplies	56,545	76,500	76,500	75,353	74,400	97,500	—
623780	Safety and Medical Supplies	13,268	22,500	22,500	17,081	15,100	18,500	—
623800	Computer Software	660	4,800	4,800	2,762	2,600	4,800	—
623810	Computer Supplies	17,099	14,500	8,200	6,921	9,500	17,500	—
623820	Fuel	8,215	19,100	19,100	18,517	15,200	21,100	—
623850	Communications Supplies	12,749	15,000	15,000	14,912	15,000	15,000	—
623860	Lubricants	1,590	3,000	2,500	1,880	3,000	5,000	—
623990	Materials and Supplies, N.O.C.	6,235	6,500	9,500	9,053	5,600	11,400	—
300	TOTAL MATERIALS AND SUPPLIES	2,426,694	3,585,700	3,282,400	3,055,273	3,214,800	4,012,500	—
634600	Equipment for Collection Facilities	—	65,000	20,500	20,467	20,500	90,000	—
634650	Equipment for Process Facilities	94,163	151,400	101,900	100,968	95,600	271,000	—
634760	Material Handling and Farming Equipment	60,216	—	—	—	—	—	—
634860	Vehicle Equipment	199,613	98,000	168,500	166,679	168,400	582,500	—
634990	Machinery and Equipment, N.O.C.	—	—	5,401	5,150	—	—	—
400	TOTAL MACHINERY AND EQUIPMENT	353,992	314,400	296,301	293,264	284,500	943,500	—
TOTAL NORTH SERVICE AREA		\$ 41,911,093	\$ 48,560,700	\$ 47,792,901	\$ 33,798,033	\$ 45,907,700	\$ 52,689,900	\$ —

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.

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				
		2020	2021		2022	
					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		1	
HP12	Secretary #2 (Administrative Specialist) (New Grade HP11)	1	—		—	
TOTAL 710	North Service Area Executive Office	4	4	650,710	4	607,968
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	223,388	2	223,388
720	Plant Engineering & Maintenance Section					
724	Maintenance Unit					
HP19	Master Mechanic	1	1		—	
HP19	Master Mechanic #2 (Master Mechanic I) (New Grade HP18)	—	—		1	
HP18	Principal Electrical Engineer	1	1		1	
HP17	Assistant Master Mechanic	4	4		4	
HP17	Senior Electrical Engineer	1	1		1	
HP15	Associate Civil Engineer #2 (Engineering Technician IV) (New Grade HP12)	1	1		1	
HP15	Associate Electrical Engineer	—	1		1	
HP15	Associate Process Control Engineer	1	1		1	
HP14	Assistant Electrical Engineer	1	—		—	
HP11	Administrative Specialist	1	1		1	
TOTAL 724	Maintenance Unit	11	11	1,455,914	11	1,448,867
760	Area Maintenance Section					
764	Area Maintenance Unit					
PR5933	Architectural Ironworker	2	2		2	

Fund: Corporate Dept: Maintenance & Operations Division: North Service Area		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
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	
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	8,461,253	80	8,461,253
TOTAL 760	Area Maintenance Section	80	80	8,461,253	80	8,659,685
TOTAL 720	Plant Engineering & Maintenance Section	91	91	9,917,167	91	10,108,552
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 I #2 (Managing Engineer) (New Grade HP20)	1	—		—	
HP20	Managing Engineer	—	1		1	
TOTAL 715	Terrence J. O'Brien Water Reclamation Plant Branch Office	1	1	206,569	1	206,568

Fund: Corporate Dept: Maintenance & Operations Division: North Service Area		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
730	Plant Operations Section					
731	Administrative Unit					
HP18	Principal Engineer	1	1		1	
HP15	Associate Civil Engineer	—	1		1	
HP12	Engineering Technician IV	1	1		1	
TOTAL 731	Administrative Unit	2	3	329,229	3	351,541
723	Electrical Engineering Unit					
HP15	Associate Process Control Engineer	1	1		1	
NR6251	Chief Electrical Operator	1	1		1	
NR6233	Electrical Operator II	5	5		5	
NR6232	Electrical Operator I	2	2		2	
TOTAL 723	Electrical Engineering Unit	9	9	944,407	9	949,738
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	3		5	
NR8651	Maintenance Laborer Class A	2	2		—	
NR8651	Maintenance Laborer Class A #1	—	—		2	
TOTAL 732	Treatment Operations Unit	19	18	1,722,269	20	1,915,244
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	
NR6810	Fireman-Oiler #1	3	—		—	
NR6832	Operating Engineer II	8	8		8	
NR6831	Operating Engineer I	5	5		5	
TOTAL 734	Mechanical Operations Unit	24	21	2,264,447	21	2,270,056
TOTAL 730	Plant Operations Section	54	51	5,260,352	53	5,486,580

Fund: Corporate Dept: Maintenance & Operations Division: North Service Area		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
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	794,503	11	797,130
TOTAL 715	Terrence J. O'Brien Water Reclamation Plant Branch	66	63	6,261,423	65	6,490,278
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	258,820	2	267,608
753	Operations Unit					
HP17	Senior Engineer	1	1		1	
HP16	Treatment Plant Operator III	1	1		1	
HP14	Treatment Plant Operator II	7	7		7	
HP12	Treatment Plant Operator I	5	5		5	
NR6810	Fireman-Oiler	1	1		1	
TOTAL 753	Operations Unit	15	15	1,450,664	15	1,455,303
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	
TOTAL 755	General Plant Services Unit	4	4	331,451	4	331,451
TOTAL 750	Hanover Park Water Reclamation Plant Section	21	21	2,040,935	21	2,054,363
780	James C. Kirie Water Reclamation Plant Section					
781	Administrative Unit					
HP20	Managing Engineer	1	1		1	

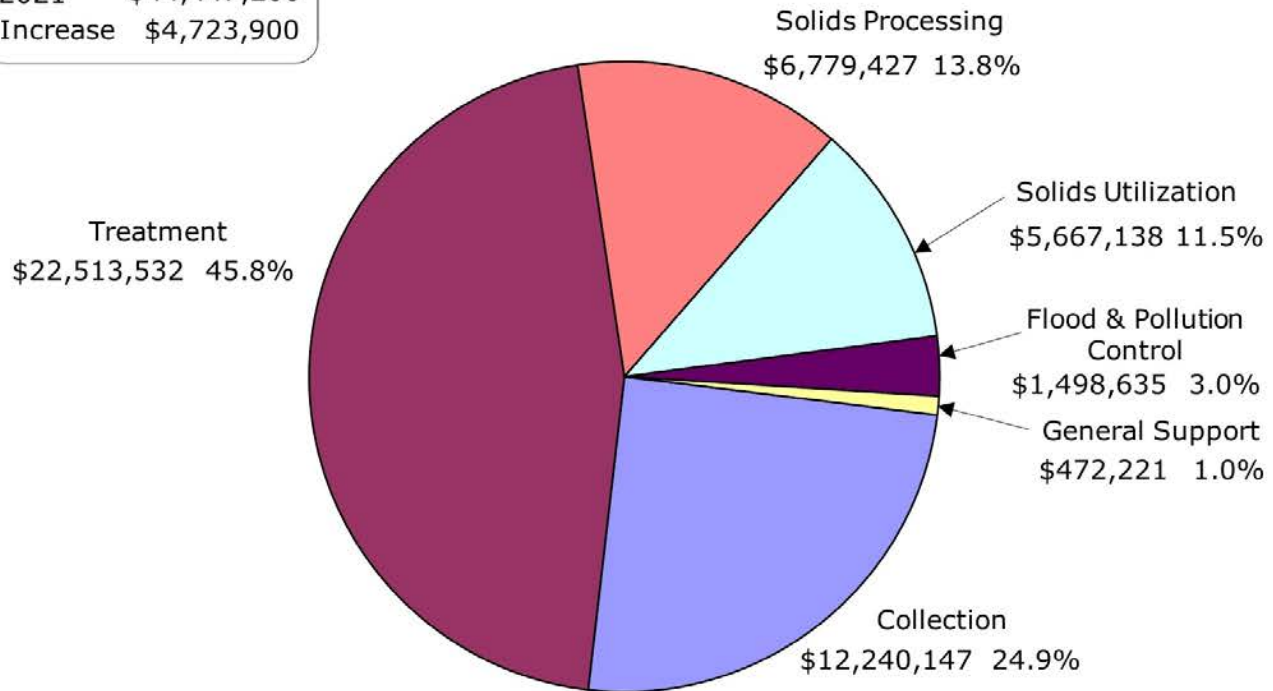
Fund: Corporate Dept: Maintenance & Operations Division: North Service Area		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP11	Administrative Specialist	1	1		—	
TOTAL 781	Administrative Unit	2	2	274,571	1	206,568
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	7	7		7	
HP12	Treatment Plant Operator I	2	2		2	
NR6810	Fireman-Oiler	1	1		1	
NR8650	Maintenance Laborer Class A Shift	3	3		3	
NR6831	Operating Engineer I	6	6		6	
TOTAL 783	Operations Unit	22	22	2,308,985	22	2,295,605
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	389,904	5	395,012
TOTAL 780	James C. Kirie Water Reclamation Plant Section	29	29	2,973,460	28	2,897,185
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	445,504	3	445,504
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	—		—	

Fund: Corporate Dept: Maintenance & Operations Division: North Service Area		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP12	Treatment Plant Operator I	4	4		4	
NR6810	Fireman-Oiler	1	1		1	
NR6832	Operating Engineer II	1	1		—	
NR6832	Operating Engineer II #1	—	—		1	
NR6831	Operating Engineer I	6	6		6	
TOTAL 793	Operations Unit	22	21	2,084,980	21	2,094,228
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	488,571	6	488,571
TOTAL 790	John E. Egan Water Reclamation Plant Section	31	30	3,019,055	30	3,028,303
TOTAL	Maintenance & Operations North Service Area	244	240	25,086,138	241	25,410,037
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.						

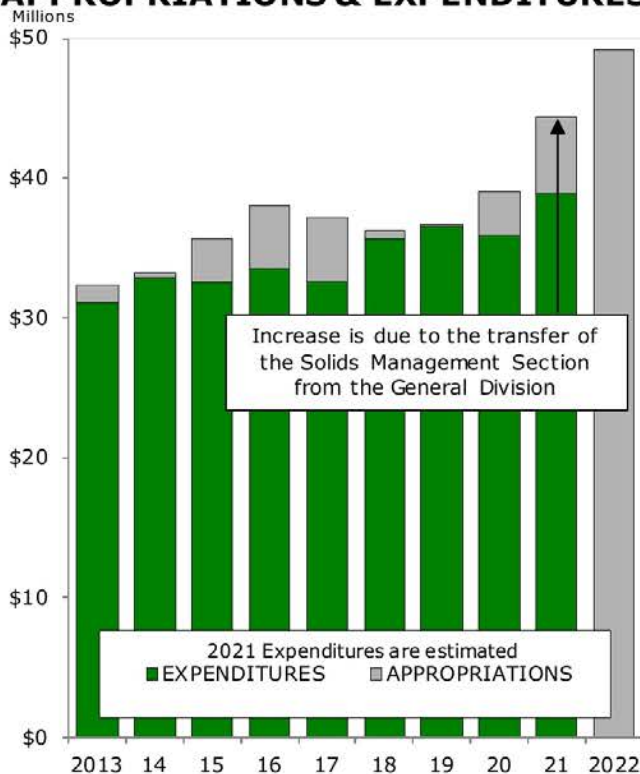
MAINTENANCE & OPERATIONS – CALUMET SERVICE AREA

2022 \$49,171,100
 2021 \$44,447,200
 Increase \$4,723,900

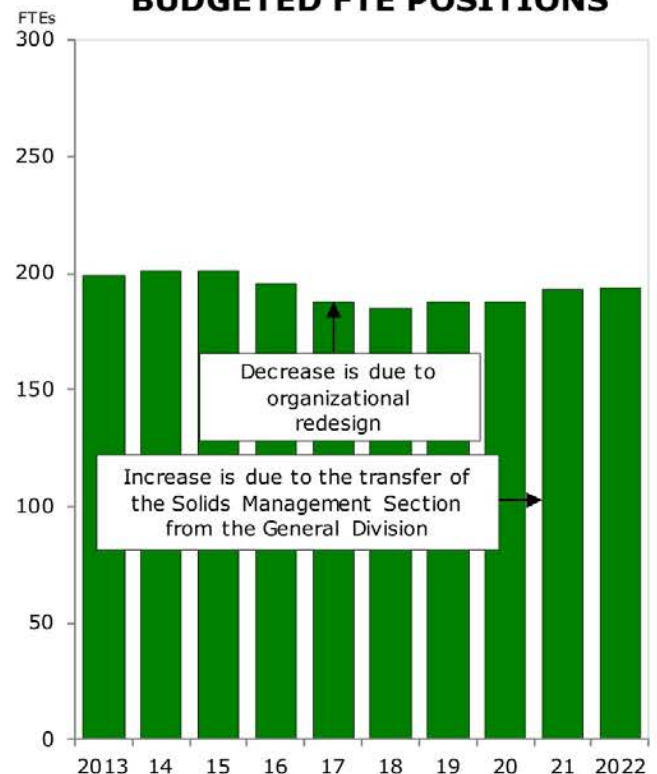
FUNCTIONS



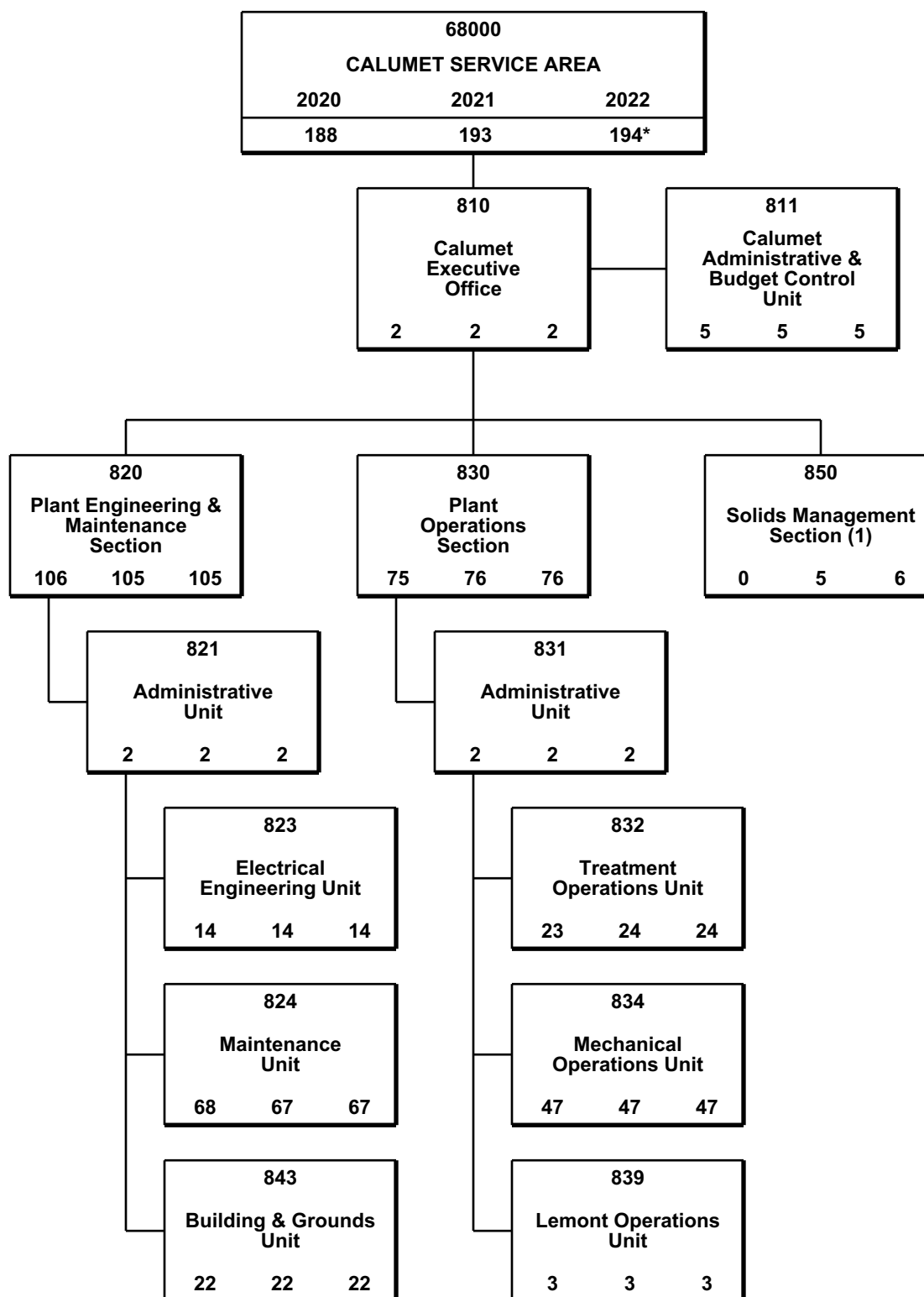
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



MAINTENANCE & OPERATIONS - CALUMET SERVICE AREA



* In 2022, there are no positions funded by the Stormwater Management Fund.

(1) Effective 01/01/21, five positions in Section 850 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.		\$34,753,679	70.7 %
		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.		\$ 6,779,427	13.8 %
3. SOLIDS UTILIZATION: The Calumet Service Area will utilize approximately 24,250 dry tons of biosolids for application at final utilization sites such as daily and final cover in sanitary landfills.		\$ 5,667,138	11.5 %
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.		\$ 1,498,635	3.0 %
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.		\$ 472,221	1.0 %
Division Totals		\$49,171,100	100.0 %

MEASURABLE GOALS:		2020	2021	2022
	Unit of Measure	Actual	Estimated	Proposed
1. The Calumet Service Area will collect and treat approximately 101.0 billion gallons of wastewater in 2022.	Billion Gallons	97.6	101.0	101.0
2. The Calumet Service Area will remove and process solids from 35,000 dry tons of concentrated sewage.	Dry Tons Process Solids	33,975	35,000	35,000
3. The Calumet Service Area will obtain 100 percent permit compliance in 2022 for National Pollutant Discharge Elimination System effluent limits.	Percent	100.00%	100.00%	100.00%
4. The Calumet Service Area will utilize 24,250 dry tons of biosolids in 2022.	Dry Tons	17,868	24,250	24,250

68000 M&O - CALUMET SERVICE AREA**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:		2020	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
1000	Collection	\$10,993,604	2022	56 \$ 12,240,147	\$ 1,337,167	12.3	
			2021	56 \$ 10,902,980			
1100	Surface Interceptor Systems	\$ 476,189	2022	4 \$ 511,400	\$ 35,200	7.4	
			2021	4 \$ 476,200			
1200	Tunnel and Reservoir System	\$ 3,681,460	2022	10 \$ 3,887,200	\$ 514,000	15.2	a)
			2021	10 \$ 3,373,200			
1300	Pumping Station Facilities	\$ 2,824,103	2022	15 \$ 3,235,100	\$ 163,200	5.3	b)
			2021	15 \$ 3,071,900			
1900	Collection - Indirect Costs	\$ 4,011,852	2022	27 \$ 4,606,447	\$ 624,767	15.7	c)
			2021	27 \$ 3,981,680			
2000	Treatment	\$16,411,548	2022	83 \$ 22,218,732	\$ 1,849,957	9.1	
			2021	83 \$ 20,368,775			
2000	Pre-Treatment	\$ 473,110	2022	4 \$ 512,100	\$ (1,200)	(0.2)	
			2021	4 \$ 513,300			
2100	Primary Treatment	\$ 1,128,305	2022	11 \$ 1,156,400	\$ 54,500	4.9	
			2021	11 \$ 1,101,900			
2200	Secondary Treatment	\$ 5,558,391	2022	22 \$ 7,865,100	\$ 944,900	13.7	d)
			2021	22 \$ 6,920,200			
2300	Tertiary Treatment	\$ 1,613,503	2022	5 \$ 2,508,100	\$ 536,900	27.2	e)
			2021	5 \$ 1,971,200			
2900	Treatment - Indirect Costs	\$ 7,638,239	2022	41 \$ 10,177,032	\$ 314,857	3.2	f)
			2021	41 \$ 9,862,175			
<p>a) Increase is due to an increased cost of electrical energy for TARP (\$495,300).</p> <p>b) Increase is due to an increased cost of electrical energy for pumping stations (\$263,800), offset by a decreased demand to rehabilitate pump rotating assemblies (\$100,000).</p> <p>c) Increase is due to Foxboro distributed control system upgrades (\$300,000), the reallocation of natural gas costs to more accurately reflect current activities (\$100,600), an increased cost of electrical energy (\$49,100), the procurement of a materials storage structure (\$30,000), the replacement of two stake body trucks (\$26,000), and the reallocation of salaries to more accurately reflect current activities (\$24,700).</p> <p>d) Increase is due to an increased cost of electrical energy for the Calumet and Lemont WRPs (\$879,800).</p> <p>e) Increase is due to the addition of services to reline six sodium hypochlorite tanks at the Calumet WRP (\$210,000), a price increase for sodium hypochlorite due to supply chain disruptions (\$186,700), and a revised estimate for sodium bisulfite usage at the Calumet WRP (\$120,400).</p> <p>f) Increase is due to an increased demand for repairs and alterations to plant facilities (\$750,000), compensation plan adjustments (\$122,700), and an increased demand for services to install gas monitoring equipment (\$110,000), offset by a net decrease in the timing of Foxboro distributed control system upgrades (\$438,600) and the reallocation of natural gas costs to more accurately reflect current activities (\$308,300).</p>							

68000 M&O - CALUMET SERVICE AREA**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:		2020	Budgeted		Change	
Number	Name	Actual	FTEs	Dollars	Dollars	Percent
3000	Solids Processing	\$ 5,889,932	2022 39	\$ 6,779,427	\$ 572,247	9.2
			2021 39	\$ 6,207,180		
3100	Thickening	\$ 697,142	2022 7	\$ 682,700	\$ 5,600	0.8
			2021 7	\$ 677,100		
3200	Stabilization	\$ 1,694,407	2022 9	\$ 1,902,500	\$ 159,900	9.2
			2021 9	\$ 1,742,600		
3300	Dewatering	\$ 287,950	2022 3	\$ 299,600	\$ 5,300	1.8
			2021 3	\$ 294,300		
3900	Solids Processing - Indirect Costs	\$ 3,210,433	2022 20	\$ 3,894,627	\$ 401,447	11.5
			2021 20	\$ 3,493,180		
4000	Flood & Pollution Control	\$ 1,085,817	2022 2	\$ 1,498,635	\$ 375,865	33.5
			2021 2	\$ 1,122,770		
4200	Waterways Control and Stormwater Reservoirs	\$ 209,092	2022 1	\$ 238,500	\$ 39,500	19.8
			2021 1	\$ 199,000		
4400	Aeration Facilities	\$ 733,992	2022 1	\$ 882,500	\$ 115,500	15.1
			2021 1	\$ 767,000		
4900	Flood & Pollution Control - Indirect Costs	\$ 142,733	2022 —	\$ 377,635	\$ 220,865	140.9
			2021 —	\$ 156,770		
5000	Solids Utilization	\$ 892,126	2022 11	\$ 5,667,138	\$ 506,103	9.8
			2021 10	\$ 5,161,035		
5100	Solids Drying	\$ 69,066	2022 3	\$ 2,786,200	\$ 401,600	16.8
			2021 2	\$ 2,384,600		
5200	Solids Distribution	\$ 69,065	2022 2	\$ 1,641,700	\$ (38,800)	(2.3)
			2021 2	\$ 1,680,500		
5900	Solids Utilization - Indirect Costs	\$ 753,995	2022 6	\$ 1,239,238	\$ 143,303	13.1
			2021 6	\$ 1,095,935		
7000	General Support (excluding program number 7604)	\$ 342,151	2022 3	\$ 472,221	\$ 70,461	17.5
			2021 3	\$ 401,760		
7604	Social Security and Medicare Contributions	\$ 276,418	2022 —	\$ 294,800	\$ 12,100	4.3
			2021 —	\$ 282,700		
Division Totals		\$35,891,596	2022 194	\$49,171,100	\$ 4,723,900	10.6 %
			2021 193	\$44,447,200		
<p>g) Increase is due to an increased cost of electrical energy for the Calumet WRP (\$153,400).</p> <p>h) Increase is due to the reallocation of natural gas costs to more accurately reflect current activities (\$108,700), compensation plan adjustments (\$86,700), an increased cost of electrical energy (\$76,300), the procurement of a materials storage structure (\$46,500), the replacement of two stake body trucks (\$40,300) and one 480V power generator (\$35,700), and the reallocation of salaries to more accurately reflect current activities (\$26,300).</p> <p>i) Increase is due to higher electrical energy costs for small stormwater detention reservoirs (\$37,900).</p> <p>j) Increase is due to higher electrical energy costs for SEPA stations (\$162,400), offset by the purchase of Royce monitors in 2021 (\$50,000).</p> <p>k) Increase is due to the addition of protective coating services for digester covers (\$180,000) and the reallocation of natural gas costs to more accurately reflect current activities (\$15,100).</p> <p>l) Increase is due to increased demands for services of tractor mounted paddle aerators and rotavators, (\$125,000), truck hauling of processed solids (\$123,400), services of tractors with rotavators and sludge pumps (\$109,000), services of heavy equipment with operators (\$25,000), and the addition of one FTE position (\$15,000).</p> <p>m) Increase is due to an increased cost of electrical energy (\$31,100) and an increased demand for building control services (\$30,000).</p> <p>* The 2022 position total for the Calumet Service Area is 194, with no positions budgeted in the Stormwater Management Fund.</p>						

68000 M&O - CALUMET SERVICE AREA**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
1000-2900	Collection & Treatment					
	Collect and Treat Wastewater at the Calumet and Lemont Water Reclamation Plants					
	Calumet Water Reclamation Plant	Mil. Gallons	96,654	100,000	100,000	
		Cost	\$ 26,959,685	\$ 30,623,445	\$ 33,964,111	a)
		Cost/Mil. Gallons	\$ 278.93	\$ 306.23	\$ 339.64	
	Lemont Water Reclamation Plant	Mil. Gallons	939	1,000	1,000	
		Cost	\$ 445,467	\$ 648,310	\$ 494,768	b)
		Cost/Mil. Gallons	\$ 474.41	\$ 648.31	\$ 494.77	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	33,975	35,000	35,000	
		Cost	\$ 5,889,932	\$ 6,207,180	\$ 6,779,427	c)
		Cost/Dry Ton	\$ 173.36	\$ 177.35	\$ 193.70	
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	\$ 209,092	\$ 199,000	\$ 238,500	d)
		Cost/Reservoir	\$ 20,909.20	\$ 19,900.00	\$ 23,850.00	d)
4400	Aeration Facilities	Cost	\$ 733,992	\$ 767,000	\$ 882,500	e)
4900	Flood & Pollution Control - Indirect Costs	Cost	\$ 142,733	\$ 156,770	\$ 377,635	f)
5000	Solids Utilization					
	Utilize Biosolids for Application at Final Utilization Sites, such as for Daily and Final Cover in Sanitary Landfills	Dry Tons	17,868	23,000	24,250	
		Cost	\$ 892,126	\$ 5,161,035	\$ 5,667,138	g)
		Cost/Dry Ton	\$ 49.93	\$ 224.39	\$ 233.70	
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	\$ 342,151	\$ 401,760	\$ 472,221	h)
7604	Social Security and Medicare Contributions	Cost	\$ 276,418	\$ 282,700	\$ 294,800	
	Division Totals		\$ 35,891,596	\$ 44,447,200	\$ 49,171,100	
<p>a) Increase is due to an increased cost of electrical energy (\$1,340,600), an increased demand for repairs and alterations to plant facilities (\$750,000), the replacement of aeration blower controls (\$250,000), services to reline six sodium hypochlorite tanks (\$210,000), a price increase for sodium hypochlorite due to supply chain disruptions (\$186,700), the reallocation of salaries to more accurately reflect current activities (\$169,800), and a revised estimate for sodium bisulfite use (\$120,400), offset by the reallocation of natural gas costs to more accurately reflect current activities (\$207,700) and a net decrease in the timing of upgrades to the Foxboro distributed control system (\$138,600).</p> <p>b) Decrease is due to the procurement of a turbo blower and related piping at the Lemont WRP in 2021 (\$180,000), offset by an increased cost of electrical energy (\$42,100).</p> <p>c) Increase is due to an increased cost of electrical energy (\$231,600), the reallocation of natural gas costs to more accurately reflect current activities (\$108,700), compensation plan adjustments (\$87,000), the procurement of a materials storage structure (\$46,500), and the reallocation of salaries to more accurately reflect current activities (\$42,000).</p> <p>d) Increase is due to an increased cost of electrical energy for small stormwater detention reservoirs (\$37,900).</p> <p>e) Increase is due to an increased cost of electrical energy for SEPA stations (\$162,400), offset by the purchase of Royce monitors in 2021 (\$50,000).</p> <p>f) Increase is due to the addition of protective coating services for digester covers (\$180,000) and the reallocation of natural gas costs to more accurately reflect current activities (\$15,100).</p> <p>g) Increase is due to an increased demand for services of tractor mounted paddle aerators and rotavators (\$125,000), an increased demand for truck hauling of processed solids (\$123,400), an increased demand for services of tractors with rotavators and sludge pumps (\$109,000), and the addition of one FTE position (\$54,000).</p> <p>h) Increase is due to an increased cost of electrical energy (\$31,100) and an increased demand for building control services (\$30,000).</p>						

101 68000	Fund: Corporate Department: Maintenance & Operations Division: Calumet Service Area	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 18,366,645	\$ 19,335,500	\$ 19,335,500	\$ 13,286,936	\$ 18,979,200	\$ 19,608,100	\$ —
601060	Compensation Plan Adjustments	1,409,180	1,071,300	1,071,300	636,054	1,007,300	1,394,000	—
601070	Social Security and Medicare Contributions	276,418	282,700	282,700	205,426	279,100	294,800	—
601080	Salaries of Nonbudgeted Employees	26,029	—	23,900	23,874	23,900	—	—
601100	Tuition and Training Payments	1,099	34,300	34,300	3,349	3,500	35,600	—
100	TOTAL PERSONAL SERVICES	20,079,371	20,723,800	20,747,700	14,155,639	20,293,000	21,332,500	—
612010	Travel	—	5,000	5,000	—	500	5,800	—
612030	Meals and Lodging	4,610	10,000	10,000	3,700	5,500	13,000	—
612050	Compensation for Personally-Owned Automobiles	27,061	45,000	45,000	17,813	32,000	45,000	—
612080	Motor Vehicle Operating Services	—	500	500	3	300	500	—
612150	Electrical Energy	9,342,341	9,792,700	9,792,700	4,890,464	7,900,000	12,127,600	—
612160	Natural Gas	738,103	731,700	731,700	424,993	697,200	673,800	—
612170	Water and Water Services	264,355	390,500	390,500	167,786	284,600	340,500	—
612240	Testing and Inspection Services	52,446	70,000	70,000	67,611	46,700	66,400	—
612330	Rental Charges	—	7,700	7,700	3,100	3,000	8,100	—
612410	Governmental Service Charges	99,613	100,000	100,000	97,752	99,600	100,000	—
612420	Maintenance of Grounds and Pavements	108,486	247,500	400,200	399,211	327,000	167,500	—
612490	Contractual Services, N.O.C.	101	15,500	15,500	15,407	10,000	16,400	—
612520	Waste Material Disposal Charges	380,431	4,013,900	3,863,900	3,506,757	2,915,900	4,338,000	—
612600	Repairs to Collection Facilities	36,141	383,700	320,700	187,399	251,500	609,300	—
612620	Repairs to Waterway Facilities	—	10,000	10,000	—	—	—	—
612650	Repairs to Process Facilities	2,138,855	3,095,900	3,004,200	3,004,122	1,701,000	3,933,700	—
612680	Repairs to Buildings	175,616	484,800	501,500	494,932	360,800	462,000	—
612760	Repairs to Material Handling and Farming Equipment	43,313	84,300	84,300	80,418	51,000	84,300	—
612780	Safety Repairs and Services	27,248	24,800	32,300	32,246	31,000	28,800	—
612820	Computer Software Maintenance	—	—	—	—	—	3,200	—
612860	Repairs to Vehicle Equipment	39,248	53,500	53,500	53,446	47,300	66,700	—
612990	Repairs, N.O.C.	749	8,000	8,000	7,900	7,000	2,000	—
200	TOTAL CONTRACTUAL SERVICES	13,478,718	19,575,000	19,447,200	13,455,060	14,771,900	23,092,600	—
623030	Metals	7,463	10,100	10,100	9,700	8,800	10,100	—
623070	Electrical Parts and Supplies	337,950	528,300	686,300	631,080	603,300	803,900	—
623090	Plumbing Accessories and Supplies	77,269	219,800	211,800	114,349	115,400	201,100	—
623110	Hardware	737	2,800	2,800	2,800	1,500	2,800	—

101 68000	Fund: Corporate Department: Maintenance & Operations Division: Calumet Service Area	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623130	Buildings, Grounds, Paving Materials, and Supplies	25,016	56,600	47,600	42,854	30,600	62,400	—
623190	Paints, Solvents, and Related Materials	22,835	2,800	10,800	10,361	10,600	2,800	—
623250	Vehicle Parts and Supplies	29,335	62,500	62,500	61,100	54,100	66,500	—
623270	Mechanical Repair Parts	615,970	632,200	782,200	781,125	764,200	704,800	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	7,201	10,000	10,000	8,306	9,400	20,000	—
623560	Processing Chemicals	1,073,415	1,768,700	1,918,700	1,652,685	1,496,500	1,975,800	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	2,328	3,000	3,000	2,713	2,900	7,000	—
623660	Cleaning Supplies	257	2,000	2,000	500	500	2,000	—
623680	Tools and Supplies	41,320	39,000	39,000	38,720	34,700	47,000	—
623780	Safety and Medical Supplies	12,525	20,300	20,300	6,797	14,800	20,300	—
623820	Fuel	19,522	68,800	68,800	68,465	59,100	83,000	—
623860	Lubricants	1,087	2,000	1,000	500	300	2,000	—
623990	Materials and Supplies, N.O.C.	18,280	45,500	45,500	43,351	23,500	32,500	—
300	TOTAL MATERIALS AND SUPPLIES	2,292,511	3,474,400	3,922,400	3,475,406	3,230,200	4,044,000	—
634650	Equipment for Process Facilities	40,996	316,000	314,500	314,452	289,000	164,000	—
634760	Material Handling and Farming Equipment	—	285,000	276,600	276,502	276,600	—	—
634860	Vehicle Equipment	—	48,000	53,800	53,721	53,800	200,000	—
634990	Machinery and Equipment, N.O.C.	—	25,000	30,399	30,130	25,000	338,000	—
400	TOTAL MACHINERY AND EQUIPMENT	40,996	674,000	675,299	674,805	644,400	702,000	—
TOTAL CALUMET SERVICE AREA		\$ 35,891,596	\$ 44,447,200	\$ 44,792,599	\$ 31,760,910	\$ 38,939,500	\$ 49,171,100	\$ —

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 exceed Adjusted Appropriation for a specific division as funding is controlled at the M&O Overall department-level or when transfers of funds are anticipated.

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				
		2020	2021		2022	
					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	323,529	2	327,067
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	408,794	5	413,902
820	Plant Engineering & Maintenance Section					
821	Administrative Unit					
HP20	Managing Engineer	1	1		1	
HP14	Engineering Technician V	1	1		1	
TOTAL 821	Administrative Unit	2	2	281,414	2	290,205
823	Electrical Engineering Unit					
HP15	Associate Process Control Engineer	2	2		2	
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	14	14	1,465,493	14	1,470,824
824	Maintenance Unit					
HP19	Master Mechanic	1	1		—	
HP19	Master Mechanic #2 (Master Mechanic I) (New Grade HP18)	—	—		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				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	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	67	7,241,280	67	7,385,922
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	1,630,394	22	1,639,638
TOTAL 820	Plant Engineering & Maintenance Section	106	105	10,618,580	105	10,786,589
830	Plant Operations Section					
831	Administrative Unit					
HP21	Engineer of Treatment Plant Operations I #2 (Managing Engineer) (New Grade HP20)	1	—		—	
HP20	Managing Engineer	—	1		1	

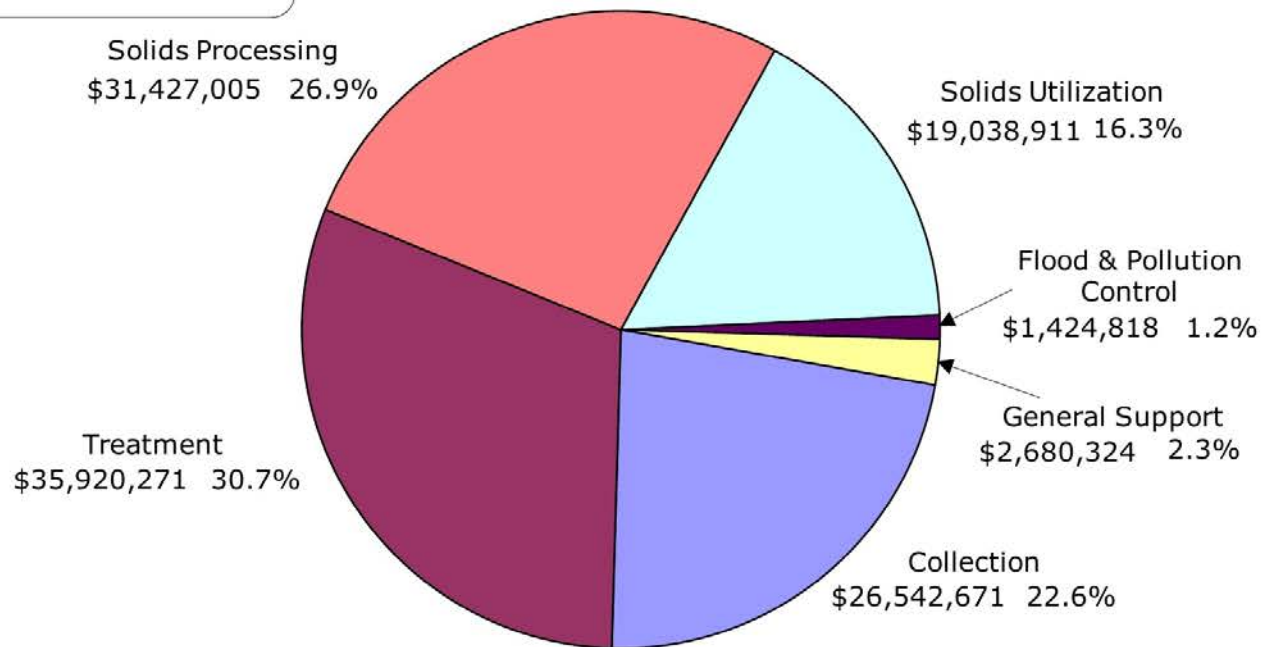
Fund: Corporate Dept: Maintenance & Operations Division: Calumet Service Area		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP18	Principal Engineer	1	1		1	
TOTAL 831	Administrative Unit	2	2	333,889	2	348,997
832	Treatment Operations Unit					
HP15	Associate Civil Engineer	—	1		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	24	2,226,568	24	2,259,185
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	4,931,444	47	4,935,187
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	290,946	3	274,656
TOTAL 830	Plant Operations Section	75	76	7,782,847	76	7,818,026
850	Solids Management Section					
HP17	Senior Engineer	—	1		1	
HP14	Engineering Technician V	—	2		2	

Fund: Corporate Dept: Maintenance & Operations Division: Calumet Service Area		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP12	Engineering Technician IV	—	1		1	
HP11	Engineering Technician III	—	1		2	
TOTAL 850	Solids Management Section	—	5	495,440	6	559,902
TOTAL	Maintenance & Operations Calumet Service Area	188	193	19,629,190	194	19,905,487
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.						

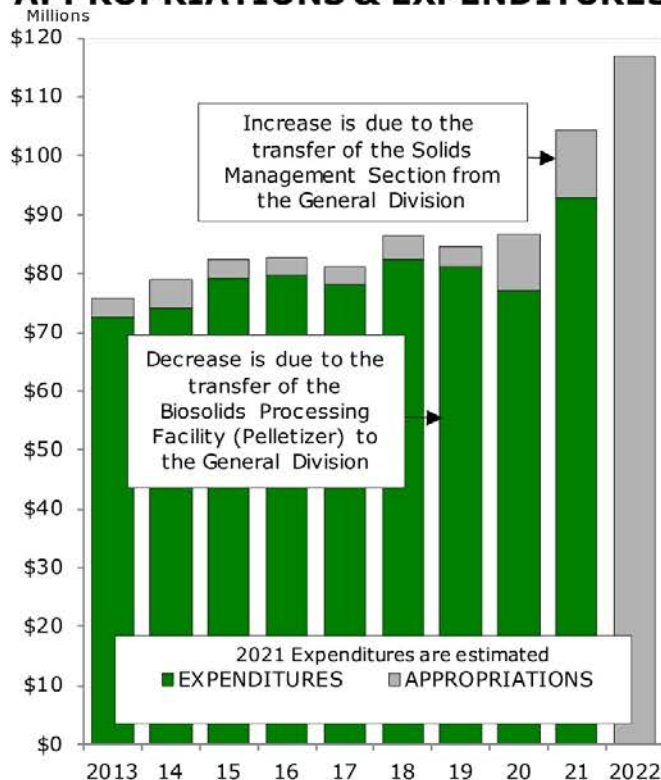
MAINTENANCE & OPERATIONS – STICKNEY SERVICE AREA

2022 \$117,034,000
2021 \$104,302,500
Increase \$12,731,500

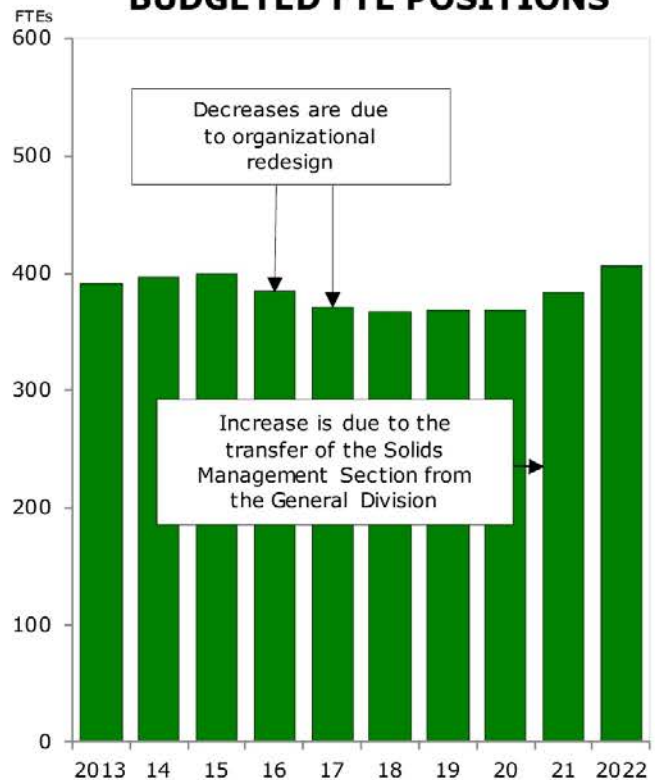
FUNCTIONS



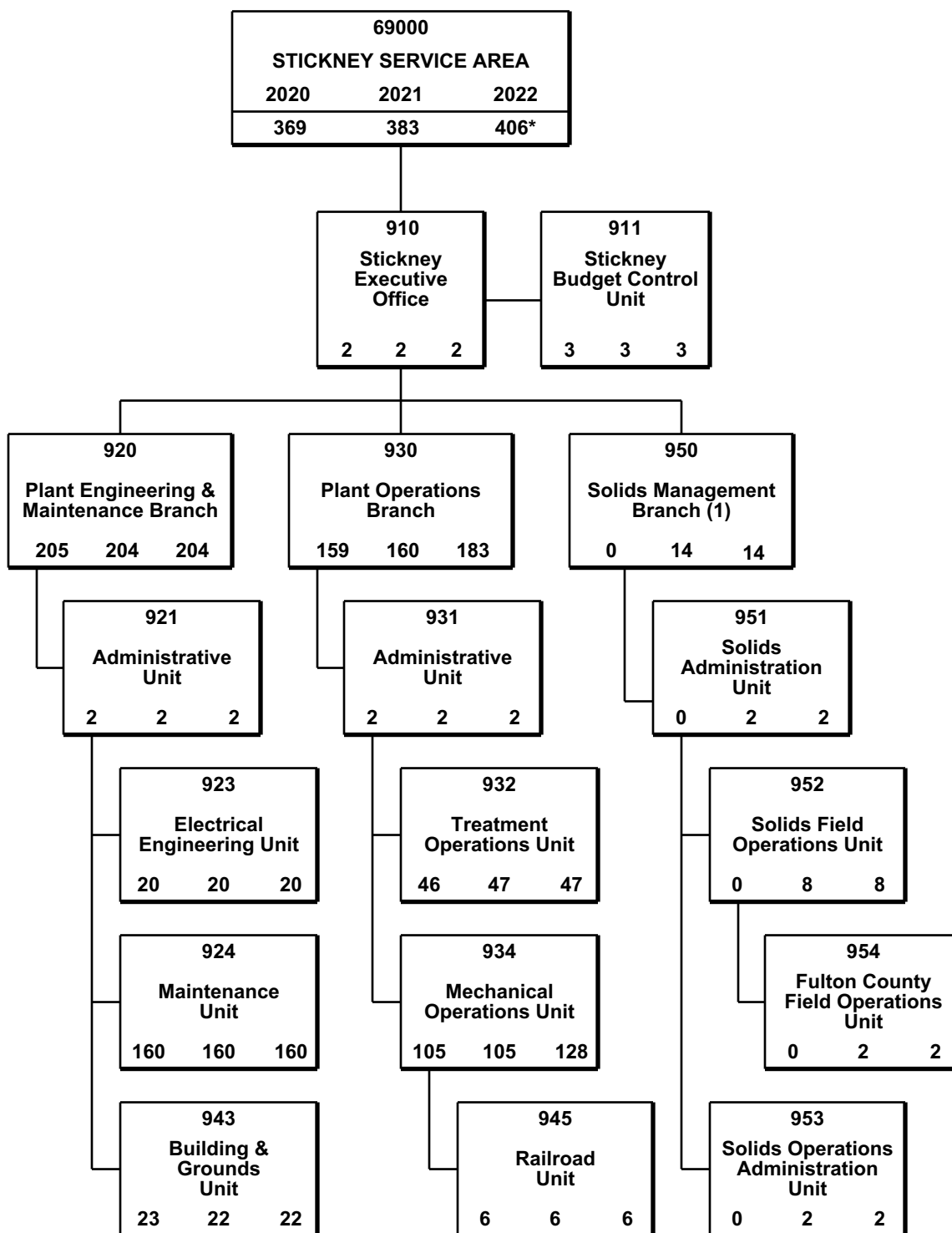
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS

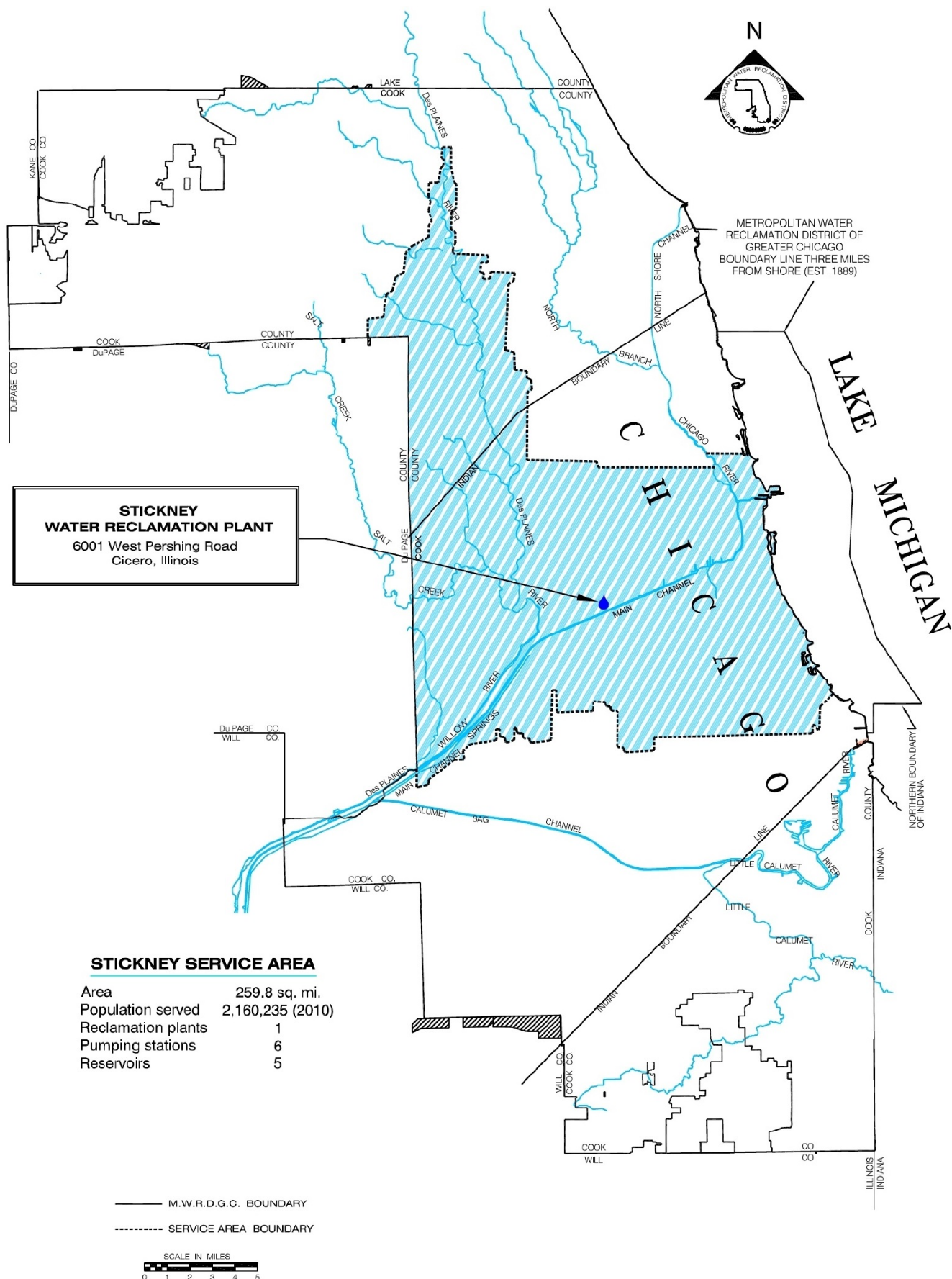


MAINTENANCE & OPERATIONS - STICKNEY SERVICE AREA



* In 2022, 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, 14 positions in Branch 950 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 271.3 billion gallons of wastewater through its treatment facilities.		\$ 62,462,942	53.3 %
<p style="text-align: right;">Design: Flows ^ CBOD * SS *</p> <p>Stickney Water Reclamation Plant 1,200 MGD 10 mg/L 12 mg/L</p> <p>^ In millions of gallons per day (MGD).</p> <p>* National Pollutant Discharge Elimination System monthly effluent quality standards in milligrams per liter:</p> <p> CBOD - Carbonaceous Biochemical Oxygen Demand</p> <p> SS - Suspended Solids</p>			
2. SOLIDS PROCESSING: The Stickney Service Area will remove 99,200 dry tons and process solids from 141,700 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.		\$ 31,427,005	26.9 %
3. SOLIDS UTILIZATION: The Stickney Service Area will utilize 78,000 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.		\$ 19,038,911	16.3 %
4. FLOOD & POLLUTION CONTROL: The Stickney Service Area will work to prevent local area flooding through the operation of five 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.		\$ 1,424,818	1.2 %
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.		\$2,680,324	2.3 %
Division Totals		\$117,034,000	100.0 %

MEASURABLE GOALS:		2020	2021	2022
	Unit of Measure	Actual	Estimated	Proposed
1. The Stickney Service Area will collect and treat approximately 271 billion gallons of wastewater in 2022.	Billion Gallons	255	271	271
2. The Stickney Service Area will remove and process solids from 141,700 dry tons of concentrated sewage, including 42,500 dry tons transferred from the North Service Area.	Dry Tons Process Solids	149,793	141,700	141,700
3. The Stickney Service Area will obtain 100 percent permit compliance in 2022 for National Pollutant Discharge Elimination System effluent limits.	Percent	100.00%	100.00%	100.00%
4. The Stickney Service Area will utilize 78,000 dry tons of biosolids in 2022 (does not include Pelletizer Facility Operations).	Dry Tons	—	78,000	78,000

69000 M&O - STICKNEY SERVICE AREA**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:			Budgeted		Change	
Number	Name	2020 Actual		FTEs Dollars	Dollars Percent	
1000	Collection	\$20,871,712	2022	81 \$ 26,542,671	\$ 2,959,141	12.5
			2021	79 \$ 23,583,530		
1100	Surface Interceptor Systems	\$ 214,694	2022	— \$ 256,800	\$ 39,800	18.3
			2021	— \$ 217,000		
1200	Tunnel and Reservoir System	\$ 5,827,942	2022	14 \$ 7,460,900	\$ 1,410,000	23.3
			2021	12 \$ 6,050,900		
1300	Pumping Station Facilities	\$ 7,660,745	2022	29 \$ 9,480,700	\$ 1,265,900	15.4
			2021	28 \$ 8,214,800		
1900	Collection - Indirect Costs	\$ 7,168,331	2022	38 \$ 9,344,271	\$ 243,441	2.7
			2021	39 \$ 9,100,830		
2000	Treatment	\$23,822,899	2022	139 \$ 35,321,971	\$ 5,562,288	18.7
			2021	126 \$ 29,759,683		
2000	Pre-Treatment	\$ 2,129,288	2022	24 \$ 2,217,600	\$ 110,600	5.2
			2021	17 \$ 2,107,000		
2100	Primary Treatment	\$ 1,806,137	2022	23 \$ 1,643,700	\$ (80,300)	(4.7)
			2021	18 \$ 1,724,000		
2200	Secondary Treatment	\$ 7,872,221	2022	28 \$ 10,411,800	\$ 1,832,100	21.4
			2021	26 \$ 8,579,700		
2300	Tertiary Treatment	\$ 16,259	2022	— \$ 15,700	\$ 300	1.9
			2021	— \$ 15,400		
2900	Treatment - Indirect Costs	\$11,998,994	2022	64 \$ 21,033,171	\$ 3,699,588	21.3
			2021	65 \$ 17,333,583		
<p>a) Increase is due to an increased cost of electrical energy for pumping stations and control gates (\$54,800).</p> <p>b) Increase is due to an increased cost of electrical energy for the Mainstream Pumping Station and Tunnel and Reservoir Plan facilities (\$1,009,900), the allocation of funds for the purchase of renewable energy credits (\$500,000), offset by a reduced demand for painting and protective coating services at the Stickney WRP (\$150,000).</p> <p>c) Increase is due to an increased cost of electrical energy for the pumping stations at the Stickney WRP and the Racine Avenue Pumping Station (\$1,315,300).</p> <p>d) Increase is due to an increased demand for chains, sprockets, and appurtenances (\$120,000) and an increased cost of electrical energy (\$95,800).</p> <p>e) Increase is due to an increased cost of electrical energy for the aeration blowers at the Stickney WRP (\$1,344,000), an increased demand for final tank painting at the Stickney WRP (\$446,200), and electrical parts for process blower motors (\$19,300).</p> <p>f) Increase is due to an upgrade to distributed control systems (\$3,100,000) and an increased demand for gas monitoring equipment (\$550,000).</p>						

69000 M&O - STICKNEY SERVICE AREA**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:		2020	Budgeted		Change	
Number	Name	Actual	FTEs	Dollars	Dollars	Percent
3000	Solids Processing	\$26,038,947	2022 139	\$ 31,427,005	\$ 2,604,118	9.0
			2021 133	\$ 28,822,887		
3100	Thickening	\$ 6,153,976	2022 25	\$ 5,403,000	\$ 265,700	5.2
			2021 25	\$ 5,137,300		
3200	Stabilization	\$ 3,852,583	2022 27	\$ 4,137,500	\$ 228,200	5.8
			2021 27	\$ 3,909,300		
3300	Dewatering	\$ 8,787,686	2022 35	\$ 13,044,000	\$ 1,589,100	13.9
			2021 32	\$ 11,454,900		
3900	Solids Processing - Indirect Costs	\$ 7,244,702	2022 52	\$ 8,842,505	\$ 521,118	6.3
			2021 49	\$ 8,321,387		
4000	Flood & Pollution Control	\$ 908,457	2022 7	\$ 1,424,818	\$ 38,144	2.8
			2021 6	\$ 1,386,674		
4200	Waterways Control and Stormwater Reservoirs	\$ 595,153	2022 5	\$ 604,700	\$ 52,900	9.6
			2021 5	\$ 551,800		
4900	Flood & Pollution Control - Indirect Costs	\$ 313,304	2022 2	\$ 820,118	\$ (14,756)	(1.8)
			2021 1	\$ 834,874		
5000	Solids Utilization	\$ 2,587,669	2022 25	\$ 19,038,911	\$ 1,381,974	7.8
			2021 24	\$ 17,656,937		
5100	Solids Drying	\$ 706,163	2022 7	\$ 4,042,600	\$ 282,000	7.5
			2021 7	\$ 3,760,600		
5200	Solids Distribution	\$ 745,079	2022 6	\$ 11,914,200	\$ 1,314,400	12.4
			2021 6	\$ 10,599,800		
5900	Solids Utilization - Indirect Costs	\$ 1,136,427	2022 12	\$ 3,082,111	\$ (214,426)	(6.5)
			2021 11	\$ 3,296,537		
7000	General Support (excluding program number 7604)	\$ 2,210,982	2022 15	\$ 2,680,324	\$ 151,635	6.0
			2021 15	\$ 2,528,689		
7604	Social Security and Medicare Contributions	\$ 555,848	2022 —	\$ 598,300	\$ 34,200	6.1
			2021 —	\$ 564,100		
Division Totals		\$76,996,514	2022 406	\$ 117,034,000	\$ 12,731,500	12.2 % *
			2021 383	\$ 104,302,500		
<p>g) Increase is due to an increased demand for polymer (\$261,600) and an increased cost of electrical energy for pre-digester centrifuges at the Stickney WRP (\$228,200), offset by a reduced demand for rehabilitation services for centrifuges (\$243,100).</p> <p>h) Increase is due to an increased cost of electrical energy for the digesters at the Stickney WRP (\$228,200).</p> <p>i) Increase is due to an increased demand for polymer (\$1,386,000), ferric chloride (\$755,700), and an increased cost of electrical energy for post digester centrifuges at the Stickney WRP (\$137,000), offset by a reduced demand for sodium hydroxide (\$706,200).</p> <p>j) Increase is due to an increased cost of electrical energy at the Stickney WRP (\$260,900), an increased demand for chains, sprockets and appurtenances (\$170,000), centrifuge parts (\$59,500), and fire detection equipment services (\$12,900).</p> <p>k) Increase is due to an increased demand for truck hauling biosolids (\$200,000) and heavy equipment maintenance biosolids (\$50,500).</p> <p>l) Increase is due to an increased demand for beneficial reuse biosolids (\$500,000), furnish and deliver one compost screener (\$385,000), and furnish and deliver one John Deere 744L wheel loader (\$330,000).</p> <p>m) Decrease is due to the 2021 completion of certified rebuild for Caterpillar wheel loader (\$428,800), offset by an increased demand for pavement rehabilitation at Lawndale Avenue Solids Management (\$75,000), railroad track maintenance services (\$50,000), railroad freight car parts (\$25,000), and fuel for equipment at the Solids Management Area (\$23,700).</p> <p>* The 2022 position total for the Stickney Service Area is 406, with an additional nine positions budgeted in the Stormwater Management Fund.</p>						

69000 M&O - STICKNEY SERVICE AREA**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
1000-2900	Collection & Treatment					
	Collect and Treat Wastewater at the Stickney Water Reclamation Plant	Mil. Gallons	254,708	290,000	271,300	
		Cost	\$ 44,694,611	\$ 53,343,213	\$ 61,864,642	a)
		Cost/Mil. Gallons	\$ 175.47	\$ 183.94	\$ 228.03	a)
3000	Solids Processing					
	Remove 99,200 Dry Tons of Solids and Process 141,700 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	149,793	140,700	141,700	
		Cost	\$ 26,038,947	\$ 28,822,887	\$ 31,427,005	b)
		Cost/Dry Ton	\$ 173.83	\$ 204.85	\$ 221.79	
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	\$ 595,153	\$ 551,800	\$ 604,700	
		Cost/Reservoir	\$ 119,030.60	\$ 110,360.00	\$ 120,940.00	
4900	Flood & Pollution Control - Indirect Costs	Cost	\$ 313,304	\$ 834,874	\$ 820,118	
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	—	76,000	78,000	
		Cost	\$ 1,914,984	\$ 12,471,237	\$ 13,670,511	c)
		Cost/Dry Ton	\$ —	\$ 164.10	\$ 175.26	
5271	Pelletizer Disposal	Dry Tons	—	40,000	40,000	
	Control Management and Disposal of Solids by Private Contracts	Cost	\$ 672,685	\$ 5,185,700	\$ 5,368,400	d)
		Cost/Dry Ton	\$ —	\$ 129.64	\$ 134.21	
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	\$ 2,210,982	\$ 2,528,689	\$ 2,680,324	e)
7604	Social Security and Medicare Contributions	Cost	\$ 555,848	\$ 564,100	\$ 598,300	
	Division Totals		\$ 76,996,514	\$ 104,302,500	\$ 117,034,000	
<p>a) Increase is due to an increased cost of electrical energy (\$3,943,800), an upgrade to distributed control systems (\$3,100,000), an increased demand for gas monitoring equipment (\$550,000), the allocation of funds for the purchase of renewable energy credits (\$500,000), and an increased demand for final tanks painting (\$446,200).</p> <p>b) Increase is due to an increased demand for polymer (\$1,647,600), an increased cost of electrical energy (\$854,300), and an increased demand for ferric chloride (\$755,700), offset by the reduced demand of sodium hydroxide (\$706,200).</p> <p>c) Increase is due to an increased demand for beneficial reuse biosolids (\$500,000), furnish and deliver one compost screener (\$385,000), furnish and deliver one John Deere 744L wheel loader (\$330,000), truck hauling solids biosolids (\$200,000), pavement rehabilitation at Lawndale Avenue Solids Management Area (\$75,000) and railroad track maintenance (\$50,000), offset by a reduced demand of the 2021 completion of a certified rebuild of one Caterpillar 980G (\$428,800).</p> <p>d) Increase is due to an increased cost of electrical energy at the Pelletizer Facility (\$182,700).</p> <p>e) Increase is due to an increased cost of electrical energy at the Stickney WRP (\$87,100).</p>						

101 69000	Fund: Corporate Department: Maintenance & Operations Division: Stickney Service Area	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 36,657,437	\$ 39,378,400	\$ 39,378,400	\$ 26,281,338	\$ 37,900,000	\$ 39,751,600	\$ —
601060	Compensation Plan Adjustments	3,058,746	2,335,000	2,335,000	1,726,536	2,250,500	2,823,900	—
601070	Social Security and Medicare Contributions	555,848	564,100	564,100	412,640	561,900	598,300	—
601080	Salaries of Nonbudgeted Employees	5,600	1,500	1,500	—	—	5,000	—
601100	Tuition and Training Payments	18,150	86,500	86,500	22,511	29,200	110,500	—
100	TOTAL PERSONAL SERVICES	40,295,781	42,365,500	42,365,500	28,443,025	40,741,600	43,289,300	—
612010	Travel	794	5,400	5,400	—	500	5,400	—
612030	Meals and Lodging	15,502	26,500	26,500	10,094	16,000	26,500	—
612050	Compensation for Personally-Owned Automobiles	24,855	45,000	45,000	20,107	40,000	45,000	—
612080	Motor Vehicle Operating Services	80	300	300	—	100	300	—
612150	Electrical Energy	18,797,446	19,493,000	19,493,000	10,691,316	18,000,000	25,118,700	—
612160	Natural Gas	1,061,710	2,050,000	1,800,000	733,826	1,988,500	1,824,500	—
612170	Water and Water Services	1,445,942	1,825,200	1,675,200	826,045	1,733,900	1,449,600	—
612240	Testing and Inspection Services	49,132	94,000	84,500	73,459	86,900	95,400	—
612330	Rental Charges	121,626	133,100	133,100	132,195	124,600	137,600	—
612410	Governmental Service Charges	89,880	90,700	90,700	73,045	90,400	90,700	—
612420	Maintenance of Grounds and Pavements	374,245	1,040,900	1,180,600	1,175,814	700,000	1,224,800	—
612430	Payments for Professional Services	18,540	194,000	137,500	90,511	90,600	93,600	—
612490	Contractual Services, N.O.C.	297,983	486,300	485,600	463,400	446,200	567,500	—
612520	Waste Material Disposal Charges	640,073	7,532,700	8,930,500	7,324,234	5,730,000	8,179,900	—
612590	Sludge Disposal	—	4,500,000	4,500,000	4,500,000	4,000,000	4,500,000	—
612600	Repairs to Collection Facilities	1,098,002	2,184,400	1,854,000	1,825,797	1,398,300	1,987,400	—
612650	Repairs to Process Facilities	2,111,810	5,465,100	5,395,100	5,374,115	3,380,100	9,186,700	—
612670	Repairs to Railroads	358,561	642,800	888,200	881,385	461,600	719,000	—
612680	Repairs to Buildings	88,946	485,000	400,000	395,647	350,000	502,500	—
612760	Repairs to Material Handling and Farming Equipment	—	634,300	734,300	731,496	626,400	240,500	—
612780	Safety Repairs and Services	179,381	250,100	250,100	249,165	242,700	290,000	—
612820	Computer Software Maintenance	—	9,000	9,000	8,919	9,000	6,400	—
612860	Repairs to Vehicle Equipment	9,998	27,100	27,100	27,100	25,000	33,100	—
612990	Repairs, N.O.C.	689	16,500	16,500	13,500	15,500	18,000	—
200	TOTAL CONTRACTUAL SERVICES	26,785,195	47,231,400	48,162,200	35,621,170	39,556,300	56,343,100	—

101 69000	Fund: Corporate Department: Maintenance & Operations Division: Stickney Service Area	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623030	Metals	8,871	10,400	10,400	9,900	9,900	10,400	—
623070	Electrical Parts and Supplies	749,917	1,155,100	1,205,300	1,172,890	1,092,400	1,192,700	—
623090	Plumbing Accessories and Supplies	193,249	363,600	363,600	360,873	309,100	400,100	—
623110	Hardware	1,567	2,100	2,100	1,685	1,800	6,100	—
623130	Buildings, Grounds, Paving Materials, and Supplies	25,017	56,700	62,700	60,377	50,200	57,200	—
623170	Fiber, Paper, and Insulation Materials	4,709	13,500	13,500	5,300	5,300	5,500	—
623190	Paints, Solvents, and Related Materials	984	1,300	2,800	2,800	2,500	1,300	—
623250	Vehicle Parts and Supplies	19,737	118,000	118,000	117,969	81,600	126,000	—
623270	Mechanical Repair Parts	2,090,910	3,085,600	2,935,600	2,748,533	2,729,400	3,257,000	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	7,756	14,000	14,000	7,930	13,000	11,500	—
623530	Farming Supplies	—	4,000	4,000	3,912	3,500	4,000	—
623560	Processing Chemicals	6,493,249	8,808,000	8,808,000	7,840,999	7,319,500	10,415,300	—
623570	Laboratory Testing Supplies, Small Equipment, and Chemicals	281	5,600	5,600	2,835	4,800	2,500	—
623660	Cleaning Supplies	687	2,000	2,000	1,745	1,900	2,500	—
623680	Tools and Supplies	97,260	99,600	99,600	98,651	98,000	99,700	—
623700	Wearing Apparel	382	600	600	—	600	600	—
623780	Safety and Medical Supplies	660	1,400	1,400	995	700	1,400	—
623800	Computer Software	63,136	31,500	30,500	16,483	30,000	31,500	—
623810	Computer Supplies	7,956	10,000	21,500	20,906	18,200	17,000	—
623820	Fuel	36,413	227,700	227,700	226,938	193,600	251,400	—
623840	Gases	208	600	600	600	600	—	—
623860	Lubricants	6,395	11,200	13,700	13,619	11,000	35,200	—
623990	Materials and Supplies, N.O.C.	13,308	52,100	49,100	42,020	42,500	55,300	—
300	TOTAL MATERIALS AND SUPPLIES	9,822,652	14,074,600	13,992,300	12,757,960	12,020,100	15,984,200	—
634600	Equipment for Collection Facilities	—	25,000	—	—	—	25,000	—
634650	Eqpt for Proc Facil	—	94,000	141,000	137,875	124,100	370,000	—
634670	Railroad Equipment	—	25,000	25,000	24,958	25,000	—	—
634760	Material Handling and Farming Equipment	—	—	—	—	—	715,000	—
634860	Vehicle Equipment	—	422,000	457,800	457,049	457,100	307,400	—

101 69000	Fund: Corporate Department: Maintenance & Operations Division: Stickney Service Area	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
634990	Machinery and Equipment, N.O.C.	92,886	65,000	21,000	20,484	24,000	—	—
400	TOTAL MACHINERY AND EQUIPMENT	92,886	631,000	644,800	640,366	630,200	1,417,400	—
TOTAL STICKNEY SERVICE AREA		\$ 76,996,514	\$ 104,302,500	\$ 105,164,800	\$ 77,462,521	\$ 92,948,200	\$ 117,034,000	\$ —
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: Stickney Service Area		POSITION ANALYSIS				
		2020	2021		2022	
					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		1	
HP12	Secretary #2 (Administrative Specialist) (New Grade HP11)	1	1		1	
TOTAL 910	Stickney Executive Office	2	2	360,848	2	360,849
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	288,417	3	271,525
920	Plant Engineering & Maintenance Branch					
921	Administrative Unit					
HP21	Engineer of Treatment Plant Operations	—	1		1	
HP21	Engineer of Treatment Plant Operations I	1	—		—	
HP11	Administrative Specialist	1	1		—	
HP11	Administrative Specialist #1	—	—		1	
TOTAL 921	Administrative Unit	2	2	299,236	2	299,236
923	Electrical Engineering Unit					
HP17	Senior Electrical Engineer	1	1		1	
HP15	Associate Process Control Engineer	1	2		2	
HP14	Engineering Technician V	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	2,213,833	20	2,196,091
924	Maintenance Unit					
	(* Number of positions budgeted and funded by the Stormwater Management Fund appear below position count)					
HP19	Master Mechanic	1	1		—	
HP19	Master Mechanic II	—	—		1	
HP17	Assistant Master Mechanic	5	5		5	
HP14	Engineering Technician V	1	1		1	
HP11	Administrative Specialist	1	1		1	
PR5935	Architectural Ironworker Leadman	1	1		1	

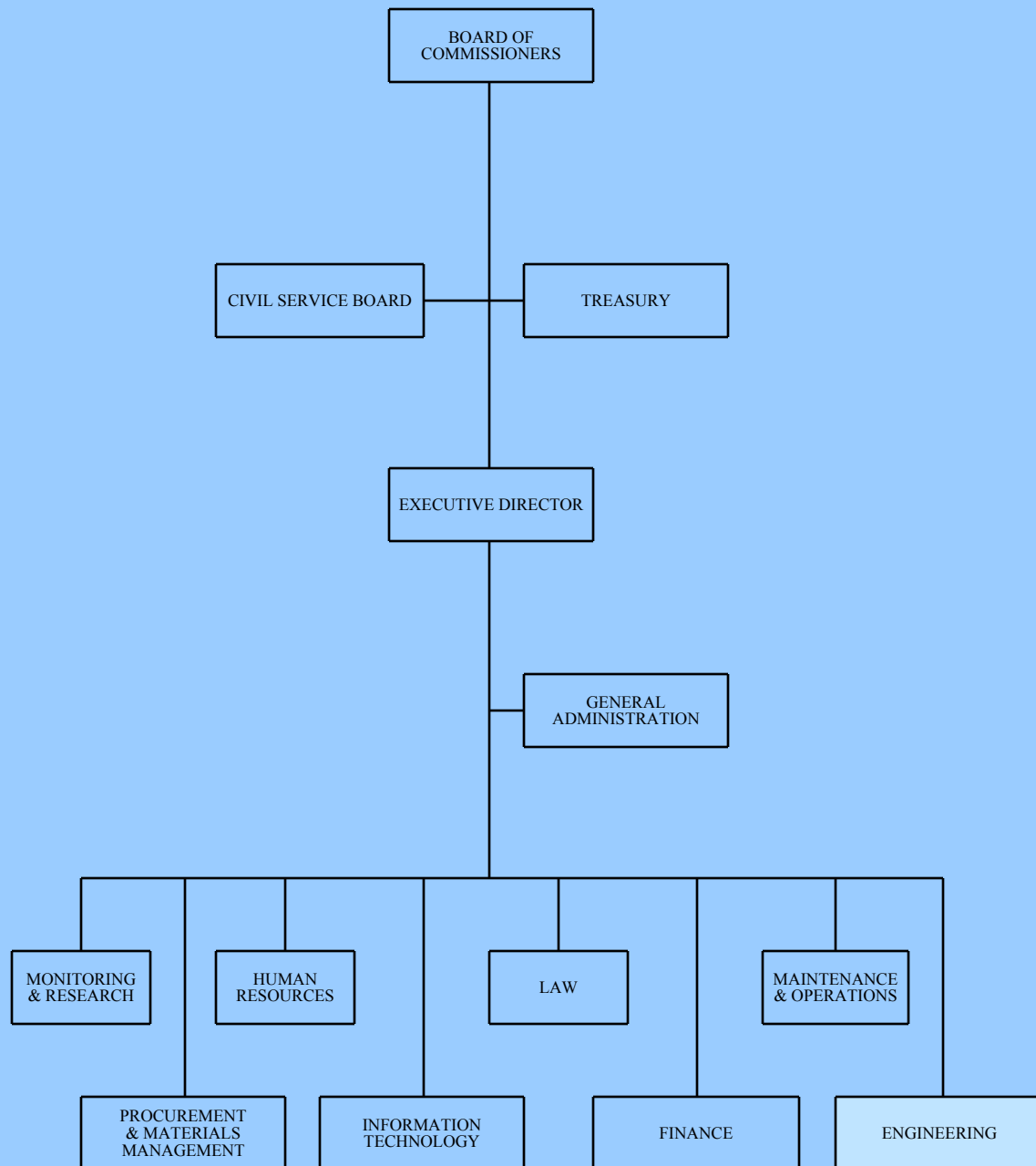
Fund: Corporate Dept: Maintenance & Operations Division: Stickney Service Area		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
PR5933	Architectural 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	Pipecoverer	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	
PR6473	Truck Driver	8	8		8	
TOTAL 924	Maintenance Unit	160	160	17,102,623	160	17,461,196
TOTAL	Stormwater Management Fund Positions	(*1)	(*1)		(*1)	

Fund: Corporate Dept: Maintenance & Operations Division: Stickney Service Area		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
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	—		—	
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	22	1,800,741	22	1,811,177
TOTAL 920	Plant Engineering & Maintenance Branch	205	204	21,416,433	204	21,767,701
TOTAL	Stormwater Management Fund Positions	(*1)	(*1)		(*1)	
930	Plant Operations Branch					
931	Administrative Unit					
HP21	Engineer of Treatment Plant Operations	—	1		1	
HP21	Engineer of Treatment Plant Operations I	1	—		—	
HP20	Managing Engineer #1	1	1		1	
TOTAL 931	Administrative Unit	2	2	377,981	2	374,651
932	Treatment Operations Unit					
HP19	Assistant Engineer of Treatment Plant Operations II #2 (Principal Engineer) (New Grade HP18)	1	—		—	
HP18	Principal Engineer	—	1		1	
HP17	Senior Engineer	1	1		1	
HP16	Treatment Plant Operator III	6	6		6	
HP15	Associate Civil Engineer	1	1		1	
HP14	Assistant Civil Engineer	—	1		1	
HP14	Treatment Plant Operator II	8	9		9	
HP14	Treatment Plant Operator II #4	1	—		—	
HP12	Treatment Plant Operator I	6	6		6	
HP11	Administrative Specialist	1	1		1	
NR8331	Laborer Foreman	1	1		1	
NR8650	Maintenance Laborer Class A Shift	15	15		—	
NR8650	Maintenance Laborer Class A Shift #1	—	—		15	

Fund: Corporate Dept: Maintenance & Operations Division: Stickney Service Area		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
NR8651	Maintenance Laborer Class A	5	5		—	
NR8651	Maintenance Laborer Class A (AC)	—	—		5	
TOTAL 932	Treatment Operations Unit	46	47	4,482,681	47	4,557,622
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	
NR8331	Laborer Foreman	—	—		1	
NR8650	Maintenance Laborer Class A Shift	20	20		40	
		(*4)	(*4)		(*4)	
NR8650	Maintenance Laborer Class A Shift #1	—	—		2	
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	11,025,975	128	13,045,225
TOTAL	Stormwater Management Fund Positions	(*8)	(*8)		(*8)	
945	Railroad Unit					
NR8331	Laborer Foreman	1	1		—	
NR8331	Laborer Foreman #1	—	—		1	
NR8650	Maintenance Laborer Class A Shift	5	5		—	
NR8650	Maintenance Laborer Class A Shift #1	—	—		5	
TOTAL 945	Railroad Unit	6	6	535,101	6	535,101
TOTAL 930	Plant Operations Branch	159	160	16,421,739	183	18,512,599
TOTAL	Stormwater Management Fund Positions	(*8)	(*8)		(*8)	
950	Solids Management Section					
951	Solids Administration Unit					
HP20	Managing Engineer	—	1		1	
HP12	Administrative Assistant #2 (Administrative Specialist) (New Grade HP11)	—	1		1	
TOTAL 951	Solids Administration Unit	—	2	287,764	2	300,691

Fund: Corporate Dept: Maintenance & Operations Division: Stickney Service Area		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
952	Solids Field Operations Unit					
HP15	Associate Civil Engineer	—	1		1	
HP14	Engineering Technician V	—	3		3	
HP12	Engineering Technician IV	—	3		3	
NR8651	Maintenance Laborer Class A	—	1		1	
TOTAL 952	Solids Field Operations Unit	—	8	731,964	8	771,851
953	Solids Operations Administration Unit					
HP19	Assistant Engineer of Treatment Plant Operations II #2 (Principal Engineer) (New Grade HP18)	—	1		—	
HP17	Senior Engineer	—	1		2	
TOTAL 953	Solids Operations Administration Unit	—	2	325,496	2	261,260
954	Fulton County Field Operations Unit					
HP12	Agricultural Technician II	—	1		1	
HP11	Agricultural Technician I	—	1		1	
TOTAL 954	Fulton County Field Operations Unit	—	2	144,381	2	144,381
TOTAL 950	Solids Management Section	—	14	1,489,605	14	1,478,184
TOTAL	Maintenance & Operations Stickney Service Area	369	383	39,977,043	406	42,390,857
TOTAL	Stormwater Management Fund Positions	(*9)	(*9)		(*9)	
NOTES: 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.						

NOTE PAGE



Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 7, 2021

Mr. Brian A. Perkovich
Executive Director
O F F I C E

Dear Sir:

Subject: 2022 Program for the Engineering Department - Corporate Fund

The Engineering Department - Corporate Fund's program for 2022, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the department's 2022 initiatives in alignment with and in support of the Strategic 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, 2022 major initiatives and challenges, and 2021 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 2022.

Respectfully submitted,

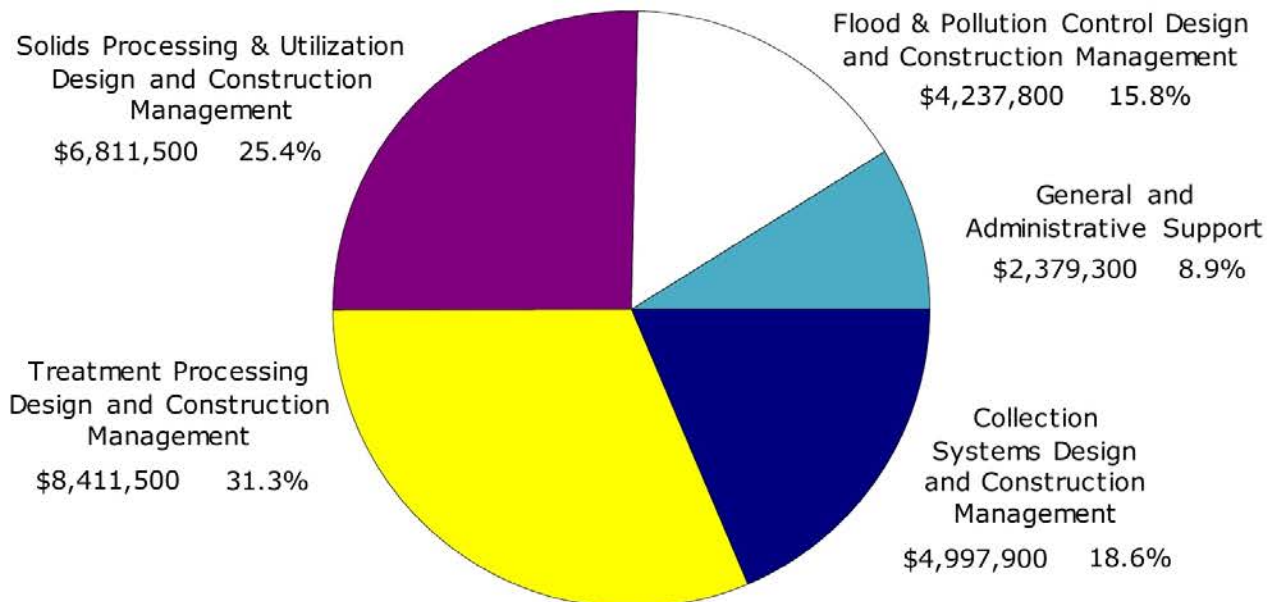


Catherine A. O'Connor
Director of Engineering

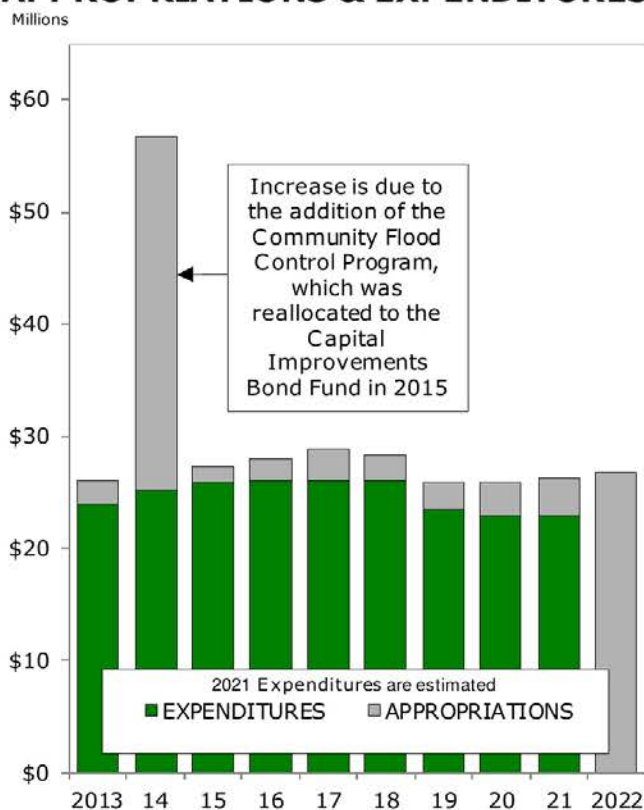
ENGINEERING – CORPORATE FUND

2022	\$26,838,000
2021	\$26,254,700
Increase	\$583,300

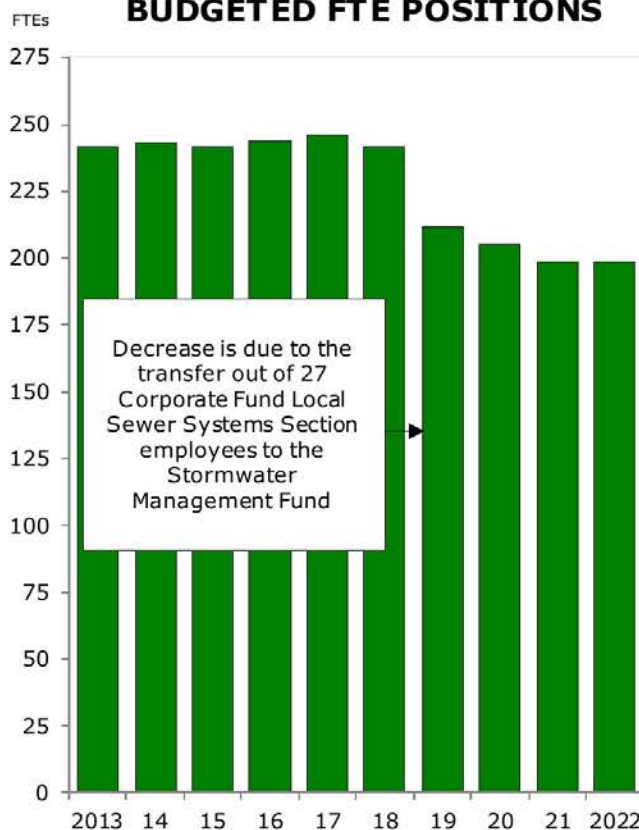
FUNCTIONS



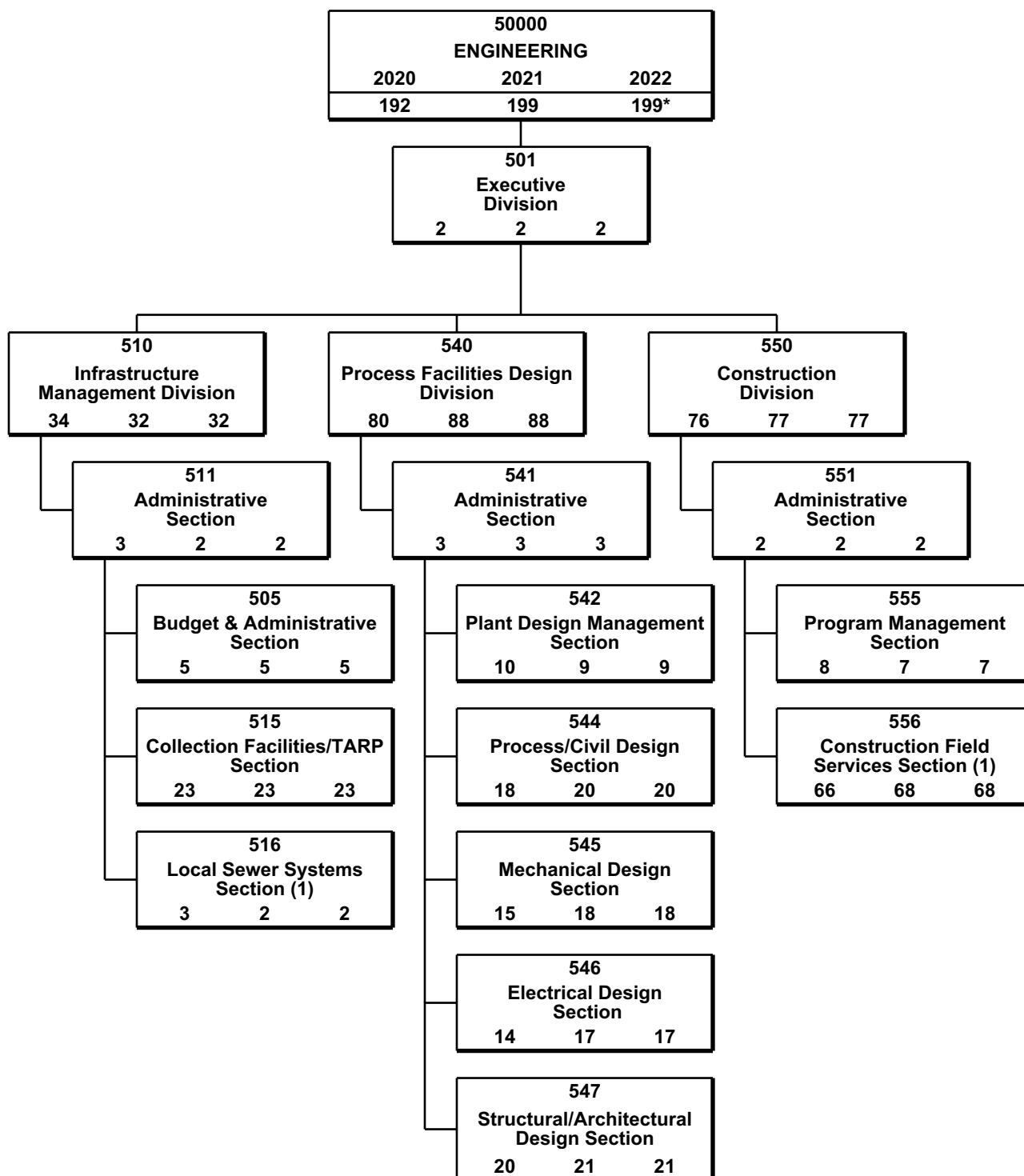
APPROPRIATIONS & EXPENDITURES



BUDGETED FTE POSITIONS



ENGINEERING



* The 2022 position total for the Engineering Department - Corporate Fund is 199. There are an additional 72 positions funded by the Stormwater Management Fund while the operations remain in the Engineering Department.

(1) 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, described in Section VI. The Corporate Fund finances Engineering Department positions and corporate activities, while the Stormwater Management Fund finances Stormwater positions and regulatory activities. The Capital Budget finances 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 the 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. This is accomplished by reviewing and issuing Watershed Management Ordinance permits for development and inspecting the work performed.

Summary of 2021 Major Accomplishments

- Conducted the Engineering Department's first internal training session on key aspects of budget administration and preparation and provided engineers with context for the information that is requested throughout the year;
- The District's electronic project management system, e-Builder, implemented in 2018, continues to be improved to manage all of the District's Capital Improvement Program projects and report on the \$200 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 2021, e-Builder was updated to include processing of payments required under Intergovernmental Agreements and automatic notification of the Budget and Administration Section when project award dates shift to a different budget year. As a result, e-Builder facilitates timely processing of invoices and administration of the Capital Improvement Program budget.

2022 Appropriation and Position Summary

The 2022 appropriation for the Engineering Department - Corporate Fund is \$26,838,000, an increase of \$583,300, or 2.2 percent, from 2021. The Engineering Department's 2022 Budget provides direct support to the Capital Improvement Program. The staffing level remains unchanged at 199.

2022 Budget Highlights

The following budget highlights support the District's Strategic Plan Goal of Resource Management. The initiatives highlighted below show how the District maintains a high level of performance on its core mission of protecting the public health and area waterways.

Manage assets to maintain optimal performance and long-term sustainability

- Focus on meeting or exceeding the industry standard of 120 percent of the originally scheduled contract time for completion of construction contracts;
- Ensure underground infrastructure remains functional into the future, the Engineering Department will continue to fund the intercepting sewer televising and inspection contract;
- In conjunction with the Maintenance and Operations Department, protect 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 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.

50000 ENGINEERING**OBJECTIVES AND PROGRAM SUMMARY**

OBJECTIVES BY PRIORITY:		Cost	Percent
1. TREATMENT PROCESSING DESIGN AND CONSTRUCTION MANAGEMENT: Design and manage construction of the projects to rehabilitate, modernize, and replace wastewater treatment facilities under the District's Capital Improvement Program.		\$ 8,411,500	31.3 %
2. SOLIDS PROCESSING AND UTILIZATION DESIGN AND CONSTRUCTION MANAGEMENT: Design and manage construction of projects to rehabilitate, modernize, and replace infrastructure for collection, treatment, and disposal of biosolids under the District's Capital Improvement Program.		\$ 6,811,500	25.4 %
3. COLLECTION SYSTEM DESIGN AND CONSTRUCTION MANAGEMENT AND PUBLIC SERVICE: Design and manage construction of projects to rehabilitate and upgrade the District's intercepting sewers, pumping stations, and force mains under the Capital Improvement Program. Protect public health through regulation of local sewer connections tributary to District infrastructure, administration of an infiltration and inflow control program, and providing infrastructure location information to the public and other agencies.		\$ 4,997,900	18.6 %
4. FLOOD AND POLLUTION CONTROL DESIGN AND CONSTRUCTION MANAGEMENT: Design and manage construction of projects to build tunnels, reservoirs, and control structures under TARP, and manage construction of projects to construct and rehabilitate flood control reservoirs, relocate streams, and improve conveyance channels.		\$ 4,237,800	15.8 %
5. GENERAL AND ADMINISTRATIVE SUPPORT: Support the work of the Engineering Department through application for grant and loan funding, budget preparation and administration, surveying, and administration of easements.		\$ 2,379,300	8.9 %
Totals		\$ 26,838,000	100.0 %

MEASURABLE GOALS:		2020 Actual	2021 Estimated	2022 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		36,330	38,254	38,500
Emergency JULIE Requests		3,023	3,152	3,200
811 Chicago Requests		6,965	5,596	5,700
OUC Information Retrieval Requests		2,141	2,628	2,700
OUC Existing Facility Protection Requests		3,564	3,050	3,200
IDOT Requests		55	76	75
Prepare contract plans and specifications for projects under the District's Capital Improvement Program				
Major Design Work Completed		4	15	13
Measurable Goals about the District's Infiltration and Inflow Control Program, which is administered under the Stormwater Management Fund, are now included in Section IV.				

50000 ENGINEERING**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:		2020	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
1000	Collection	\$ 4,463,803	2022 30	\$ 4,997,900	\$ (284,500)	(5.4)	
			2021 33	\$ 5,282,400			
1530	Local Sewer Permit Activity	\$ 253,373	2022 2	\$ 265,000	\$ 20,300	8.3	
			2021 2	\$ 244,700			
1560	Local Sewer Public Service Coordination	\$ 237,035	2022 —	\$ 60,800	\$ (62,300)	(50.6)	a)
			2021 1	\$ 123,100			
1571	Local Sewer Rehabilitation Ordinance Enforcement Activity	\$ 230,991	2022 —	\$ 10,300	\$ (30,800)	(74.9)	b)
			2021 —	\$ 41,100			
1700	Collection System Design	\$ 996,396	2022 8	\$ 987,900	\$ (132,500)	(11.8)	
			2021 8	\$ 1,120,400			
1800	Collection Construction	\$ 2,746,008	2022 20	\$ 3,673,900	\$ (79,200)	(2.1)	
			2021 22	\$ 3,753,100			
2000	Treatment	\$ 7,828,199	2022 67	\$ 8,411,500	\$ (416,800)	(4.7)	
			2021 72	\$ 8,828,300			
2700	Treatment Design	\$ 2,964,839	2022 25	\$ 3,268,800	\$ (227,800)	(6.5)	c)
			2021 27	\$ 3,496,600			
2800	Treatment Construction	\$ 4,863,360	2022 42	\$ 5,142,700	\$ (189,000)	(3.5)	d)
			2021 45	\$ 5,331,700			
3000	Solids Processing	\$ 5,428,732	2022 50	\$ 6,566,000	\$ 127,800	2.0	
			2021 50	\$ 6,438,200			
3700	Solids Processing Design	\$ 2,637,245	2022 24	\$ 3,338,200	\$ 67,200	2.1	
			2021 24	\$ 3,271,000			
3800	Solids Processing Construction	\$ 2,791,487	2022 26	\$ 3,227,800	\$ 60,600	1.9	
			2021 26	\$ 3,167,200			
a) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$62,300).							
b) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$30,800).							
c) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$234,300).							
d) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$393,400), offset by carpet and window blind replacement at the Engineering Center at the Stickney Water Reclamation Plant (\$200,000).							

50000 ENGINEERING**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:			2020		Budgeted		Change	
Number	Name		Actual		FTEs	Dollars	Dollars	Percent
4000	Flood and Pollution Control		\$ 2,663,415		2022 34	\$ 4,237,800	\$ 1,162,700	37.8
					2021 25	\$ 3,075,100		
4216	Bridge and Road Maintenance		\$ —		2022 —	\$ 237,500	\$ 137,500	137.5
					2021 —	\$ 100,000		
4322	Storm and Flood Ordinance Development		\$ 18,701		2022 —	\$ —	\$ —	—
					2021 —	\$ —		
4341	Planning/Design		\$ 66,475		2022 —	\$ 46,700	\$ (500)	(1.1)
					2021 —	\$ 47,200		
4342	Contract Administration		\$ 104,377		2022 —	\$ —	\$ —	—
					2021 —	\$ —		
4343	Construction		\$ 105,490		2022 6	\$ 681,600	\$ 517,600	315.6
					2021 1	\$ 164,000		
4700	Flood and Pollution Control Design		\$ 564,760		2022 6	\$ 734,300	\$ 107,400	17.1
					2021 5	\$ 626,900		
4800	Flood and Pollution Control Construction		\$ 1,803,612		2022 22	\$ 2,537,700	\$ 400,700	18.8
					2021 19	\$ 2,137,000		
5000	Solids Disposal		\$ 339,196		2022 1	\$ 245,500	\$ (61,100)	(19.9)
					2021 2	\$ 306,600		
5700	Solids Disposal Design		\$ 10,875		2022 —	\$ 10,700	\$ —	—
					2021 —	\$ 10,700		
5800	Solids Disposal Construction		\$ 328,321		2022 1	\$ 234,800	\$ (61,100)	(20.6)
					2021 2	\$ 295,900		
7000	General Support (excluding program number 7604)		\$ 1,843,353		2022 17	\$ 2,030,900	\$ 64,800	3.3
					2021 17	\$ 1,966,100		
7604	Social Security and Medicare Contributions		\$ 302,589		2022 —	\$ 348,400	\$ (9,600)	(2.7)
					2021 —	\$ 358,000		
Totals			\$22,869,287		2022 199	\$26,838,000	\$ 583,300	2.2 %
					2021 199	\$26,254,700		
e) Increase is due to additional funding for the biennial bridge inspection, based on scheduled contract payments (\$150,000). f) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$519,000). g) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$110,000). h) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$421,800). i) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$48,100).								

50000 ENGINEERING**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 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)	Cost	\$ 82,810	\$ 182,900	\$ 265,000	a)
1533	Review of Other Permits	Cost	\$ 144,949	\$ 61,800	\$ —	b)
1537	Permit Revision	Cost	\$ 25,614	\$ —	\$ —	
1560	Local Sewer - Public Service Coordination					
1561	Public Service	Cost	\$ 50,719	\$ —	\$ 5,600	c)
1563	Interagency Coordination	Cost	\$ 186,316	\$ 123,100	\$ 55,200	d)
1571	Local Sewer Rehabilitation Ordinance Enforcement Activity	Systems	—	93	96	
		Cost	\$ 230,991	\$ 41,100	\$ 10,300	e)
		Cost/System	\$ —	\$ 441.94	\$ 107.29	
1700	Collection System Design	Cost	\$ 996,396	\$ 1,120,400	\$ 987,900	
1800	Collection Construction	Cost	\$ 2,746,008	\$ 3,753,100	\$ 3,673,900	
2700	Treatment Design	Cost	\$ 2,964,839	\$ 3,496,600	\$ 3,268,800	f)
2800	Treatment Construction	Cost	\$ 4,863,360	\$ 5,331,700	\$ 5,142,700	g)
3700	Solids Processing Design	Cost	\$ 2,637,245	\$ 3,271,000	\$ 3,338,200	
3800	Solids Processing Construction	Cost	\$ 2,791,487	\$ 3,167,200	\$ 3,227,800	
4200	Waterways Control and Stormwater Detention Reservoirs	Cost	\$ —	\$ 100,000	\$ 237,500	h)
4300	Stormwater Management	Cost	\$ 295,043	\$ 211,200	\$ 728,300	i)
4700	Flood and Pollution Control Design	Cost	\$ 564,760	\$ 626,900	\$ 734,300	j)
4800	Flood and Pollution Control Construction	Cost	\$ 1,803,612	\$ 2,137,000	\$ 2,537,700	k)
5700	Solids Disposal Design	Cost	\$ 10,875	\$ 10,700	\$ 10,700	
5800	Solids Disposal Construction	Cost	\$ 328,321	\$ 295,900	\$ 234,800	l)
7000	General Support (excluding program number 7604)	Cost	\$ 1,843,353	\$ 1,966,100	\$ 2,030,900	
7604	Social Security and Medicare Contributions	Cost	\$ 302,589	\$ 358,000	\$ 348,400	
	Totals		\$ 22,869,287	\$ 26,254,700	\$ 26,838,000	
<p>a) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$82,600).</p> <p>b) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$61,800).</p> <p>c) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$5,600).</p> <p>d) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$67,900).</p> <p>e) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$30,800).</p> <p>f) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$234,300).</p> <p>g) Decrease is due to the reallocation of salaries to more accurately reflect current activities (\$393,400), offset by carpet and window blind replacement at the Engineering Center at the Stickney Water Reclamation Plant (\$200,000).</p> <p>h) Increase is due to additional funding for the biennial bridge inspection, based on scheduled contract payments (\$150,000).</p> <p>i) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$519,000).</p> <p>j) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$110,000).</p> <p>k) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$421,800).</p> <p>l) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$48,100).</p>						

101 50000	Fund: Corporate Department: Engineering	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 21,437,167	\$ 23,600,800	\$ 23,120,900	\$ 14,044,937	\$ 20,144,000	\$ 23,392,900	\$ —
601060	Compensation Plan Adjustments	511,589	542,200	640,800	583,984	632,900	658,400	—
601070	Social Security and Medicare Contributions	302,589	358,000	358,000	215,355	303,900	348,400	—
601100	Tuition and Training Payments	33,450	97,000	97,000	19,572	43,700	140,000	—
100	TOTAL PERSONAL SERVICES	22,284,795	24,598,000	24,216,700	14,863,848	21,124,500	24,539,700	—
612010	Travel	665	9,000	9,000	—	—	14,000	—
612030	Meals and Lodging	1,500	17,000	10,700	—	—	24,000	—
612040	Postage, Freight, and Delivery Charges	156	1,500	1,500	1,500	300	1,500	—
612050	Compensation for Personally-Owned Automobiles	2,457	8,000	7,900	32	500	8,000	—
612080	Motor Vehicle Operating Services	19	500	500	—	—	500	—
612090	Reprographic Services	3,250	3,500	3,500	3,500	3,500	3,500	—
612170	Water and Water Services	2,349	4,500	4,500	4,500	3,200	4,500	—
612240	Testing and Inspection Services	181,863	1,000,000	1,000,000	1,000,000	966,800	1,302,500	—
612330	Rental Charges	476	500	500	—	—	500	—
612430	Payments for Professional Services	204,313	324,300	324,300	262,680	315,100	430,500	—
612490	Contractual Services, N.O.C.	82,059	79,600	354,900	350,322	351,300	4,500	—
612620	Repairs to Waterway Facilities	70,955	71,000	146,000	122,847	98,200	100,000	—
612680	Repairs to Buildings	—	—	—	—	—	200,000	—
612800	Repairs to Office Furniture and Equipment	—	10,600	17,000	16,930	10,600	7,100	—
612970	Repairs to Testing and Laboratory Equipment	1,836	7,500	7,500	2,316	6,600	5,500	—
612990	Repairs, N.O.C.	8,902	500	500	—	500	500	—
200	TOTAL CONTRACTUAL SERVICES	560,800	1,538,000	1,888,300	1,764,627	1,756,600	2,107,100	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	15,543	38,300	38,300	27,170	24,600	51,700	—
623680	Tools and Supplies	5,623	11,200	11,200	8,310	9,000	19,500	—
623720	Books, Maps, and Charts	2,527	5,000	5,000	2,993	3,000	9,300	—
623780	Safety and Medical Supplies	—	1,000	1,000	—	900	1,000	—
623800	Computer Software	—	33,000	33,000	11,667	11,000	41,500	—
623990	Materials and Supplies, N.O.C.	—	200	200	—	—	200	—
300	TOTAL MATERIALS AND SUPPLIES	23,693	88,700	88,700	50,140	48,500	123,200	—
634650	Equipment for Process Facilities	—	—	—	—	—	53,000	—

101 50000	Fund: Corporate Department: Engineering	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
634970	Testing and Laboratory Equipment	—	—	31,800	31,750	30,000	—	—
634990	Machinery and Equipment, N.O.C.	—	30,000	29,200	25,000	30,000	15,000	—
400	TOTAL MACHINERY AND EQUIPMENT	—	30,000	61,000	56,750	60,000	68,000	—
TOTAL ENGINEERING		\$ 22,869,288	\$ 26,254,700	\$ 26,254,700	\$ 16,735,365	\$ 22,989,600	\$ 26,838,000	\$ —

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.

Fund: Corporate Dept: Engineering		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	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	388,255	2	388,255
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		—	
HP16	Senior Budget & Management Analyst	—	—		1	
HP15	Management Analyst II #2 (Budget & Management Analyst) (New Grade HP14)	1	1		—	
HP14	Budget & Management Analyst	1	1		2	
HP13	Senior Administrative Specialist	1	1		1	
TOTAL 505	Budget & Administrative Section	5	5	648,829	5	605,240
511	Administrative Section					
HP22	Assistant Director of Engineering	1	1		1	
HP20	Managing Civil Engineer	1	—		—	
HP11	Administrative Specialist	1	1		1	
TOTAL 511	Administrative Section	3	2	309,988	2	313,528
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	2	2		2	
HP13	Engineering Draftsman III	1	1		1	
HP12	Engineering Technician IV	3	3		2	

Fund: Corporate Dept: Engineering		POSITION ANALYSIS				
		2020	2021		2022	
					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	1		2	
TOTAL 515	Collection Facilities / TARP Section	23	23	2,688,621	23	2,661,468
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		1	
HP18	Principal Civil Engineer	1 (*2)	— (*3)		— (*3)	
HP17	Senior Civil Engineer	1 (*9)	— (*10)		— (*10)	
HP15	Associate Civil Engineer	1 (*9)	1 (*9)		1 (*9)	
HP14	Assistant Civil Engineer	— (*7)	— (*8)		— (*8)	
HP14	Engineering Technician V	— (*3)	— (*3)		— (*3)	
HP12	Engineering Technician IV	— (*5)	— (*6)		— (*7)	
HP12	Engineering Technician IV #4	— (*1)	— (*1)		— (*1)	
HP11	Administrative Specialist	— (*1)	— (*1)		—	
HP11	Engineering Technician III	— (*1)	— (*1)		—	
HP09	Administrative Clerk	— (*2)	— (*1)		— (*1)	
TOTAL 516	Local Sewer Systems Section	3	2	330,721	2	320,058
TOTAL	Stormwater Management Fund Positions	(*40)	(*43)		(*42)	
TOTAL 510	Infrastructure Management Division	34	32	3,978,159	32	3,900,294
TOTAL	Stormwater Management Fund Positions	(*40)	(*43)		(*42)	
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)		— (*4)	

Fund: Corporate Dept: Engineering		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP17	Senior Civil Engineer	— (*7)	— (*7)		— (*8)	
HP15	Associate Civil Engineer	— (*6)	— (*6)		— (*7)	
HP14	Assistant Civil Engineer	— (*3)	— (*3)		— (*3)	
HP14	Public Affairs Specialist	— (*1)	— (*1)		— (*1)	
HP11	Administrative Specialist	— (*1)	— (*1)		— (*2)	
TOTAL 522	Stormwater Management Section	—	—	—	—	—
TOTAL	Stormwater Management Fund Positions	(*22)	(*22)		(*26)	
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	391,531	3	388,609
542	Plant Design Management Section					
HP18	Principal Civil Engineer	3	2		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		1	
TOTAL 542	Plant Design Management Section	10	9	1,172,649	9	1,190,836
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	

Fund: Corporate Dept: Engineering		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP14	Assistant Civil Engineer	1	3		3	
HP13	Engineering Draftsman III	1	1		1	
HP12	Engineering Draftsman II	2	2		2	
TOTAL 544	Process / Civil Design Section	18	20	2,479,650	20	2,443,283
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	3	5		3	
HP14	Assistant Mechanical Engineer	1	2		4	
HP13	Engineering Draftsman III	1	1		1	
HP12	Engineering Draftsman II	2	2		2	
TOTAL 545	Mechanical Design Section	15	18	2,165,832	18	2,101,901
546	Electrical Design Section					
HP20	Managing Electrical Engineer	1	1		1	
HP18	Principal Electrical Engineer	1	2		2	
HP17	Senior Electrical Engineer	5	5		5	
HP15	Associate Electrical Engineer	3	5		4	
HP14	Assistant Electrical Engineer	1	1		2	
HP13	Engineering Draftsman III	1	1		1	
HP12	Engineering Draftsman II	2	2		2	
TOTAL 546	Electrical Design Section	14	17	2,018,917	17	2,006,078
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	1	2		2	
HP17	Senior Structural Engineer	4	4		4	
HP15	Associate Architect	3	3		3	
HP15	Associate Structural Engineer	3	3		3	

Fund: Corporate Dept: Engineering		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
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	20	21	2,374,815	21	2,395,060
TOTAL 540	Process Facilities Design Division	80	88	10,603,395	88	10,525,767
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	252,290	2	265,829
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	1	1		1	
HP14	Assistant Civil Engineer	1	—		—	
HP14	Assistant Electrical Engineer	1	1		1	
HP13	Senior Administrative Specialist	1	1		1	
HP11	Administrative Specialist	1	1		1	
TOTAL 555	Program Management Section	8	7	910,571	7	867,739
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	2	3		3	
HP18	Principal Electrical Engineer	2	1		1	
HP18	Principal Mechanical Engineer	—	1		1	
HP17	Senior Civil Engineer	10	9		9	
			(*1)		(*1)	
HP17	Senior Electrical Engineer	4	4		3	
HP17	Senior Mechanical Engineer	1	1		2	

Fund: Corporate Dept: Engineering		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
HP15	Associate Civil Engineer	10	9 (*1)		9 (*1)	
HP15	Associate Electrical Engineer	3	3		3	
HP15	Associate Mechanical Engineer	3	3		3	
HP14	Assistant Civil Engineer	3	3		3	
HP14	Assistant Electrical Engineer	1	1		2	
HP14	Assistant Mechanical Engineer	1	1		1	
HP14	Engineering Technician V	11	11 (*1)		12 (*1)	
HP14	Engineering Technician V #4	2	2		—	
HP12	Administrative Assistant #2 (Administrative Specialist) (New Grade HP11)	1	1		1	
HP12	Engineering Technician IV	8	7 (*1)		7 (*1)	
HP11	Engineering Technician III	2	6		6	
TOTAL 556	Construction Field Services Section	66	68	7,586,793	68	7,563,024
TOTAL	Stormwater Management Fund Positions		(*4)		(*4)	
TOTAL 550	Construction Division	76	77	8,749,654	77	8,696,592
TOTAL	Engineering	192	199	23,719,463	199	23,510,909
TOTAL	Stormwater Management Fund Positions	(*62)	(*69)		(*72)	
NOTES: 1. Seventy-two 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 2022 Capital Improvement Program places the 2022 program within the context of our long-range plan. Information is provided on the levels of funding in 2022 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 2022 is presented in the Capital Improvement Program narrative.

Transmittal Letter	333
Capital Improvement Program Functions and Narrative	334
Ten-Year Capital Improvement Program Summary, 2017 - 2026	338
Construction Fund:	
Narrative	339
Project List	341
Projects Listed by Service Area	343
Project Fact Sheets	346
Objectives and Program Summary	373
Line Item Analysis	375
Capital Improvements Bond Fund:	
Narrative	377
Project List	379
Tunnel and Reservoir Plan (TARP) Project Costs and Status Chart	383
Projects Listed by Service Area	385
Project Fact Sheets	390
Other Project Exhibits	429
Stormwater Management Project List	443
Objectives and Program Summary	444
Line Item Analysis	446

Kari K. Steele
President
Barbara J. McGowan
Vice President
Marcelino Garcia
Chairman Of Finance
Cameron Davis
Kimberly Du Buclet
Josina Morita
Eira L. Corral Sepúlveda
Debra Shore
Mariyana Spyropoulos

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 7, 2021

Mr. Brian A. Perkovich
Executive Director
O F F I C E

Dear Sir:


Subject: 2022 Program for the Capital Funds

The Capital Funds' program for 2022, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the District's 2022 Capital Plan initiatives in alignment with and in support of the Strategic 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 2022 major initiatives and challenges and 2021 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 2022.

Respectfully submitted,



Catherine A. O'Connor
Director of Engineering

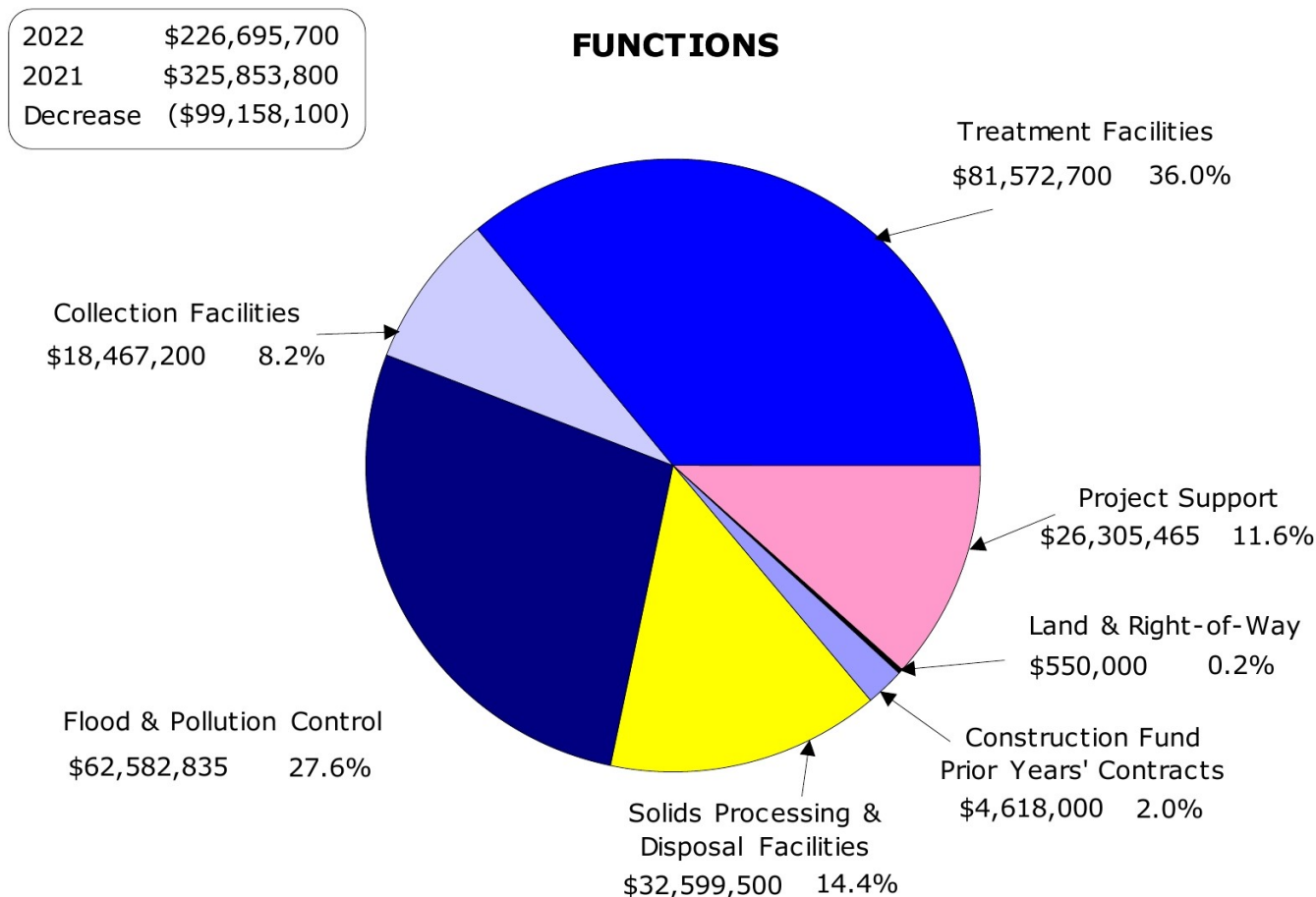


John P. Murray
Director of Maintenance & Operations



Edward W. Podczewinski
Director of Monitoring & Research

CAPITAL IMPROVEMENT PROGRAM CONSTRUCTION AND CAPITAL IMPROVEMENTS BOND FUNDS



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 2022 appropriation for the Capital Improvement Program (Construction and Capital Improvements Bond Funds) is \$226,695,700, a decrease of \$99,158,100, or 30.4 percent, from 2021 due to the timing of project awards scheduled for 2022. A total of 119 projects funded by the Construction or Capital Improvements Bond Funds will be under planning, design, or construction in 2022. There is one channel improvement project planned for award in 2022 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. The District is also exploring other financing possibilities including financing from federal Water Infrastructure Finance and Innovation Act loans for the first time in 2021.

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 2022, the Construction Fund has 19 projects scheduled for award and 8 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.

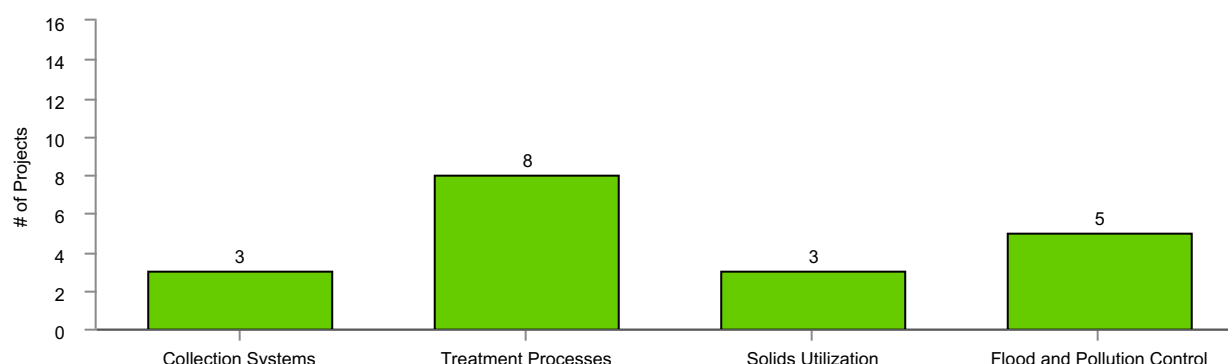
Funds in the SRF shall not be used to provide grants. SRF balances must be available in perpetuity and must be used solely to provide loans and other authorized forms of financial assistance:

- 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 \$55 million annually in SRF loans for the next several years.

In 2022, there are 19 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 2022 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 2022, the District will begin 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 2022 Capital Improvement Program includes 2022 project awards, program support, and projects under construction at award value with total estimated cost of approximately \$627.3 million. A breakdown of these projects (in millions of dollars) is as follows:

2022 project awards	\$ 216.8
2022 program support (project support and land)	26.9
Projects currently under construction (award value)	<u>383.6</u>
Total	\$ 627.3

◆ A breakdown of projects scheduled for 2022 award by fund is as follows:

Construction Fund projects	\$ 33.5
Capital Improvements Bond Fund projects	<u>183.3</u>
Total	\$ 216.8

◆ A breakdown of projects under construction (award value) by fund is as follows:

Construction Fund projects	\$ 11.4
Capital Improvements Bond Fund projects	<u>372.2</u>
Total	\$ 383.6

The table on the next page shows the 10-year construction cost projections for the Capital Improvement Program, including Stormwater Management capital projects.

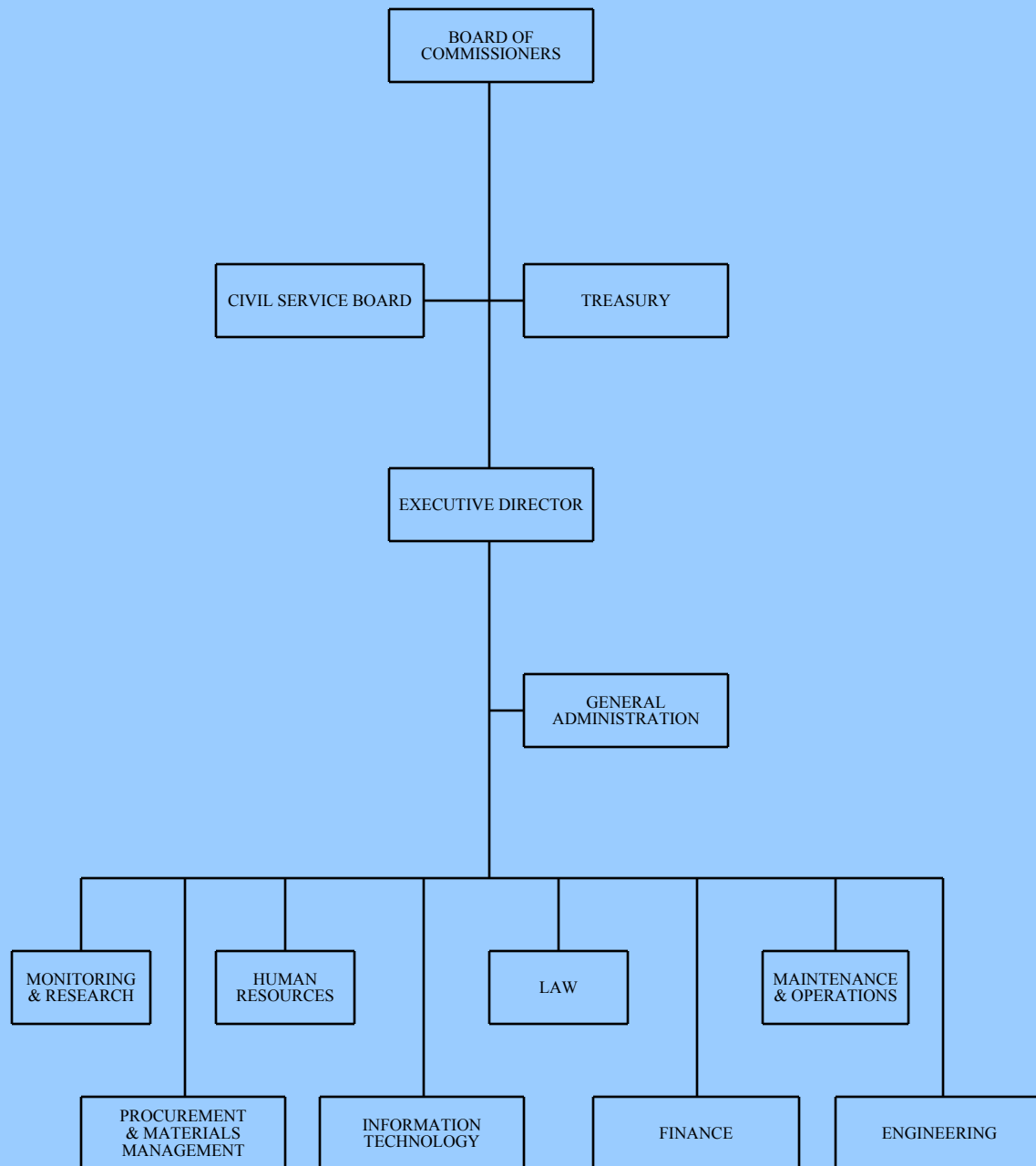
10-YEAR CAPITAL IMPROVEMENT PROGRAM SUMMARY

2017 - 2026 CAPITAL PROJECT CONSTRUCTION COST

	ACTUAL CASH DISBURSEMENTS					ESTIMATED CASH DISBURSEMENTS					TOTAL
	2017	2018	2019	2020	2021*	2022	2023	2024	2025	2026	2017-2026
BY CATEGORY											
Water Reclamation Plants and Solids Management	\$104.26	\$34.17	\$22.29	\$52.81	\$62.80	\$68.77	\$60.79	\$66.52	\$65.36	\$64.22	\$601.99
Replacement of Facilities	43.22	14.48	10.71	5.30	7.28	22.91	36.29	32.72	30.64	33.22	\$236.78
Collection Facilities	10.52	16.58	5.90	3.83	3.73	13.14	30.98	45.87	30.00	35.61	\$196.17
Stormwater Management	5.69	26.23	52.48	47.18	71.54	61.04	50.74	41.39	59.49	51.50	\$467.29
Tunnel and Reservoir Plan	55.79	45.84	4.87	15.82	8.70	22.23	29.49	23.39	25.04	25.97	\$257.14
TOTAL	\$219.48	\$137.30	\$96.25	\$124.95	\$154.05	\$188.10	\$208.30	\$209.89	\$210.53	\$210.53	\$1,759.37
BY FUND											
Stormwater Management Fund	\$0.96	\$6.59	\$16.72	\$25.82	\$35.98	\$54.42	\$50.10	\$41.23	\$39.46	\$31.50	\$302.78
Construction Fund	8.83	6.82	9.47	7.67	8.28	9.62	10.13	7.56	7.20	7.11	\$82.69
Capital Improvements Bond Fund	209.69	123.89	70.06	91.46	109.79	124.06	148.07	161.09	163.87	171.92	\$1,373.90
TOTAL	\$219.48	\$137.30	\$96.25	\$124.95	\$154.05	\$188.10	\$208.30	\$209.89	\$210.53	\$210.53	\$1,759.37

- Notes:
1. All project costs are in millions of dollars.
 2. Summary includes project construction costs.
 3. 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.
 4. 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 2021 Major Accomplishments

- Continued work on a large-scale project to improve the railroad assets at the Stickney WRP. The railroad is used to convey material to the biosolids management areas, making it an important element in producing Class A Exceptional Quality biosolids and by extension managing and recovering resources;
- Completed the third 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 two projects that will result in energy reductions: the installation of two energy-efficient boilers in the Main Office Building and the installation of energy-efficient LED fixtures in the fertilizer building at the Stickney WRP;
- Began rehabilitating the Gloria Alitto Majewski Reservoir, which is part of the District's Tunnel and Reservoir Plan, one of the country's largest public works projects for pollution and flood control. The system stores combined stormwater and sewage in reservoirs that would otherwise overflow into waterways in rainy weather;
- Completed a four-year intergovernmental agreement with the United States Geological Survey for real time monitoring and data transmission of water conditions at Route 53 in the Des Plaines River, near Joliet. This data is used to inform and develop a nutrient reduction strategy for urban point and non-point sources, in line with the State Nutrient Loss Reduction Strategy.

2022 Appropriation

The 2022 appropriation for the Construction Fund is \$18,769,700, an increase of \$3,298,500, or 21.3 percent, from 2021. There are no staff positions budgeted in the Construction Fund. The 2022 value of the Construction Fund Program includes \$4,618,000 for projects under construction and \$12,609,000 for projects scheduled for award in 2022. An additional \$1,542,700 is appropriated for purposes not specifically associated with listed project costs, such as professional engineering services in connection with programs and initiatives sponsored by the Engineering and Monitoring & Research Departments.

2022 Budget Highlights

The following budget highlights support the District's Strategic Plan Goal of Resource Management, defined as maintaining a high level of performance while fulfilling the District's core mission of protecting the public health and area waterways and pursuing opportunities to recover and reuse resources. The initiatives described below exemplify the District's goal of maintaining and operating its facilities and assets to provide that high level of service.

Design and maintain a Capital Improvement Program that emphasizes preserving and improving assets for optimal performance, long-term sustainability, and equitable and consistent service delivery

- Design and implement projects with the purpose of providing valuable equipment redundancies, preventing system failures, and maximizing equipment uptime for permit compliance;
- Understand and consider outside forces and influences, such as the COVID-19 global pandemic. The District will continue to evaluate the financial impacts related to the COVID-19 global pandemic and other external influences as it plans for capital infrastructure needs;
- Continue to build an Asset Management Program that is sustainable, optimizes the life cycle of critical assets, and considers the long-term environmental and financial implications of all plans and activities;
- Allocate resources to ensure that the required operating capacity of the District's assets is maintained at a high level. In 2022, the District will oversee 19 new and eight existing Construction Fund projects related to the core programs and functions of collection, treatment, solids processing, and flood and pollution control;
- Continue to pursue research programs focused on addressing impending or anticipated future regulatory actions, achieving energy savings and resource recovery, and driving innovation, all of which are success measures of Resource Management.

The following budget highlight supports the District's Strategic Plan Goal of Community Engagement. The initiative described below illustrates the District's determination to serve as a critical community asset, a responsive neighbor, and an inclusive business partner.

Collaborate with similarly motivated agencies and organizations to advance the mission and goals of the District

- Maintain membership in the DuPage River Salt Creek Workgroup (DRSCW), which is a non-profit organization formed by local communities, water reclamation plants, and environmental organizations to address water quality issues at the

watershed level. The Salt Creek and the East and West Branch DuPage River Watersheds, the primary areas of focus, are also the receiving streams for the discharge from the Egan and Hanover Park WRPs. Membership in the DRSCW provides the District with an opportunity to benefit both the environment and its financial position 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 implemented and their impacts on the waterway are evaluated. Beginning in 2022, the District will fund and manage a watershed project in DuPage County to remove the Graue Mill dam, perform intensive stream restoration along Salt Creek, and add recreational amenities in the Fullersburg Woods Forest Preserve. Additionally, options will be developed to rehabilitate or replace the floodwall at the Fullersburg Nature Center, which suffers from significant seepage during times of high flow in the Salt Creek. The estimated cost of the project is \$4,000,000, with funds to be expended over a two-year period.

The following budget highlight supports the District's Strategic Plan Goal of Enterprise Resilience. The initiative described below reflects the District's dedication to making choices and decisions that strengthen the District's operational position, resulting in reliable and cost-effective services.

Develop conceptual plans and cost estimates to achieve energy neutrality at one water reclamation plant by 2030, and net energy neutrality District-wide by 2035.

- Begin a project in the North Aeration Battery at the Egan WRP to test new technologies and their effectiveness at reducing energy, minimizing maintenance, and meeting more stringent permit compliance requirements.

Construction Fund Program**Projects Under Construction**

Project Name	Project Number	Est. Construction Cost	2022 Appropriation	Duration (days)	Award Date
Rehabilitation of Two Double Disc Gate Valves, SWRP	19-905-21	\$ 1,088	\$ 500	896	Oct 2019
Railroad Track Rehabilitation, SSA	J69922-22.A	1,462	44	705	Feb 2020
Rehabilitate Aeration Blowers, SWRP	20-908-21	3,385	1,721	1,333	May 2020
HVAC Improvements, Various Locations	19-613-21	3,175	1,025	1,186	Oct 2020
Remove and Replace Two Boilers, Main Office Building	J15090-076	556	138	491	Jan 2021
Rehabilitation of the Gloria Alitto Majewski Reservoir, KWRP	J67783-044	1,028	620	434	Jan 2021
Rehabilitate One Electric Motor, SWRP	21-901-21	305	200	534	Jul 2021
Piping Improvements, KWRP and OWRP	J67722-003.A	370	370	365	Sep 2021
Total Projects Under Construction		\$ 11,369	\$ 4,618		

Awards in 2022

Project Name	Project Number	Est. Construction Cost	2022 Appropriation	Duration (days)	Est. Award Date
Furnish, Deliver, and Install HVAC Control Panels, SWRP	21-910-21	\$ 850	\$ 850	359	Jan 2022
Replacement of Telemetry, Various Locations	20-861-3E	1,300	1,300	353	Feb 2022
Remove and Replace One 23XL Chiller, MOB	J15090-080	350	350	119	Feb 2022
Rehabilitation of Locomotive No. 4, SSA	21-911-21	750	750	640	Mar 2022
Furnish, Deliver, and Install Primary Bag Filters, Various Locations	22-601-21	400	350	659	Mar 2022
Furnish, Deliver, and Install 480V Power Feeds to Aeration Batteries A, B, and C, CWRP	J68823-001.A	250	250	305	Mar 2022
Furnish, Deliver, and Install Automatic Transfer Switches, LWRP	J68823-002.A	250	250	305	Mar 2022
Rehabilitate Overhead Air Main, CWRP	22-801-21	400	400	365	Apr 2022
Rebuild Central Control Room, CWRP	22-803-21	300	300	365	Apr 2022
South Well Drain Restoration, KWRP	J67722-005.A	75	75	274	Apr 2022
North Aeration Battery Tank System Rehabilitation, EWRP	21-XXX-21	3,000	1,000	547	Jun 2022
Fox River Water Reclamation District Biosolids Gas Utilization	21-IGA-20	2,134	2,134	873	Sep 2022
Influent Gate Improvements, SWRP	22-902-21	1,500	1,000	486	Sep 2022
Railroad Track Improvements, SSA	20-907-21	4,000	200	451	Oct 2022
HVAC System Replacement, Various Locations	21-611-21	12,000	300	1,182	Oct 2022
Fullersburg Woods Master Plan, DRSCW	21-863-2C	4,000	2,000	730	Oct 2022
Underground Storage Tank Improvements, Various Locations	22-602-21	650	650	365	Oct 2022
Centrifuge Improvements at Post-Digestion Centrifuge Facility, SWRP	22-903-21	1,000	200	425	Oct 2022

Awards in 2022 (continued)

Project Name	Project Number	Est. Construction Cost	2022 Appropriation	Duration (days)	Est. Award Date
MCC Replacement at Upper DuPage Reservoir, NSA	19-543-3E	\$ 250	\$ 250	253	Nov 2022
Total 2022 Awards		\$ 33,459	\$ 12,609		
Cumulative Projects Under Construction and 2022 Awards		\$ 44,828	\$ 17,227		

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 2022 award.

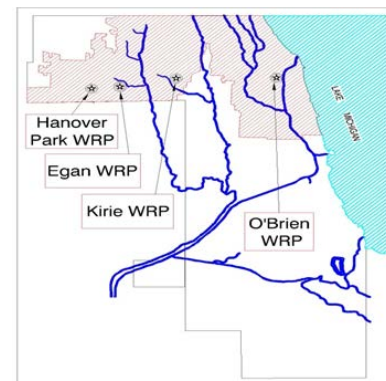
STICKNEY SERVICE AREA (SSA)



Stickney Water Reclamation Plant (SWRP)

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects Under Construction			
19-613-21	HVAC Improvements, Various Locations	12/23	\$ 3,175,000
19-905-21	Rehabilitation of Two Double Disc Gate Valves, SWRP	3/22	1,088,000
20-908-21	Rehabilitate Aeration Blowers, SWRP	12/23	3,385,000
21-901-21	Rehabilitate One Electric Motor, SWRP	12/22	305,000
J15090-076	Remove and Replace Two Boilers, Main Office Building	5/22	556,000
J69922-22.A	Railroad Track Rehabilitation, SSA	1/22	1,462,000
		Total	\$ 9,971,000
Projects for 2022 Award			
20-861-3E	Replacement of Telemetry, Various Locations		\$ 1,300,000
20-907-21	Railroad Track Improvements, SSA		4,000,000
21-611-21	HVAC System Replacement, Various Locations		12,000,000
21-910-21	Furnish, Deliver, and Install HVAC Control Panels, SWRP		850,000
21-911-21	Rehabilitation of Locomotive No. 4, SSA		750,000
22-602-21	Underground Storage Tank Improvements, Various Locations		650,000
22-902-21	Influent Gate Improvements, SWRP		1,500,000
22-903-21	Centrifuge Improvements at Post-Digestion Centrifuge Facility, SWRP		1,000,000
J15090-080	Remove and Replace One 23XL Chiller, MOB		350,000
		Total	\$ 22,400,000
Stickney Service Area Grand Total			\$ 32,371,000

NORTH SERVICE AREA (NSA)



Terrence J. O'Brien Water Reclamation Plant (OWRP)

Projects for 2022 Award

		Estimated Substantial Completion Date	Estimated Construction Cost
19-543-3E	MCC Replacement at Upper DuPage Reservoir, NSA		\$ 250,000
21-IGA-20	Fox River Water Reclamation District Biosolids Gas Utilization		2,134,000
22-601-21	Furnish, Deliver, and Install Primary Bag Filters, Various Locations		400,000
Total			\$ 2,784,000

John E. Egan Water Reclamation Plant (EWRP)

Projects for 2022 Award

21-863-2C	Fullersburg Woods Master Plan, DRSCW		\$ 4,000,000
21-XXX-21	North Aeration Battery Tank System Rehabilitation, EWRP		3,000,000
Total			\$ 7,000,000

James C. Kirie Water Reclamation Plant (KWRP)

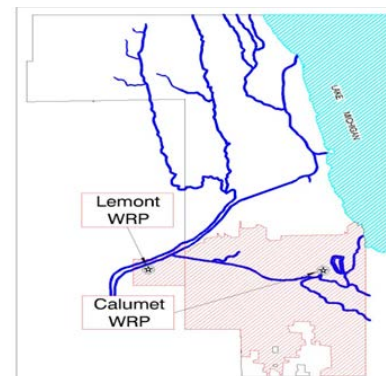
Projects Under Construction

J67722-003.A	Piping Improvements, KWRP and OWRP	9/22	\$ 370,000
J67783-044	Rehabilitation of the Gloria Alitto Majewski Reservoir, KWRP	3/22	1,028,000
Total			\$ 1,398,000

Project for 2022 Award

J67722-005.A	South Well Drain Restoration, KWRP		\$ 75,000
Total			\$ 75,000
North Service Area Grand Total			\$ 11,257,000

CALUMET SERVICE AREA (CSA)



Calumet Water Reclamation Plant (CWRP)

Projects for 2022 Award

		Estimated Substantial Completion Date	Estimated Construction Cost
22-801-21	Rehabilitate Overhead Air Main, CWRP		\$ 400,000
22-803-21	Rebuild Central Control Room, CWRP		300,000
J68823-001.A	Furnish, Deliver, and Install 480V Power Feeds to Aeration Batteries A, B, and C, CWRP		250,000
Total			\$ 950,000

Lemont Water Reclamation Plant (LWRP)

Project for 2022 Award

J68823-002.A	Furnish, Deliver, and Install Automatic Transfer Switches, LWRP		\$ 250,000
Total			\$ 250,000
Calumet Service Area Grand Total			\$ 1,200,000
Capital Projects Grand Total - All Service Areas			\$ 44,828,000

MCC Replacement at Upper DuPage Reservoir, NSA

Project Number 19-543-3E

Service Area North

Location Upper DuPage Reservoir

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$250,000

Contract Award Date November 2022

Substantial Completion Date July 2023

Project Description Replace the motor control center (MCC) at the Upper DuPage Reservoir.

Project Justification The electrical equipment is over 30 years old and is in poor condition. In order to avoid failure and ensure the appropriate level of service, the equipment must be replaced.

Project Status Planning



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	October 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, ventilation improvements will be made.
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

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	March 2022



Project Description	This project entails the rehabilitation of two 66-inch double-disc gate valves on main raw sewage pumps Nos. 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 Nos. 1 through 4 were originally installed in 1938 and rehabilitated in 2008 through 2010. The discharge valves on raw sewage pumps Nos. 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

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 \$4,000,000

Contract Award Date October 2022

Substantial Completion Date December 2023


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 increased. 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 Planning



Rehabilitate Aeration Blowers, SWRP

Project Number	20-908-21	
Service Area	Stickney	
Location	Stickney WRP	
Engineering Consultant	In-house design	
Engineering Contractor	Dresser-Rand Company	
Estimated Construction Cost	\$3,385,000	
Contract Award Date	May 2020	
Substantial Completion Date	December 2023	
Project Description	This project entails inspecting, rehabilitating, and overhauling four Dresser-Clark blowers at the Stickney WRP.	
Project Justification	Four axial flow blowers (Nos. 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 Nos. 5 and 7 have obsolete pneumatic actuators which will be replaced with electro-hydraulic actuators.	
Project Status	Construction	

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	\$12,000,000
Contract Award Date	October 2022
Substantial Completion Date	December 2025



Project Description	<p>This project entails replacing and improving heating, ventilation, and air conditioning (HVAC) 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 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.</p>
Project Justification	<p>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</p>
Project Status	Planning

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 February 2022

Substantial Completion Date January 2023

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. AT&T has been reluctant to continue long-term contractual relationships for these point-to-point services. Additionally, it is expected that the operating costs for a new communications system will realize actual savings of more than 30 percent.

Project Status Planning




Fullersburg Woods Master Plan, DRSCW

Project Number	21-863-2C
Service Area	North
Location	Graue Mill along Salt Creek, near Ogden Avenue and York Road in Oak Brook, DuPage County, IL
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$4,000,000
Contract Award Date	October 2022
Substantial Completion Date	September 2024



Project Description	The project entails removing the Graue Mill Dam and improving a segment of the Salt Creek to stabilize banks and enhance habitat. It will also return flow into the mill to power the waterwheel and rehabilitate a floodwall.
Project Justification	This project will fulfill the District's commitment under its agreement with the DuPage River Salt Creek Workgroup to support projects along the waterway. It will also comply with the Egan and Hanover Park WRPs' National Pollutant Discharge Elimination System Permit provisions to support waterway projects in lieu of near-term, additional nutrient removal solutions at the WRPs.
Project Status	Design

Rehabilitate One Electric Motor, SWRP

Project Number	21-901-21		
Service Area	Stickney		
Location	Pump & Blower Facility, Stickney WRP		
Engineering Consultant	In-house design		
Engineering Contractor	Louis Allis, LLC		
Estimated Construction Cost	\$305,000		
Contract Award Date	July 2021		
Substantial Completion Date	December 2022		
Project Description	This project entails rewinding the motor stator and refurbishing the rotor on aeration blower motor No. 4 at the Stickney WRP.		
Project Justification	On December 23, 2020, aeration blower motor No. 4 tripped while being placed in service. District staff tested the motor and found the stator winding had shorted to ground. To restore the blower to operation, the motor stator must be rewound, and new temperature monitoring devices must be installed. The rotor will be tested and refurbished to like-new condition.		
Project Status	Construction		

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 Siemens Industry, Inc.

Estimated Construction Cost \$850,000

Contract Award Date January 2022

Substantial Completion Date December 2022

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 2022 and 10 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 Design



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	\$750,000
Contract Award Date	March 2022
Substantial Completion Date	December 2023



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 four dump cars derailed on July 13, 2020.

Project Status Planning

Fox River Water Reclamation District Biosolids Gas Utilization

Project Number 21-IGA-20

Service Area North

Location Albin P. Pagorski WRP

Engineering Consultant To be determined

Engineering Contractor To be determined

Estimated Construction Cost \$2,134,000

Contract Award Date September 2022

Substantial Completion Date February 2025

Project Description This project will utilize biogas produced at the Albin P. Pagorski WRP, which is part of the Fox River Water Reclamation District (FRWRD), for plant building and process heating and/or electrical generation to save utility costs. Alternatively, it will produce energy products that will be available for sale to offset plant operating costs.

Project Justification The FRWRD treats flow from the District's Poplar Creek Basin. The District shares the cost of capital projects and pays for treatment costs based on flow. This project will utilize biogas produced at the water reclamation plant, saving plant operating costs and/or providing additional revenue. This will also result in environmental benefits.

Project Status Design




North Aeration Battery Tank System Rehabilitation, EWRP

Project Number	21-XXX-21
Service Area	North
Location	Egan WRP
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$3,000,000
Contract Award Date	June 2022
Substantial Completion Date	November 2023



Project Description	This project entails replacing the membrane diffuser system in the north aeration battery tank with ceramic diffusers and associated piping. Additional improvements include removing baffle walls and adding a hydrocyclone to preferentially waste lighter biomass. Upon implementation, the M&R Department will test the system for its ability to provide adequate aeration and treatment and control filamentous bacterial growth. The M&O Department will assist with establishing maintenance and operational guidelines.
Project Justification	The current membrane diffuser system in the north aeration battery is at the end of its service life and requires a complete replacement due to broken air lines and diffuser plates. Design modifications are also required to meet treatment needs. This overhaul will help the WRP meet National Pollutant Discharge Elimination System permit requirements and minimize filamentous growth. One tank's aeration system will be replaced and tested prior to replacing the second tank's system.
Project Status	Planning

Furnish, Deliver, and Install Primary Bag Filters, Various Locations

Project Number	22-601-21	
Service Area	Calumet and North	
Location	Calumet and O'Brien WRPs	
Engineering Consultant	In-house design	
Engineering Contractor	To be determined	
Estimated Construction Cost	\$400,000	
Contract Award Date	March 2022	
Substantial Completion Date	December 2023	
Project Description	Furnish, deliver, and install primary filter bags in the pump and blower bag houses at the Calumet & O'Brien WRPs. The contractor shall install new primary filter bags in 20 baghouses at the Calumet WRP and eight baghouses at the O'Brien WRP	
Project Justification	Filter bags, which remove debris and contaminants, need to be replaced every ten years due to wear and clogging which can no longer be removed with mechanical shaking.	
Project Status	Planning	

Underground Storage Tanks Improvements, Various Locations

Project Number	22-602-21
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	\$650,000
Contract Award Date	October 2022
Substantial Completion Date	October 2023
Project Description	This project entails improving the District's underground storage tanks, which are used for fleet fueling operations, by installing containment sumps on the submersible turbine pumps and fuel dispensers.
Project Justification	By 2028, regulations issued by the Illinois Office of the State Fire Marshal will require that all submersible turbine pumps and fuel dispensers have containment sumps installed.
Project Status	Planning



Rehabilitate Overhead Air Main, CWRP

Project Number 22-801-21

Service Area Calumet

Location Calumet WRP

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$400,000

Contract Award Date April 2022

Substantial Completion Date April 2023

Project Description This project entails removing the lead paint detected on the overhead air main and adjacent supports at the Calumet WRP.

Project Justification The overhead air main and supports have been found to contain unacceptable levels of lead paint, which requires abatement to eliminate any related safety concerns.

Project Status Design



Rebuild Central Control Room, CWRP

Project Number 22-803-21

Service Area Calumet

Location Calumet WRP

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$300,000

Contract Award Date April 2022

Substantial Completion Date April 2023

Project Description This project entails removing the walls, windows, and equipment currently supported by a raised floor that runs under the room, hallway, and adjacent areas and replacing the floor with new steel frame raised-access computer flooring. Once the new floor is installed, the area will be rebuilt with new walls and windows.

Project Justification The current floor has degraded over time, putting the structural integrity of the room at risk. Any damage to the electrical wiring, for instance, would be extremely costly to replace.

Project Status Design



Influent Gate Improvements, SWRP

Project Number	22-902-21
Service Area	Stickney
Location	Stickney WRP
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$1,500,000
Contract Award Date	September 2022
Substantial Completion Date	December 2023



Project Description	This project entails rehabilitating the hydraulic power units and gate cylinders for the hydraulic gates at the Stickney WRP. Influent control structures M-13-1 and M-14-1 have hydraulic-operated gates in series with the motor-operated gates. Hydraulic-operated gates E and F in structure M-13-1 have failed in the close position, thus reducing operational flexibility during a wet-weather event.
Project Justification	This project will increase the reliability of controlling the influent flow to the Stickney and westside WRPs and the Stickney Tunnel and Reservoir Plan.
Project Status	Planning

Centrifuge Improvements at Post-Digestion Centrifuge Facility, SWRP

Project Number 22-903-21

Service Area Stickney

Location Post-Digestion Centrifuge Facility

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$1,000,000

Contract Award Date October 2022

Substantial Completion Date November 2023


Project Description The Post-Digestion Centrifuge Facility at the Stickney WRP is currently operated by obsolete equipment. This project entails upgrading and replacing the old equipment. A fiber optic network/backbone will also be installed to enable the new equipment to communicate seamlessly with the existing network.

Project Justification The current controllers and input/output modules are part of a line of hardware that was discontinued in 2017. Procuring hardware, software, and technical support has become increasingly difficult and costly due to the equipment's obsolescence. Upgrading to a new system will make the facility's network more reliable and sustainable.

Project Status Planning



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	\$556,000	
Contract Award Date	January 2021	
Substantial Completion Date	May 2022	
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	Construction	

Remove and Replace One 23XL Chiller, MOB

Project Number J15090-080

Service Area Stickney

Location Main Office Building

Engineering Consultant In-house design

Engineering Contractor McDonagh Demolition, Inc.

Estimated Construction Cost \$350,000

Contract Award Date February 2022

Substantial Completion Date May 2022

Project Description The project entails removing and replacing one 23XL Carrier chiller unit at the Main Office Building. The new unit must be energy efficient, use less harmful refrigerant, and be tied into the building automation system.

Project Justification The chiller was installed in 1997. The American Society of Heating, Refrigerating, and Air-Conditioning Engineers' standard for useful life of centrifugal chillers is 23 years. This chiller has now been operational for 24 years. Failure of either existing chiller could have adverse effects on the working conditions of all employees in the Main Office Building due to the inability to regulate the temperature during the summer months. The current unit is also expensive to recharge and uses R-22 refrigerant, an ozone-depleting chemical. Water and electrical energy usage levels are expected to decrease significantly due to the new model's higher efficiency and the automated controls.

Project Status Planning



Piping Improvements, KWRP and OWRP

Project Number	J67722-003.A	
Service Area	North	
Location	Kirie and O'Brien WRPs	
Engineering Consultant	In-house design	
Engineering Contractor	McDonagh Demolition, Inc.	
Estimated Construction Cost	\$370,000	
Contract Award Date	September 2021	
Substantial Completion Date	September 2022	
Project Description	The portion of the project at the Kirie WRP entails replacing severely corroded high-pressure hydraulic piping that controls the plant's four critical influent isolation gate valves. The portion of the project at the O'Brien WRP entails modifying the existing domestic hot water plumbing system in the Process Control Building.	
Project Justification	The project is necessary to maintain the optimal performance of critical assets at the WRPs.	
Project Status	Construction	

South Well Drain Restoration, Kirie WRP

Project Number J67722-005.A

Service Area North

Location Kirie WRP

Engineering Consultant In-house design

Engineering Contractor McDonagh Demolition, Inc.

Estimated Construction Cost \$75,000

Contract Award Date April 2022

Substantial Completion Date December 2022

Project Description This project entails improving the drain piping in the south influent pump house at the Kirie WRP.

Project Justification The cast iron drain piping in the influent pumping station is 40 years old and has failed. The condition is so severe that sections from as high as 50 feet are falling off, creating a hazard to personnel working in the area. Additionally, the failed piping leaks onto the floor and equipment below during rain events, damaging equipment and creating further hazards. Piping is within the south dry well and runs approximately 160 feet below grade with some sections between floor and ceiling approximately 50 feet apart. The piping needs to be replaced to improve both operations and safety.

Project Status Planning



Rehabilitation of the Gloria Alitto Majewski Reservoir, KWRP

Project Number	J67783-044
Service Area	North
Location	The Gloria Alitto Majewski Reservoir
Engineering Consultant	In-house design
Engineering Contractor	McDonagh Demolition, Inc.
Estimated Construction Cost	\$1,028,000
Contract Award Date	January 2021
Substantial Completion Date	March 2022



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 Construction

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 March 2022

Substantial Completion Date December 2022

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, submerging the cables and splices, and creating 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 March 2022

Substantial Completion Date December 2022

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



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 \$1,462,000

Contract Award Date February 2020

Substantial Completion Date January 2022

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 track bed, 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



50000 CONSTRUCTION FUND**OBJECTIVES AND PROGRAM SUMMARY**

OBJECTIVES BY PRIORITY:		Cost	Percent
1 . COLLECTION FACILITIES: Pursue projects, such as the rehabilitation of influent gates at the Stickney WRP and the restoration of a drain well at the Kirie WRP, which will reduce operation and maintenance costs and/or provide facility improvements.		\$ 2,717,200	14.5 %
2 . TREATMENT FACILITIES: Pursue projects, such as the replacement of heating, ventilation, and air conditioning systems, District-wide and the rehabilitation of an overhead air main at the Calumet WRP, which will reduce operation and maintenance costs and/or provide facility improvements.		\$ 5,772,700	30.8 %
3 . 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.		\$ 1,299,500	6.9 %
4 . FLOOD AND POLLUTION CONTROL: Provide funding for construction projects addressing flood control.		\$ 2,124,500	11.3 %
5 . CONSTRUCTION FUND PROJECT COST: Provide funding for contracts awarded prior to 2022.		\$ 4,618,000	24.6 %
6 . PROJECT SUPPORT: Development, design, and administration of current and future contracts, funding support, construction materials, and utility support services.		\$ 2,237,800	11.9 %
Totals		\$ 18,769,700	100.0 %

MEASURABLE GOALS:		2020 Actual	2021 Estimated	2022 Proposed
Award contracts for the continued implementation of the District's Capital Improvement Program.				
Number of projects proposed		19	7	19
Number of contracts awarded		15	8	19
Number of plans available for award		15	8	19
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.				

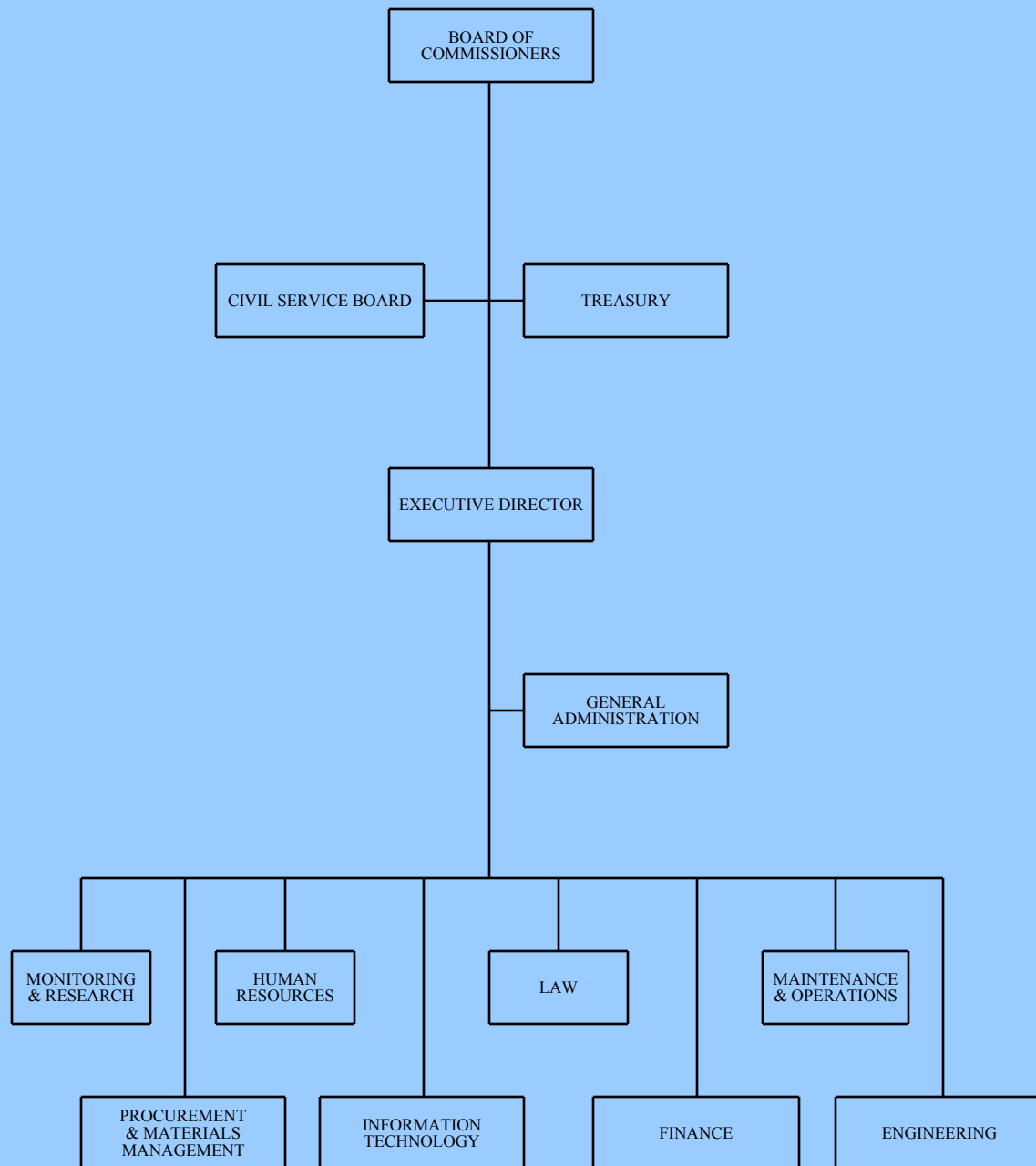
50000 CONSTRUCTION FUND**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:		2020	Budgeted		Change	
Number	Name	Actuals	Positions	Dollars	Dollars	Percent
1110	Interceptor Systems	\$ 608,536	2022	— \$ —	\$ —	—
			2021	— \$ —		
1800	Collection Construction	\$ 3,603,680	2022	— \$ 3,467,200	\$ 1,465,200	73.2
			2021	— \$ 2,002,000		
2800	Treatment Construction	\$ 1,698,335	2022	— \$ 8,675,700	\$ 3,785,400	77.4
			2021	— \$ 4,890,300		
2900	Treatment Processes	\$ —	2022	— \$ 163,000	\$ —	—
			2021	— \$ 163,000		
3800	Solids Processing Construction	\$ 138,509	2022	— \$ 350,000	\$ 200,000	133.3
			2021	— \$ 150,000		
4600	Monitoring	\$ 329,257	2022	— \$ 1,750,000	\$ 653,800	59.6
			2021	— \$ 1,096,200		
4800	Flood and Pollution Control Construction	\$ —	2022	— \$ 2,882,500	\$ (717,500)	(19.9)
			2021	— \$ 3,600,000		
5800	Solids Disposal Construction	\$ 855,329	2022	— \$ 993,500	\$ (1,954,200)	(66.3)
			2021	— \$ 2,947,700		
7460	Main Office Building Complex Services	\$ 437,363	2022	— \$ 487,800	\$ (134,200)	(21.6)
			2021	— \$ 622,000		
Totals		\$ 7,671,009	2022	— \$ 18,769,700	\$ 3,298,500	21.3 %
			2021	— \$ 15,471,200		

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						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
612240	Testing and Inspection Services	\$ 765,202	\$ 225,000	\$ 225,000	\$ 216,000	\$ 140,000	\$ 225,000	\$ —
612400	Intergovernmental Agreements	65,000	3,065,500	3,065,500	2,765,500	287,200	4,411,200	—
612430	Payments for Professional Services	244,302	1,030,700	1,030,700	247,970	185,900	750,000	—
612440	Preliminary Engineering Reports and Studies	19,955	163,000	163,000	162,730	100,600	163,000	—
200	TOTAL CONTRACTUAL SERVICES	1,094,459	4,484,200	4,484,200	3,392,200	713,700	5,549,200	—
634650	Equipment for Process Facilities	90,274	62,000	62,000	61,420	61,500	—	—
400	TOTAL MACHINERY AND EQUIPMENT	90,274	62,000	62,000	61,420	61,500	—	—
645650	Process Facilities Structures	405,000	50,000	450,000	441,493	441,500	1,000,000	—
645680	Buildings	1,101,738	622,000	772,000	771,857	537,700	787,800	—
645700	Preservation of Collection Facility Structures	3,176,128	2,602,000	2,779,500	2,756,181	1,955,000	3,810,000	—
645720	Preservation of Waterway Facility Structures	—	—	—	—	—	262,500	—
645750	Preservation of Process Facility Structures	128,142	3,110,000	3,082,500	2,488,352	1,627,700	3,490,700	—
645780	Preservation of Buildings	819,938	1,544,700	2,494,700	2,230,802	2,218,600	2,177,400	—
645790	Preservation of Capital Projects, N.O.C.	855,329	2,996,300	1,346,300	1,345,395	634,700	1,692,100	—
500	TOTAL CAPITAL PROJECTS	6,486,276	10,925,000	10,925,000	10,034,080	7,415,200	13,220,500	—
TOTAL CONSTRUCTION FUND		\$ 7,671,009	\$ 15,471,200	\$ 15,471,200	\$ 13,487,700	\$ 8,190,400	\$ 18,769,700	\$ —
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.								

NOTE PAGE



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 2021 Major Accomplishments

- The District awarded contracts for rehabilitation of the Upper Des Plaines 14B interceptor, access shaft rehabilitation at the Mainstream Pumping Station, Central Boiler Facility and electrical updates at Hanover Park WRP, rehabilitation of steel spandrel beams at the Pump and Blower Building at O'Brien WRP, and service tunnels rehabilitation at Stickney WRP;
- The District awarded a contract for installation of backup facilities to ensure consistent and reliable removal of phosphorus from effluent at Stickney WRP;
- Construction of projects involving rehabilitation of switchgear and motor control centers at O'Brien WRP, and installation of odor control facilities at Hanover Park, Calumet, and Kirie WRPs achieved substantial completion;
- Construction of facilities for pilot testing of sidestream enhanced biological phosphorus removal facilities at Calumet WRP and of facilities for full scale biological phosphorus removal at the Fox River WRP achieved substantial completion;
- Substantial completion was achieved on contracts involving construction of McCook Reservoir, TARP control structures throughout the Calumet and Stickney Service Areas, and the Des Plaines Inflow Tunnel at McCook Reservoir.

2022 Appropriation

The 2022 appropriation for the Capital Improvements Bond Fund is \$207,926,000, a decrease of \$102,456,600, or 33.0 percent, from 2021. There are no staff positions budgeted in the Capital Improvements Bond Fund. The 2022 appropriation includes construction costs for capital projects to be awarded in 2022 in the amount of \$183.3 million including funding for stormwater management capital projects. The remaining \$24.6 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.

Method of Financing

	State Revolving Fund Loans	General Obligation Bonds	Army Corps of Engineers	Alternate Bonds	Total
Tunnel and Reservoir Plan	\$ 32,150	\$ 35,687	\$ 27,909	\$ —	\$ 95,746
Water Reclamation Plant Expansion and Improvements	110,200	7,928	—	—	118,128
Solids Management	97,500	10,050	—	—	107,550
Collection Facilities	83,450	7,600	—	—	91,050
Replacement of Facilities	209,450	11,861	—	—	221,311
Stormwater	—	—	—	23,708	23,708
Total	\$ 532,750	\$ 73,126	\$ 27,909	\$ 23,708	\$ 657,493

2022 Budget Highlights

The following budget highlights support the District's Strategic Plan Goal of Resource Management. The initiatives highlighted below illustrate how the District is maintaining a high level of performance on the core mission of protecting the public health and area waterways while pursuing opportunities to recover, reuse, and monetize resources.

Maintain a high level of permit compliance as requirements evolve

- Award contracts for installation of facilities at the Calumet WRP to ensure consistent phosphorus removal through chemical addition to treated effluent.
- Construction of the TARP Mainstream Dropshaft at Armitage Avenue to minimize combined sewer overflows at three combined sewer outfalls located on the east bank of the Chicago River between Webster Avenue and McLean Avenue;
- Award detailed design and construction for a combined biogas heat and power facility at the Egan WRP.

The table below provides planned expenditures for the fiscal years 2022-2026 for phosphorus removal projects (in millions) throughout the District.

	Project Number		2022	2023	2024	2025	2026
Chemical Phosphorus Removal Facility, CWRP	18-254-3P	\$	14,000				
Fermentation and Ancillary Facilities for Biological Phosphorus Removal, CWRP	12-245-3P	\$		6,000			
Phosphorus Removal, KWRP	19-375-3P			6,500			
Chemical Phosphorus Removal, OWRP	20-087-3P	\$		14,000			
Fermentation and Ancillary Facilities for Biological Phosphorus Removal Phase I, OWRP	20-085-3P				30,000		
Phosphorus Removal, EWRP	19-415-3P				\$	30,000	
Additional Grit Removal Tank, Chemical Phosphorus Removal Facility, and Construction of New Plant Entrance, LWRP	19-717-3P					6,000	
Fermentation and Ancillary Facilities for Biological Phosphorus Removal Phase II, OWRP	20-086-3P					\$	30,000
Total \$			14,000 \$	12,500 \$	44,000 \$	36,000 \$	30,000

Manage assets to maintain optimal performance and long-term sustainability

- Award contracts for replacement of boilers and motor control centers, roof replacement at the Liu-Hing M&R Complex, rehabilitation of Battery A final settling tank concrete and road replacement at the Stickney WRP;
- Award contracts for utility tunnel crack rehabilitation and expansion joint replacement, rehabilitation of North Branch Pumping Station, replacement of the North Side Sludge Line;
- Award contracts for rehabilitation of Upper Des Plaines 11D, Extension C interceptors as well as for other collection facility improvements at other collection facilities throughout the District;
- Continue the Engineering Department's 30-year program to rehabilitate concrete structures, roofs, pumps, roads, and outlying stations to ensure the continued reliability and longevity of its facilities 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, SWRP, scheduled for award in 2022. 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 scheduled for 2022 award 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.

Capital Improvements Bond Fund Program

Awards in 2022

Project Name	Project Number	Est. Construction Cost	Duration (days)	Est. Award Date
Furnish, Deliver, and Install Disc Filters, EWRP	18-702-31	\$ 9,000	608	Jan 2022
Sludge Pumping Improvements, Various Locations	21-603-31	7,300	694	Jan 2022
North Side Sludge Pipeline Replacement - Section 1, NSA	07-027-3S	20,000	925	Feb 2022
Battery A Final Settling Tanks, Rehabilitation of Concrete and Road Replacement, SWRP	08-174-3D	7,700	323	Feb 2022
Boilers 3, 4, 5 and MCC Replacement, SWRP	19-155-3M	15,500	673	Feb 2022
Upper Des Plaines Intercepting Sewer 11D, Ext. C Rehabilitation, NSA	11-404-3S	5,500	403	Mar 2022
McCook Reservoir Rock Wall Stabilization and Geotechnical Instrumentation, SSA	17-131-4FR	20,000	318	Mar 2022
TARP Mainstream Dropshaft DS-M73E at Armitage Avenue, SSA	20-160-4H	9,600	353	Mar 2022
Biogas Combined Heat and Power System, EWRP	20-415-3S	4,000	271	Mar 2022
Drop Shaft Modifications and Collection Facilities Work, NSA	20-859-3S	4,750	253	Mar 2022
Roof Replacement of the Lue-Hing M&R Complex, SWRP	17-135-3V	6,500	683	Apr 2022
Mechanical Process Improvements at Various Locations	22-601-31	11,000	1,623	Apr 2022
Upper Des Plaines Intercepting Sewer 11D Rehabilitation, NSA	12-369-3S	5,500	403	Jun 2022
Rehabilitation of North Branch Pumping Station, NSA & Modification of Pipe Supports, KWRP	20-858-3D	7,150	287	Jun 2022
Chemical Phosphorus Removal Facility, CWRP	18-254-3P	14,000	253	Jul 2022
Furnish, Deliver, and Install Coarse Screens, OWRP	22-702-31	8,000	733	Oct 2022
Utility Tunnel Cracks and Expansion Joints Rehabilitation, OWRP, KWRP, EWRP, HPWRP	17-843-3D	4,100	683	Dec 2022
Total 2022 Awards		\$ 159,600		

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	\$ 55,006	9,327	Jun 1998
North Branch Dam Removal and River Riparian Connectivity, NSA	16-IGA-22	2,500	1,796	Sep 2017
Replacement of Tailrace Stop Logs, Headrace Gates, and Equipment at Lockport Powerhouse, SSA	15-830-3D	13,084	1,140	Jun 2019
Odor Control Facilities at Sludge Concentration, Southwest Coarse Screen, Overhead Weir, and Post-Centrifuge Building, SWRP	17-134-3MR	16,800	900	Sep 2019
Digester Rehabilitation and Gas Piping Replacement, SWRP	17-140-3P	13,810	800	Nov 2019
Digester Sludge Heating System Upgrades and Boiler Removal, CWRP	18-277-3M	25,805	1,067	Dec 2019
Installation of Mechanical Mixers, SWRP	19-157-3P	8,824	505	Oct 2020
Six Access Shafts Infiltration Mitigation, MSPS	18-142-3H	2,022	436	Feb 2021
Furnish, Deliver, and Install Disc Filters and Other Improvements, HPWRP Group A	20-701-31A	2,078	623	Feb 2021
Rehabilitation of TARP Pumps, MSPS	18-144-3M	23,380	1,252	Apr 2021
Furnish, Deliver, and Install Three Bar Screens, KWRP	18-703-31	1,940	560	Apr 2021
Decommissioning the Thornton Transitional Reservoir, CSA, Rebid	15-266-4H5	22,085	649	May 2021
Furnish, Deliver, and Install Replacement Gearboxes at SEPA Stations	20-801-31	1,898	574	May 2021
Furnish, Deliver, and Install Coarse Screens, SWRP	20-903-31	4,374	1,321	May 2021
Install Aerated Grit Tank Platforms, SWRP	J69922024.A	614	520	Jul 2021
Chemical Addition Backup System, SWRP	19-159-3P	8,532	253	Sep 2021
A/B and C/D Service Tunnel Rehabilitation - Phase III, SWRP	16-127-3D	17,000	1,048	Nov 2021
Upper Des Plaines Intercepting Sewer 14B Rehabilitation, NSA	06-360-3S	14,116	1,003	Dec 2021
Rehabilitation of Steel Spandrel Beams of Pump and Blower House, OWRP	15-069-3D	10,000	903	Dec 2021
Central Boiler Facility and Electrical Updates, HPWRP	19-542-3MR (RE-BID)	14,995	1,335	Dec 2021
Roof Replacement at Webster Avenue Aeration Station, NSA	21-089-3M	674	382	Dec 2021
Thornton Rock Dam Treatment and Geotechnical Instrumentation, CSA	21-260-4H	4,500	337	Dec 2021
Total Projects Under Construction		\$ 264,037		

Projects Under Development

Project Name	Project Number	Est. Construction Cost	Duration (days)	Est. Award Date
39th Street Conduit Rehabilitation - Phase II, SSA	01-103-AS	\$ 24,700	690	Jan 2023
Salt Creek 3 Intercepting Sewer Rehabilitation, SSA	20-161-3S	7,250	853	Jan 2023
Gate Control Equipment Upgrade at TARP Control Structures, KWRP, NSA	06-358-3M	2,200	493	Feb 2023
Digester Rehabilitation and Gas Piping Replacement Phase II, SWRP	18-148-3P	11,500	1,413	Feb 2023
Low Voltage Pump & Blower Switchgear and Aerated Grit MCC Replacement, SWRP	19-156-3E	6,750	493	Feb 2023
Calumet 18E Relief Connecting Structure and Sewer Work, CSA	21-262-3S	1,200	354	Feb 2023
Fox River Water Reclamation District (FRWRD) Operations and Maintenance Building Replacement	21-IGA-21	1,557	841	Feb 2023
Rehabilitation of Pump and Blower House, CWRP	19-255-3D	4,000	503	Mar 2023
6th Street Construction and Utility Tunnel Rehabilitation and Various Roof Replacements, CWRP	19-257-3D	3,100	323	Apr 2023
Lockport Turbine Generator Rehabilitation, SSA	21-601-31	2,000	267	Apr 2023
Fermentation and Ancillary Facilities for Biological Phosphorus Removal, CWRP	12-245-3P	6,000	783	May 2023
FST Effluent Conduit Rehab & UV Facility Upgrades, OWRP	19-084-3P	2,000	453	May 2023
Furnish, Deliver, and Install Elevator Upgrades, NSA	21-701-31	3,450	610	May 2023
Rehabilitation of the Overhead Bridge Crane in the Discharge Valve Chamber, MSPS	21-901-31	1,100	540	May 2023
Furnish, Deliver, and Install Replacement Gearboxes SEPA Stations	23-801-31	2,000	607	May 2023
Rehabilitation of Gates and Actuators for Wheel Gates G3 & G4, MSPS	23-901-31	4,000	874	May 2023
Upgrade Wilmette Lift Station, NSA	19-083-3P	1,500	323	Jun 2023
TARP Control System Replacement, SSA, CSA, NSA	19-856-3E	25,000	353	Jun 2023
West Side Intercepting Sewer No. 2 Rehabilitation, SSA	20-162-3S	2,000	376	Jun 2023
Westchester Pumping Station Relief Sewer, SSA	21-168-3S	1,000	354	Jun 2023
Phosphorus Removal, KWRP	19-375-3P	6,500	453	Jul 2023
Fox River Water Reclamation District (FRWRD) Grit Tank and Primary Clarifiers (1-4) Replacement	21-IGA-22	5,611	1,024	Jul 2023
North Shore 1 Rehabilitation, NSA	10-047-3S	22,750	953	Aug 2023
Digester Rehabilitation and Gas Piping Replacement, CWRP	18-253-3P	15,000	783	Sep 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
Fox River Water Reclamation District (FRWRD) Biosolids Storage Stage 2	21-IGA-23	671	911	Oct 2023
Biosolids Processing Improvements at LASMA, SWRP	23-902-31	5,000	737	Oct 2023
Battery B Final Settling Tanks, Rehabilitation of Concrete, SWRP	16-128-3D	5,000	513	Jan 2024
Rehabilitation of Locomotive Terminal Building, SWRP	18-143-3D	2,750	533	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
Fermentation and Ancillary Facilities for Biological Phosphorus Removal Phase I, OWRP	20-085-3P	30,000	803	Apr 2024
Decommissioning of Battery B & C Imhoff Tanks and Skimming Tanks 9-16, SWRP	19-152-3P	10,000	513	Jul 2024
Battery D Final Settling Tanks, Rehabilitation of Concrete, SWRP	16-130-3D	3,000	453	Oct 2024
Aeration Battery A Rehabilitation of Concrete, SWRP	20-164-3D	25,000	503	Dec 2024

Projects Under Development continued

Project Name	Project Number	Construction Cost	Duration (days)	Est. Award Date
Low Voltage Switchgear Replacement, MSPS	19-154-3E	\$ 9,000	453	Jan 2025
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
Deammonification System, SWRP	13-101-3P	30,000	503	Jun 2025
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 Phosphorus Removal Phase II, OWRP	20-086-3P	30,000	355	Dec 2026
Stickney Effluent Reuse Line, SSA	14-107-3S	800	193	May 2028
McCook Reservoir Stage 2 Final Reservoir Prep, SSA	17-132-4F	24,796	483	Aug 2028
Total Future Awards		<u>\$ 478,185</u>		
Cumulative 2022 and Future Awards		<u>\$ 637,785</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."

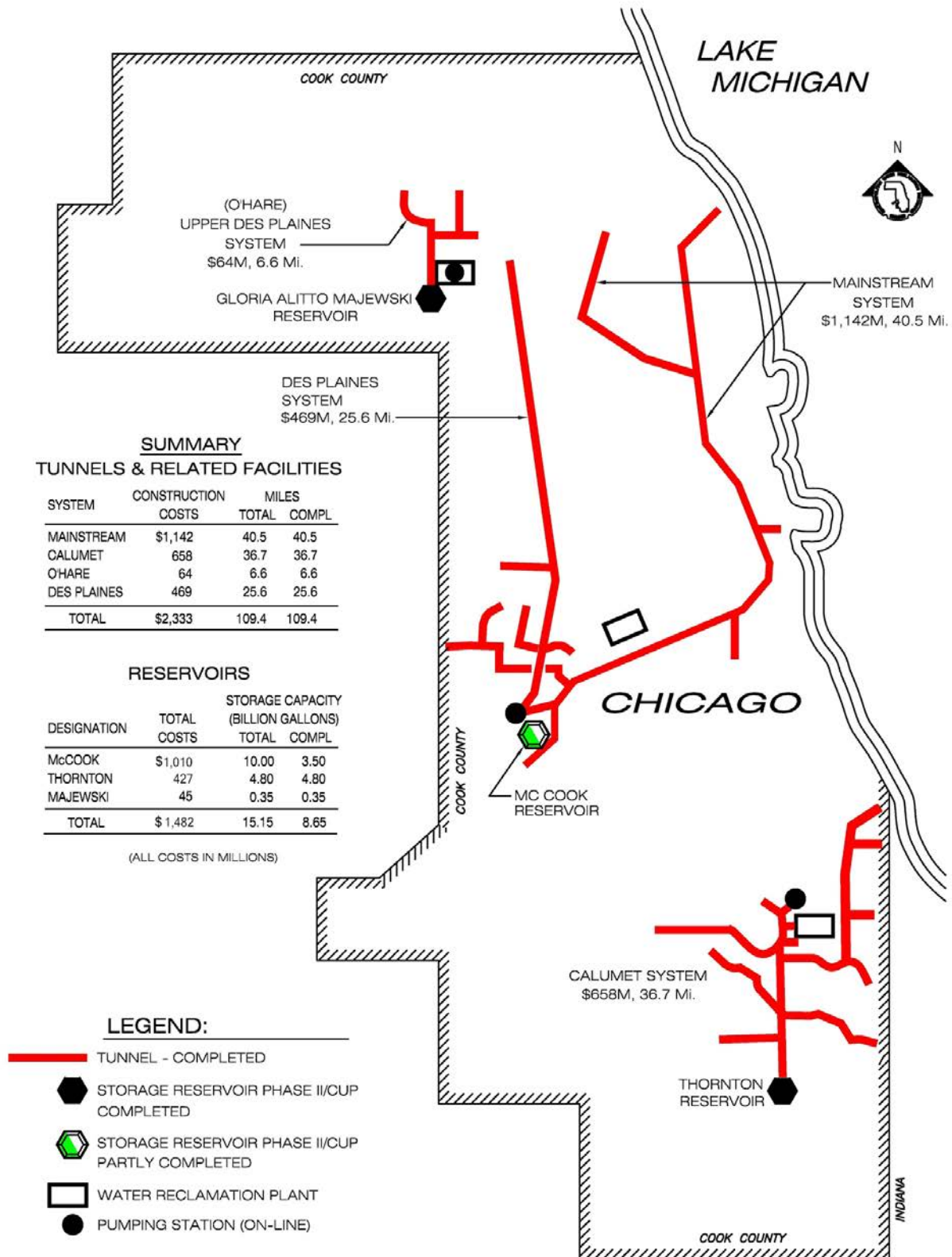
TARP PHASE II PROJECT COSTS

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	\$40,819,000	75%
II - Betterments (1)	93-339-2F	Construction completed in 1998	\$3,992,000	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 - Decommissioning TTR	15-266-4H4	Construction to be completed in 2022	\$22,085,000	
X - Rock Dam Treatment	21-260-4H	Construction to be completed in 2022	\$4,500,000	
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	
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	Under Construction	\$112,769,000	No
XV - Expanded Stage 2 Slope Stabilization	16-125-4F	Construction completed in 2018	\$8,897,000	No
XVI - McCook Reservoir Rock Wall Stabilization and Geotechnical Instrumentation	17-131-4FR	In Design	\$20,000,000	53%
XVII - McCook Reservoir Stage 2 Final Reservoir Prep	17-132-4F	Future	\$24,800,000	69%
Total Project Cost			\$1,502,654,000	

Notes:

- (1) Betterment includes a control building, reservoir outflow control gates, and monitoring system.
- (2) Cost shown is the total cost of the 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 2022 award, or under development.

Bold type indicates projects to be financed by "Unlimited Tax Bonds."

STICKNEY SERVICE AREA (SSA)



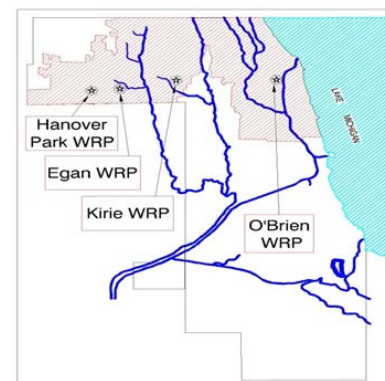
Stickney Water Reclamation Plant (SWRP)

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects for 2022 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
13-199-3F	^ Lyons Levee Flood Control Improvements, SSA		2,358,335
17-131-4FR	McCook Reservoir Rock Wall Stabilization and Geotechnical Instrumentation, SSA		20,000,000
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		15,500,000
20-160-4H	TARP Mainstream Dropshaft DS-M73E at Armitage Avenue, SSA		9,600,000
21-603-31	Sludge Pumping Improvements, Various Locations		7,300,000
		Total	\$ 90,308,335
Projects Under Construction			
11-186-3F	^* Addison Creek Reservoir, SSA	09/22	\$ 78,142,207
14-263-3F	^ Melvina Ditch Reservoir Improvements, SSA	05/22	16,527,113
15-830-3D	Replacement of Tailrace Stop Logs, Headrace Gates, and Equipment at Lockport Powerhouse, SSA	07/22	13,084,160
16-127-3D	A/B and C/D Service Tunnel Rehabilitation - Phase III, SWRP	10/24	17,000,000
17-134-3MR	Odor Control Facilities at Sludge Concentration, Southwest Coarse Screen, Overhead Weir, and Post-Centrifuge Building, SWRP	02/22	16,799,908
17-140-3P	Digester Rehabilitation and Gas Piping Replacement, SWRP	01/22	13,809,967
18-142-3H	Six Access Shafts Infiltration Mitigation, MSPS	04/22	2,022,000
18-144-3M	Rehabilitation of TARP Pumps, MSPS	09/24	23,380,000
19-157-3P	Installation of Mechanical Mixers, SWRP	02/22	8,823,647
19-159-3P	Chemical Addition Backup System, SWRP	05/22	8,531,760
20-903-31	Furnish, Deliver, and Install Coarse Screens, SWRP	12/24	4,374,000
J69922024.A	Install Aerated Grit Tank Platforms, SWRP	12/22	614,100
		Total	\$ 203,108,862
Projects Under Development			
01-103-AS	39th Street Conduit Rehabilitation - Phase II, SSA		\$ 24,700,000

Stickney Water Reclamation Plant (SWRP)

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects Under Development (Continued)			
13-101-3P	Deammonification System, SWRP		\$ 30,000,000
14-107-3S	Stickney Effluent Reuse Line, SSA		800,000
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
19-152-3P	Decommissioning of Battery B & C Imhoff Tanks and Skimming Tanks 9-16, SWRP		10,000,000
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
21-168-3S	Westchester Pumping Station Relief Sewer, SSA		1,000,000
21-601-31	Lockport Turbine Generator Rehabilitation, SSA		2,000,000
21-901-31	Rehabilitation of the Overhead Bridge Crane in the Discharge Valve Chamber, MSPS		1,100,000
23-901-31	Rehabilitation of Gates and Actuators for Wheel Gates G3 & G4, MSPS		4,000,000
23-902-31	Biosolids Processing Improvements at LASMA, SWRP		5,000,000
		Total	\$ 231,646,187
		Stickney Service Area Grand Total	\$ 525,063,384

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)

Projects for 2022 Award

		Estimated Substantial Completion Date	Estimated Construction Cost
07-027-3S	North Side Sludge Pipeline Replacement - Section 1, NSA		\$ 20,000,000
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
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		9,000,000
20-415-3S	Biogas Combined Heat and Power System, EWRP		4,000,000
20-858-3D	Rehabilitation of North Branch Pumping Station, NSA & Modification of Pipe Supports, KWRP		7,150,000
20-859-3S	Drop Shaft Modifications and Collection Facilities Work, NSA		4,750,000
22-601-31	Mechanical Process Improvements at Various Locations		11,000,000
22-702-31	Furnish, Deliver, and Install Coarse Screens, OWRP		8,000,000
		Total	\$ 79,000,000

Projects Under Construction

06-360-3S	Upper Des Plaines Intercepting Sewer 14B Rehabilitation, NSA	09/24	\$ 14,116,000
15-069-3D	Rehabilitation of Steel Spandrel Beams of Pump and Blower House, OWRP	06/24	10,000,000
16-IGA-22	North Branch Dam Removal and River Riparian Connectivity, NSA	08/22	2,500,000
18-703-31	Furnish, Deliver, and Install Three Bar Screens, KWRP	10/22	1,940,000
19-542-3M R (RE-BID)	Central Boiler Facility and Electrical Updates, HPWRP	08/25	14,995,000
20-701-31A	Furnish, Deliver, and Install Disc Filters and Other Improvements, HPWRP Group A	11/22	2,078,000
20-IGA-24 ^	Acquisition of Flood-Prone Properties Des Plaines Phase IV, NSA	09/23	10,000,000
21-089-3M	Roof Replacement at Webster Avenue Aeration Station, NSA	12/22	674,000
		Total	\$ 56,303,000

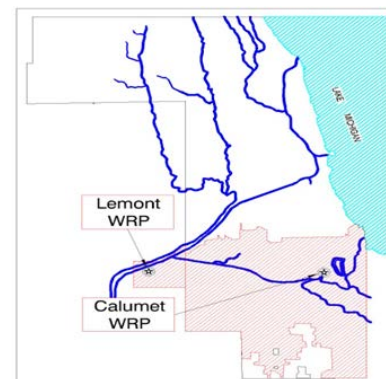
Projects Under Development

06-358-3M	Gate Control Equipment Upgrade at TARP Control Structures, KWRP, NSA		\$ 2,200,000
10-047-3S	North Shore 1 Rehabilitation, NSA		22,750,000
18-540-3P	Plant Improvements, HPWRP		20,000,000

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)

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects Under Development (Continued)			
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
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
20-085-3P	Fermentation and Ancillary Facilities for Biological Phosphorus Removal Phase I, OWRP		30,000,000
20-086-3P	Fermentation and Ancillary Facilities for Biological Phosphorus 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
21-IGA-21	Fox River Water Reclamation District (FRWRD) Operations and Maintenance Building Replacement		1,556,600
21-IGA-22	Fox River Water Reclamation District (FRWRD) Grit Tank and Primary Clarifiers (1-4) Replacement		5,611,000
21-IGA-23	Fox River Water Reclamation District (FRWRD) Biosolids Storage Stage 2		671,258
		Total	\$ 176,238,858
		North Service Area Grand Total	\$ 311,541,858

CALUMET SERVICE AREA (CSA)



Calumet Water Reclamation Plant (CWRP)

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects for 2022 Award			
18-254-3P	Chemical Phosphorus Removal Facility, CWRP		\$ 14,000,000
		Total	\$ 14,000,000
Projects Under Construction			
15-266-4H5	Decommissioning the Thornton Transitional Reservoir, CSA, Rebid	02/23	\$ 22,085,000
15-IGA-14	^* Construction of a Levee along Thorn Creek at Arquilla Park in Glenwood, CSA	12/22	3,483,000
18-277-3M	Digester Sludge Heating System Upgrades and Boiler Removal, CWRP	11/22	25,804,696
20-801-31	Furnish, Deliver, and Install Replacement Gearboxes at SEPA Stations	12/22	1,898,000
21-260-4H	Thornton Rock Dam Treatment and Geotechnical Instrumentation, CSA	11/22	4,500,000
77-235-2F	Thornton Composite Reservoir Mining, Land, and Corp Costs, CSA	12/23	55,005,539
		Total	\$ 112,776,235
Projects Under Development			
12-245-3P	Fermentation and Ancillary Facilities for Biological Phosphorus Removal, CWRP		\$ 6,000,000
18-253-3P	Digester Rehabilitation and Gas Piping Replacement, CWRP		15,000,000
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
21-262-3S	Calumet 18E Relief Connecting Structure and Sewer Work, CSA		1,200,000
23-801-31	Furnish, Deliver, and Install Replacement Gearboxes SEPA Stations		2,000,000
		Total	\$ 70,300,000
		Calumet Service Area Grand Total	\$ 197,076,235
		Capital Projects Grand Total - All Service Areas	\$ 1,033,681,477

^ 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.

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	\$55,005,539
Contract Award Date	June 1998
Substantial Completion Date	December 2023



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	\$14,116,000
Contract Award Date	December 2021
Substantial Completion Date	September 2024



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 \$20,000,000

Contract Award Date February 2022

Substantial Completion Date August 2024

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 February 2022

Substantial Completion Date December 2022



Project Description This project consists of concrete rehabilitation of Battery A final settling tanks at the Stickney WRP and rehabilitation of 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 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 deteriorated and leaking roof deck and deteriorated concrete beams at the Racine Avenue Pumping Station will restore strength of the beams and deck and prolong the building's useful life.

Project Status Design

Upper Des Plaines Intercepting Sewer 11D, Ext. C Rehabilitation, NSA

Project Number 11-404-3S

Service Area North

Location Palatine Township

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$5,500,000

Contract Award Date March 2022

Substantial Completion Date April 2023

Project Description This project consists of rehabilitating 10,828 linear feet of 36-inch sewer pipe, 24 manholes and one connecting structure.

Project Justification Rehabilitation of the sewer line will increase the useful life of the sewer and maintain the proper flow in the line.

Project Status Design



Upper Des Plaines Intercepting Sewer 11D Rehabilitation, NSA

Project Number	12-369-3S	
Service Area	North	
Location	Elk Grove Village/Mount Prospect	
Engineering Consultant	In-house design	
Engineering Contractor	To be determined	
Estimated Construction Cost	\$5,500,000	
Contract Award Date	June 2022	
Substantial Completion Date	July 2023	
Project Description	This project consists of the rehabilitation of 11,317 feet of 36-inch sewer and 1,089 feet of 54-inch sewer by cured-in-place pipe lining and the rehabilitation of 36 manholes by spray-on products.	
Project Justification	The sewer was inspected by closed circuit television system. The video shows infiltration and concrete/metal deterioration due to hydrogen sulfide. The manholes and structures exhibit similar signs of deterioration. In order to restore hydraulic and structural integrity of the sewer and manholes/structure, they need to be rehabilitated.	
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	December 2021
Substantial Completion Date	June 2024



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 tuckpointing, and other miscellaneous rehabilitation work associated or incidental to a 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 has not undergone major structural rehabilitation since it was built in 1926. During its 90 years of service, the building has undergone general maintenance including reroofing, window repair, and tuckpointing. In 2013 a portion of the south parapet wall collapsed due to corrosion of the steel spandrel beams that frame the upper roof and support the parapet walls. The steel roof beams that are part of the building vertical (gravity) and lateral (wind/seismic) loads resisting system were compromised by water infiltration. Subsequent inspection openings were made to examine the embedded steel framing, and similar damage was found around the perimeter of the building. Reinforcing the existing steel framing will extend the useful service life of the structure and prevent further damage to the existing masonry and limestone.

Project Status Design


Decommissioning the Thornton Transitional Reservoir, CSA, Rebid

Project Number	15-266-4H5
Service Area	Calumet
Location	Thornton, IL
Engineering Consultant	Black & Veatch Construction, Inc.
Engineering Contractor	To be determined
Estimated Construction Cost	\$22,085,000
Contract Award Date	May 2021
Substantial Completion Date	February 2023



Project Description	The work associated with decommissioning 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), rehabilitation of rockfall netting at the Thornton Composite Reservoir north highwall access ramp, 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 2022. 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	Design

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	\$13,084,160	
Contract Award Date	June 2019	
Substantial Completion Date	July 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	

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 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

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	November 2021
Substantial Completion Date	October 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


McCook Reservoir Rock Wall Stabilization and Geotechnical Instrumentation, SSA

Project Number	17-131-4FR
Service Area	Stickney
Location	McCook Reservoir
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$20,000,000
Contract Award Date	March 2022
Substantial Completion Date	January 2023



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 and for future monitoring of the McCook reservoir highwalls through instrumentation devices.
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	\$16,799,908	
Contract Award Date	September 2019	
Substantial Completion Date	February 2022	
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 April 2022

Substantial Completion Date February 2024

Project Description This project will replace roof areas 1, 2, 3, 5, and 6 of the Monitoring and Research 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 roof top equipment that has exceeded its useful life, removal of obsolete roof top equipment, and additional work associated with the Monitoring and Research 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	\$13,809,967
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	December 2022	
Substantial Completion Date	October 2024	
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	

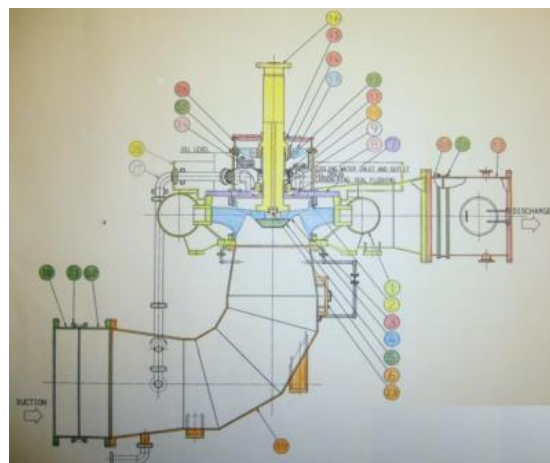
Six Access Shafts Infiltration Mitigation, MSPS

Project Number	18-142-3H
Service Area	Stickney
Location	Mainstream Pumping Station
Engineering Consultant	To be determined
Engineering Contractor	IHC Construction Companies, LLC
Estimated Construction Cost	\$2,022,000
Contract Award Date	February 2021
Substantial Completion Date	April 2022
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	Construction



Rehabilitation of TARP Pumps, MSPS

Project Number	18-144-3M
Service Area	Stickney
Location	Mainstream Pumping Station
Engineering Consultant	In-house design
Engineering Contractor	IHC Construction Companies, LLC
Estimated Construction Cost	\$23,380,000
Contract Award Date	April 2021
Substantial Completion Date	September 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	Construction

Chemical Phosphorus Removal Facility, CWRP

Project Number	18-254-3P
Service Area	Calumet
Location	Calumet WRP
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$14,000,000
Contract Award Date	July 2022
Substantial Completion Date	March 2023



Project Description	<p>The primary 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 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 a \$2.9 million annually to meet the 2024 requirement of 1mg/L effluent phosphorus concentration and \$6.4 million annually to meet the 2030 .5mg/L effluent phosphorus concentration requirement. The District believes fermentation of existing carbon sources within the wastewater will provide a stable and effective biological phosphorus removal process and not necessitate any chemical usage to meet the 2024 limit. Compliance with the 2030 effluent limit of .5 mg/L will be more challenging. It is conceivable that the chemical system could be required as a polisher to meet the .5 mg/L limit, but the actual extent of chemical use cannot be accurately estimated at this time.</p>
Project Justification	<p>A number of options are being explored to help meet the upcoming phosphorus effluent permit limits (in place in 2024) at the Calumet WRP. Chemical phosphorus removal or polishing, while incurring a high operating cost due to purchase of chemicals, is a certain technology. If biological phosphorus removal is not adequately able to meet the effluent permit limit, chemical phosphorus removal will be necessary. The facility will be designed to both remove all of the phosphorus from the mainstream or serve as a polishing step to remove peak concentrations of phosphorus from the effluent. The decision on the construction of the facility will not be made until it is determined that biological phosphorous cannot meet the NPDES permit by itself.</p>
Project Status	Design

Digester Sludge Heating System Upgrades and Boiler Removal, CWRP

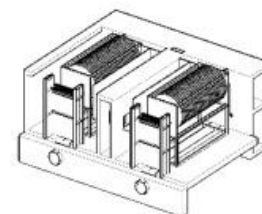
Project Number	18-277-3M
Service Area	Calumet
Location	Calumet WRP
Engineering Consultant	In-house design
Engineering Contractor	IHC Construction Companies, LLC
Estimated Construction Cost	\$25,804,696
Contract Award Date	December 2019
Substantial Completion Date	November 2022



Project Description	This project includes 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), and 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	\$9,000,000
Contract Award Date	January 2022
Substantial Completion Date	September 2023



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 Planning

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	IHC Construction Companies, LLC
Estimated Construction Cost	\$1,940,000
Contract Award Date	April 2021
Substantial Completion Date	October 2022
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	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	\$15,500,000
Contract Award Date	February 2022
Substantial Completion Date	December 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 (MCC) Nos. 3, 4 & 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 & 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	Stickney	
Engineering Consultant	In-house design	
Engineering Contractor	Sollitt/Sachi Joint Venture	
Estimated Construction Cost	\$8,823,647	
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	\$8,531,760
Contract Award Date	September 2021
Substantial Completion Date	May 2022



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 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 phosphorus effluent requirement of 0.5 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 19-542-3MR (RE-BID)

Service Area North

Location Hanover Park WRP

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$14,995,000

Contract Award Date December 2021

Substantial Completion Date August 2025



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 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) and need to be removed to comply with National Fire Protection Association 820 requirements. Centralized boiler operation will maximize the use of available digester gas. Existing electrical equipment in the Digester Complex does not meet the National Fire Protection Association 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 Dropshaft DS-M73E at Armitage Avenue, SSA

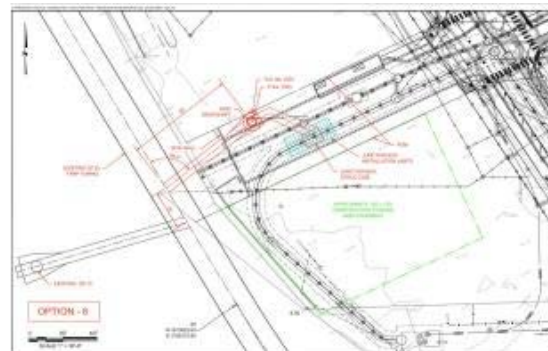
Project Number 20-160-4H

Service Area Stickney

Location SSA

Engineering Consultant In-house design

Engineering Contractor To be determined



Estimated Construction Cost \$9,600,000

Contract Award Date March 2022

Substantial Completion Date February 2023

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 (WSIS 9). The capacity of WSIS 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	\$4,000,000
Contract Award Date	March 2022
Substantial Completion Date	December 2022



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. It is anticipated that running one unit will save \$44,000 annually.


Project Status Planning

Furnish, Deliver, and Install Disc Filters and Other Improvements, HPWRP Group A


Project Number	20-701-31A
Service Area	North
Location	Hanover Park WRP
Engineering Consultant	In-house design
Engineering Contractor	Independent Mechanical Industries, Inc.
Estimated Construction Cost	\$2,078,000
Contract Award Date	February 2021
Substantial Completion Date	November 2022
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.
Project Status	Construction



Furnish, Deliver, and Install Replacement Gearboxes at SEPA Stations

Project Number	20-801-31	
Service Area	Calumet	
Location	SEPA(s) 2, 3, 4, & 5	
Engineering Consultant	In-house design	
Engineering Contractor	Independent Mechanical Industries, Inc.	
Estimated Construction Cost	\$1,898,000	
Contract Award Date	May 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 SEPA Stations #2, #3, #4, and #5 in the Calumet Service Area.	
Project Justification	Due to required changes in the permit to increase average dissolved oxygen levels from 3.0 mg/L to 5.0 mg/L from March through July at any time and 3.5 mg/L at any time during the period of 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 Illinois Environmental Protection Agency's waterway dissolved oxygen requirements.	
Project Status	Construction	

Rehabilitation of North Branch Pumping Station, NSA & Modification of Pipe Supports, KWRP

Project Number	20-858-3D	
Service Area	North	
Location	North Branch Pumping Station and KWRP	
Engineering Consultant	In-house design	
Engineering Contractor	To be determined	
Estimated Construction Cost	\$7,150,000	
Contract Award Date	June 2022	
Substantial Completion Date	March 2023	
Project Description	Replace deteriorated concrete deck, stairs, and balustrades at the North Branch Pumping Station (NBPS). Replace flap gates and removable slabs in the connecting structure at Drop Shaft DS-91 near the NBPS. Modify pipe supports for Wet Well #1 (North) raw sewage discharge piping at the Kirie WRP.	
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 balustrades are deteriorated and need to be replaced. The nearby connecting structure to drop shaft DS-91 also requires replacement of the flap gates. In addition to the NBPS work, the Wet Well #1 raw sewage discharge piping at the Kirie WRP requires modification to its pipe supports to prevent damage to the pipe risers.	
Project Status	Design	

Drop Shaft Modifications and Collection Facilities Work, NSA

Project Number	20-859-3S
Service Area	North
Location	Morton Grove, Mount Prospect and Des Plaines, IL
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$4,750,000
Contract Award Date	March 2022
Substantial Completion Date	November 2022



Project Description This contract will include: 1) Rehabilitation work at the Upper Des Plaines Drop Shaft 5 by means of slip lining or form and pour, 2) restoring 100 feet of 108-inch pipe by either cured-in-place pipe lining or Geopolymer lining, 3) restoring up to 500 feet of the drop shaft exit conduit with Geopolymer, 4) replacing deteriorated louvers and grating, 5) installing louvers and grating at Drop Shaft 8, 6) removal of Gate 11, replacing Gate 13, and installing a new actuator at Control Structure 10, 7) installing a weir in the Upper Des Plaines Tunnel near Drop Shaft 1/1A and related work, 8) installing gratings and louvers at Drop Shaft N-19 & N-17, 9) Modifications to Manhole 0+00 on Upper Des Plaines 11B.

Project Justification Project will reduce the incidents of sanitary sewer overflows during wet weather events.

Project Status Design

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	IHC Construction Companies, LLC
Estimated Construction Cost	\$4,374,000
Contract Award Date	May 2021
Substantial Completion Date	December 2024



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 SW 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 Construction

Roof Replacement at Webster Avenue Aeration Station, NSA

Project Number 21-089-3M

Service Area North

Location Webster Avenue Aeration Station

Engineering Consultant In-house design

Engineering Contractor To be determined

Estimated Construction Cost \$674,000

Contract Award Date December 2021

Substantial Completion Date December 2022

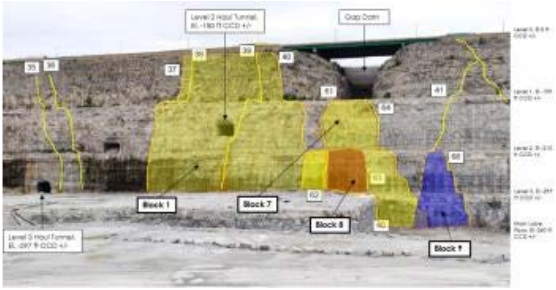
Project Description This project consists of replacing the roof deck and membrane of the Webster Avenue Aeration Station in its entirety, replacing roof mounted penthouses and exhaust fans, providing safety guard rails around the roof mounted equipment, and other associated electrical work.

Project Justification The purpose of this project is to replace the roof membrane and roof deck on the Webster Avenue Aeration Station. During repairs of the roof by M&O under a JOC project, the concrete and metal roof decking were found to be in very poor condition. In addition to supporting vertical loads, the roof deck stabilizes the building structure and masonry walls against lateral forces. The concrete was removed, and temporary roof membrane and braces were installed to protect the facility and stabilize the structure until permanent repairs could be performed. This project will restore the roof structure and ensure years of continued use of the building.

Project Status Design



Thornton Rock Dam Treatment and Geotechnical Instrumentation, CSA

Project Number	21-260-4H	
Service Area	Calumet	
Location	South side (HMS Main Lobe side) of Thornton Composite Reservoir Rock Dam	
Engineering Consultant	Black & Veatch Construction, Inc.	
Engineering Contractor	To be determined	
Estimated Construction Cost	\$4,500,000	
Contract Award Date	December 2021	
Substantial Completion Date	November 2022	
Project Description	Installation of key-block stabilization measures on the south side (HMS Main Lobe) of the Thornton Rock Dam to meet USACOE requirements. Treatment measures include drilling of horizontal drain holes into select key block faces to help alleviate internal rock pressure and the installation of high-capacity, corrosion-protected rock anchors to anchor select key blocks into the surrounding rock mass. Work also includes installation of geotechnical instrumentation and monitoring devices and related equipment.	
Project Justification	Hanson Material Services continues to mine in the Main Lobe of the Thornton Quarry, exposing the toe of the rock dam. The 2020 Rock Dam and Main Lobe Key Block Stability Assessment Report - Alternatives Assessment Memo (Stantec, 2021) recommended additional treatment measures for certain key blocks along the rock mass. The USACE requested the District perform these additional treatment measures. Also, future monitoring of the stability of the Thornton Reservoir highwalls will be provided through the instrumentation devices.	
Project Status	Design	

Sludge Pumping Improvements, Various Locations

Project Number	21-603-31
Service Area	Calumet, North, and Stickney
Location	Stickney, Calumet, O'Brien and Egan WRPs
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$7,300,000
Contract Award Date	January 2022
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



Mechanical Process Improvements at Various Locations

Project Number	22-601-31
Service Area	North and Stickney
Location	O'Brien, Kirie, Hanover Park, and Stickney WRPs
Engineering Consultant	In-house design
Engineering Contractor	To be determined
Estimated Construction Cost	\$11,000,000
Contract Award Date	April 2022
Substantial Completion Date	September 2026

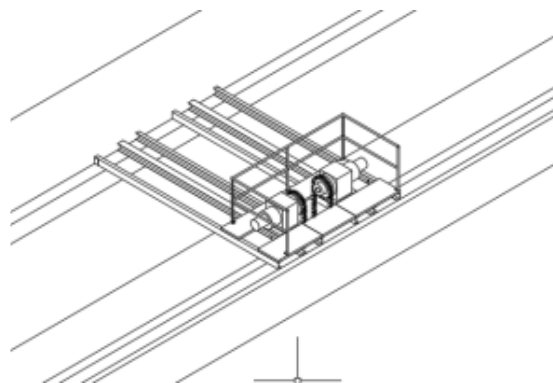


Project Description	<p>The project entails the improvement and rehabilitation of various mechanical systems and assets in the North and Stickney Service Areas. At the O'Brien and Hanover Park WRPs, launder covers will be installed to prevent undesirable algae growth. At the O'Brien WRP, the effectiveness of the UV disinfection system has been reduced due to algae growth on weir surfaces and effluent troughs. The algae become dislodged and covers the UV bulbs, which results in increased maintenance and expensive bulb replacement. The installation of the covers will prevent algae growth, act as a barrier to weather and debris, and reduce odor transmission. At the Hanover Park WRP, algae buildup also occurs on weir surfaces and effluent troughs, which can clog the disc filters and lead to increased backwash, chlorine usage, and operational maintenance. Additional improvements to the mechanical systems at the O'Brien WRP include the installation of 18 slide gates with actuators for final settling tanks 15-18 located in Batteries A, B, and C; the installation of gear reducers and floor stands on 11 final tank drain valves, the installation of fabricated drives with precision bearings on primary tanks 9-16; the installation of underground piping, which runs from the final tanks to the Scum Concentration Building; the installation of a rotating slotted pipe system made of non-corrosive materials to remove scum from the primary tank; and the rehabilitation of eight primary tank influent gate actuators and three splitter gate actuators. Additional improvements to the mechanical systems at the Hanover Park WRP include the rehabilitation of the actuators and valves on the aeration tanks. Other improvements to the mechanical systems in the North Service Area include the installation of upgraded drive shafts made of carbon fiber and reinforced polymer on Raw Sewage Pumps 2 and 4 at the Kirie WRP and the installation of new dewatering pumps at the O'Hare Reservoir. At the Stickney WRP, new drives on final tanks B20, C20, C24, and D6 will be installed. In all cases, the new equipment is superior to the existing equipment and will improve process performance and reduce equipment failures, downtime, and maintenance costs.</p>
Project Justification	<p>The project will result in mechanical systems and assets that perform better due to process modifications and improvements and require less maintenance due to their new or like-new condition.</p>
Project Status	Planning

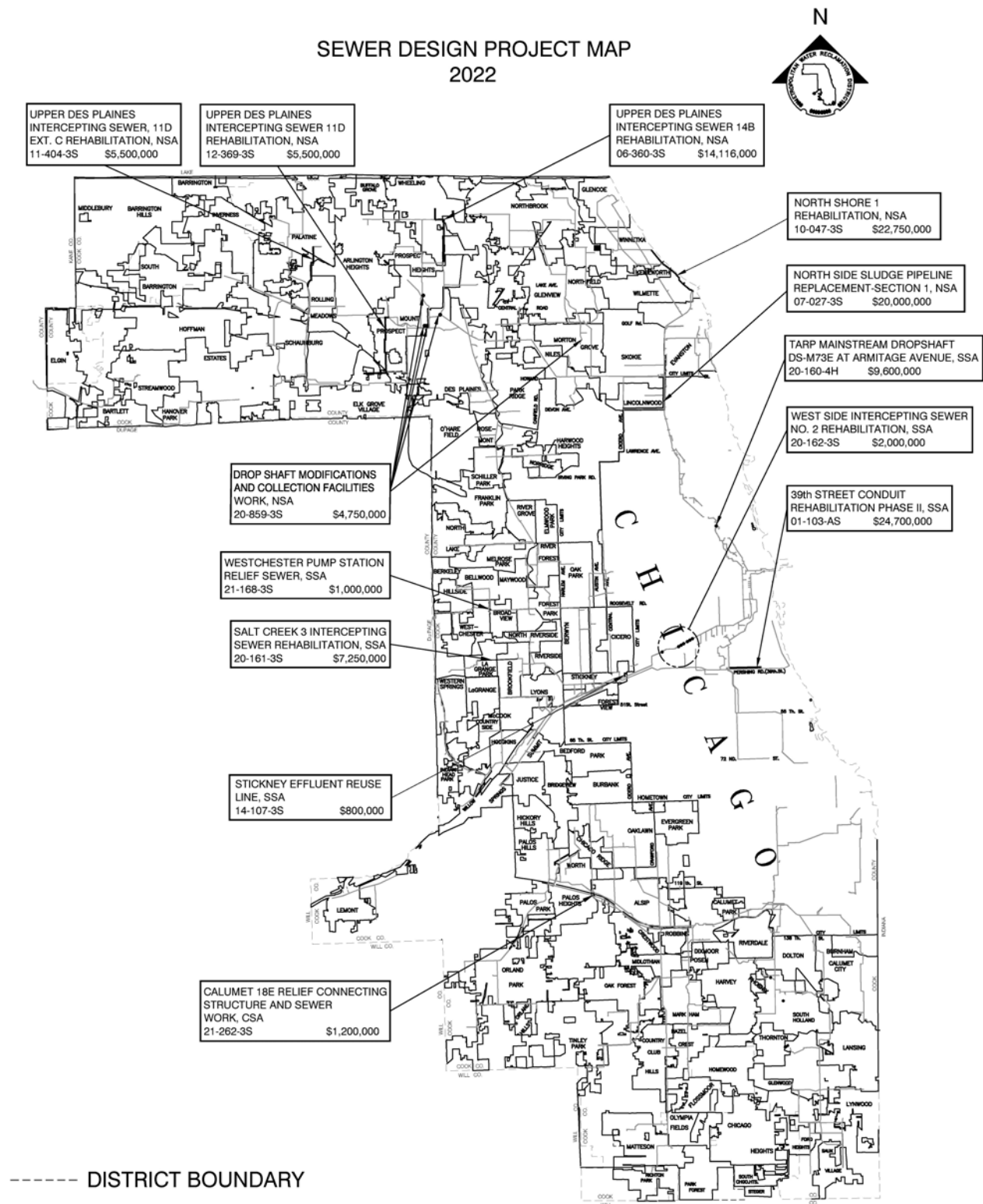
Furnish, Deliver, and Install Coarse Screens, OWRP**Project Number** 22-702-31**Service Area** North**Location** OWRP**Engineering Consultant** In-house design**Engineering Contractor** To be determined**Estimated Construction Cost** \$8,000,000**Contract Award Date** October 2022**Substantial Completion Date** October 2024**Project Description** This project will provide services to improve the plant influent channel coarse screens and debris conveyance system at the O'Brien WRP.**Project Justification** The existing climber-type coarse screens have sustained damage to the screening bars, and portions of the hydraulic rake systems are obsolete. In addition, there is currently no way to isolate these screens from the plant inflow, or from each other. This project will replace the climber-type screens with travelling-rake type screens that have become the District standard. As the new screens will provide more efficient screening of the plant inflow, the project will also incorporate new isolation gates and improvements to the screenings material handling system.**Project Status** Planning

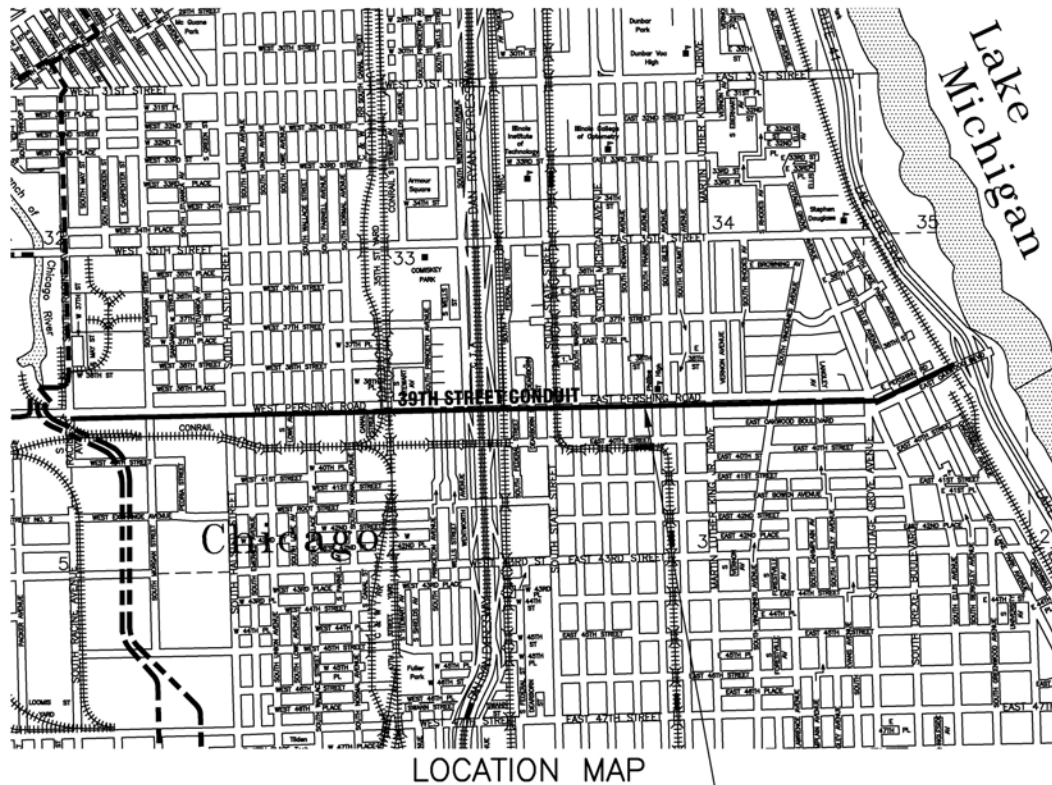
Install Aerated Grit Tank Platforms, SWRP

Project Number	J69922024.A
Service Area	Stickney
Location	Southwest Aerated Grit Tanks
Engineering Consultant	In-house design
Engineering Contractor	McDonagh Demolition, Inc.
Estimated Construction Cost	\$614,100
Contract Award Date	July 2021
Substantial Completion Date	December 2022



Project Description	Install work platforms and handrails on the eight Southwest Aerated Grit Tanks as a structural improvement. Work shall include installing gratings and railings around the chain drives and reinforcing the existing stainless steel I-beams that support the drives.
Project Justification	Maintenance on existing drives requires personnel to wear harnesses and lanyards. Platforms will improve safety and decrease maintenance times.
Project Status	Construction



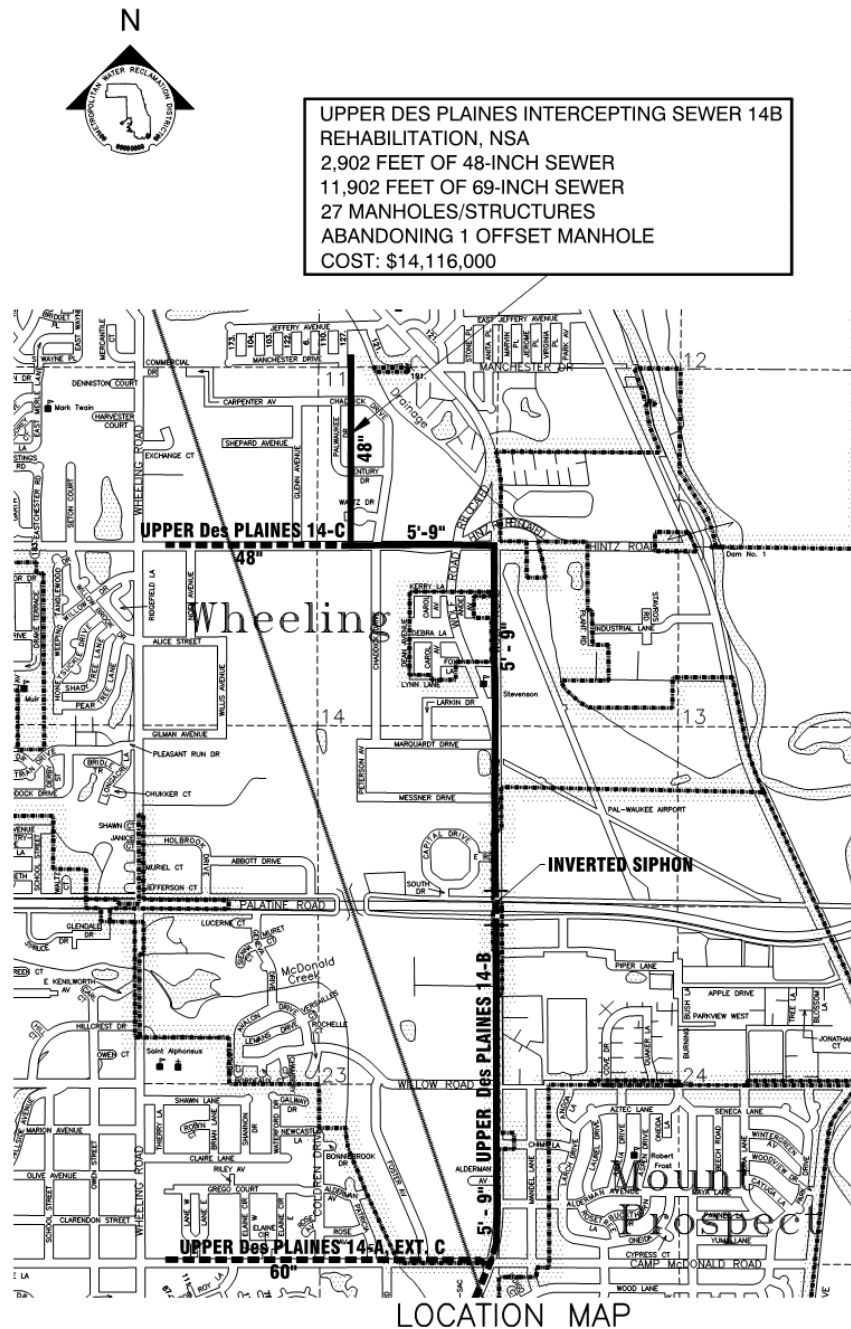


39th STREET CONDUIT REHABILITATION -
PHASE II, SSA
REHABILITATE 20-FOOT DIAMETER
CONDUIT FROM LAKE SHORE DRIVE TO
THE RACINE AVENUE PUMPING STATION
COST: \$24,700,000

LEGEND:

- = SEWER TO BE REHABILITATED
- - - = EXISTING SEWER

39th STREET CONDUIT REHABILITATION - PHASE II, SSA CONTRACT 01-103-AS

**LEGEND:**

- = SEWER TO BE REHABILITATED
 = EXISTING SEWER

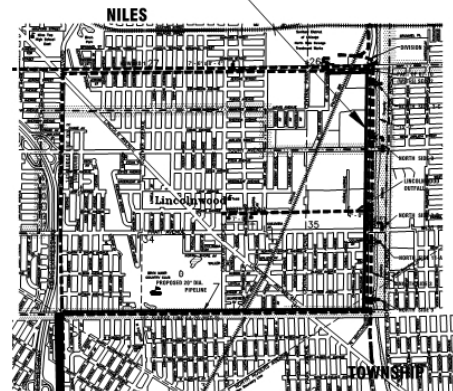
UPPER Des PLAINES INTERCEPTING SEWER 14B REHABILITATION, NSA
CONTRACT 06-360-3S



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: \$20,000,000



LOCATION MAP

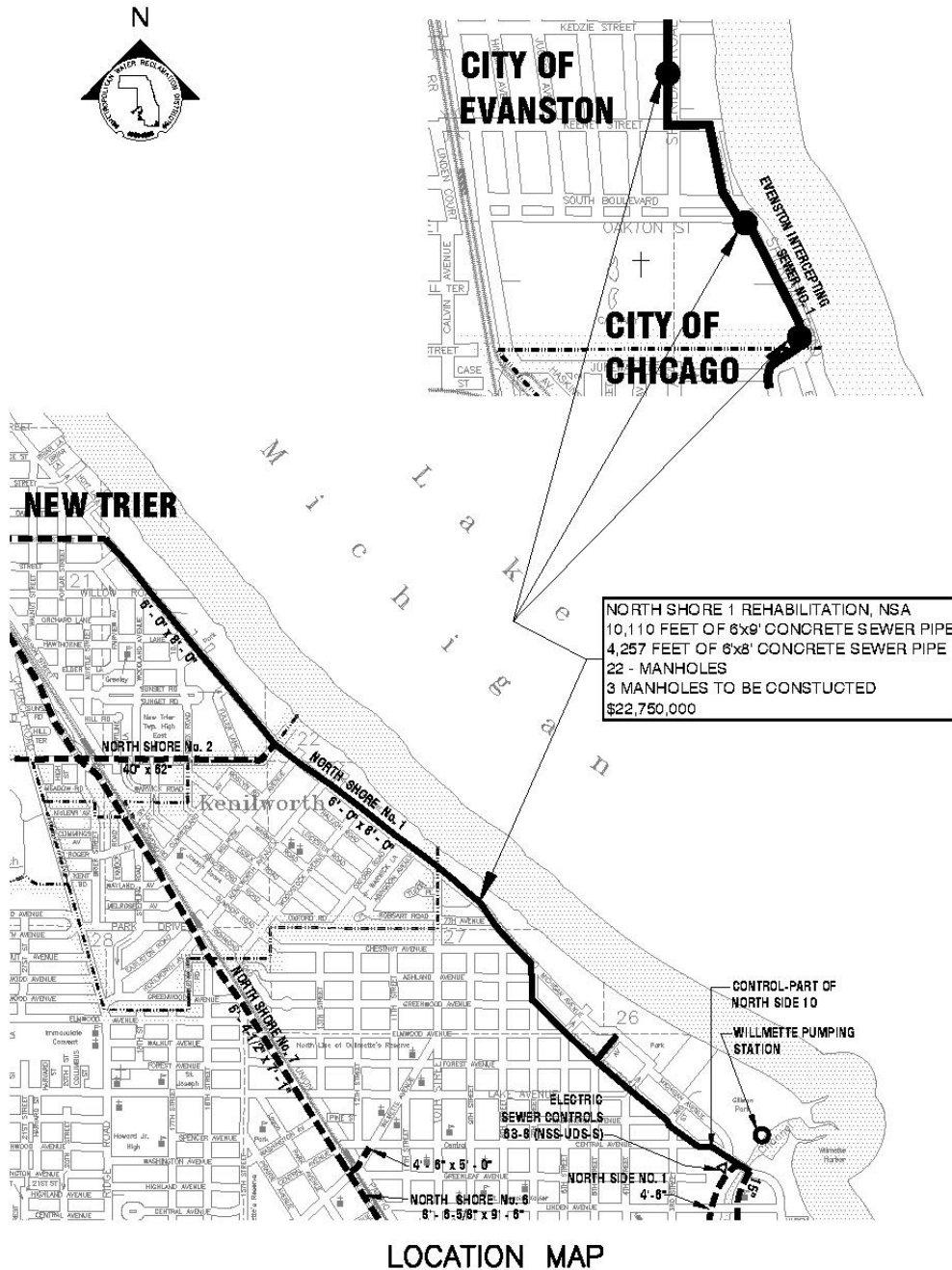


LOCATION MAP

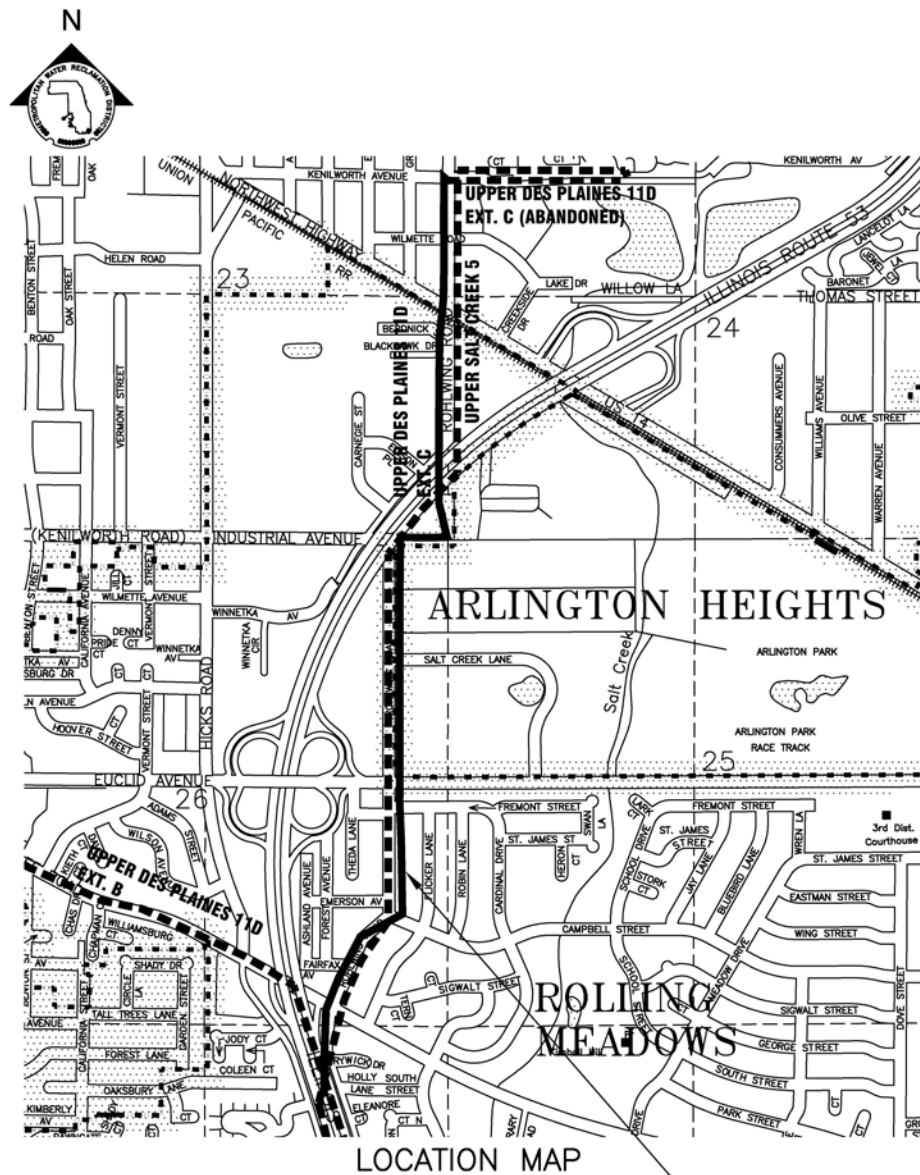
LEGEND:

- = SEWER TO BE REHABILITATED
 = EXISTING SEWER

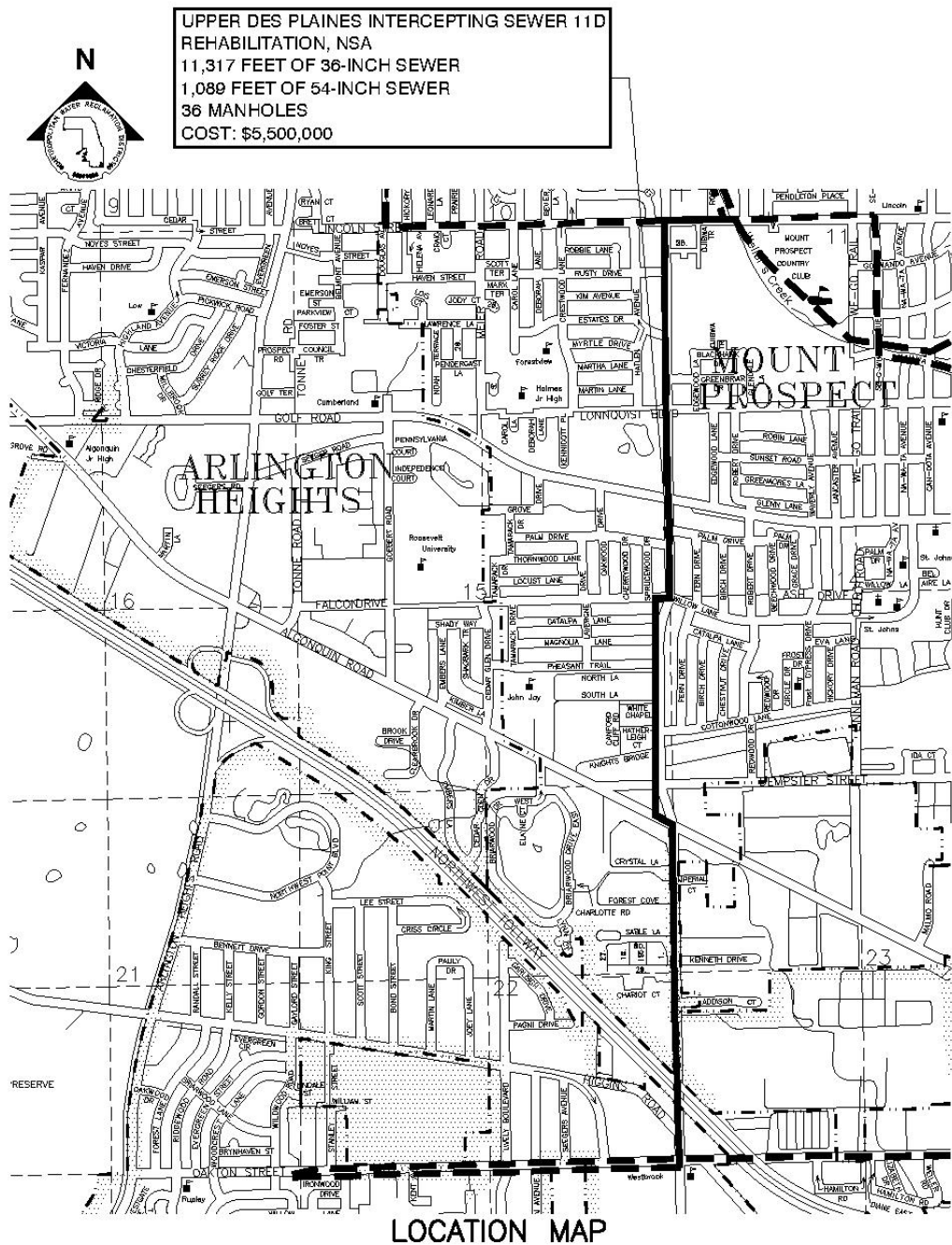
**NORTH SIDE SLUDGE PIPELINE REPLACEMENT - SECTION 1, NSA
 CONTRACT 07-027-3S**



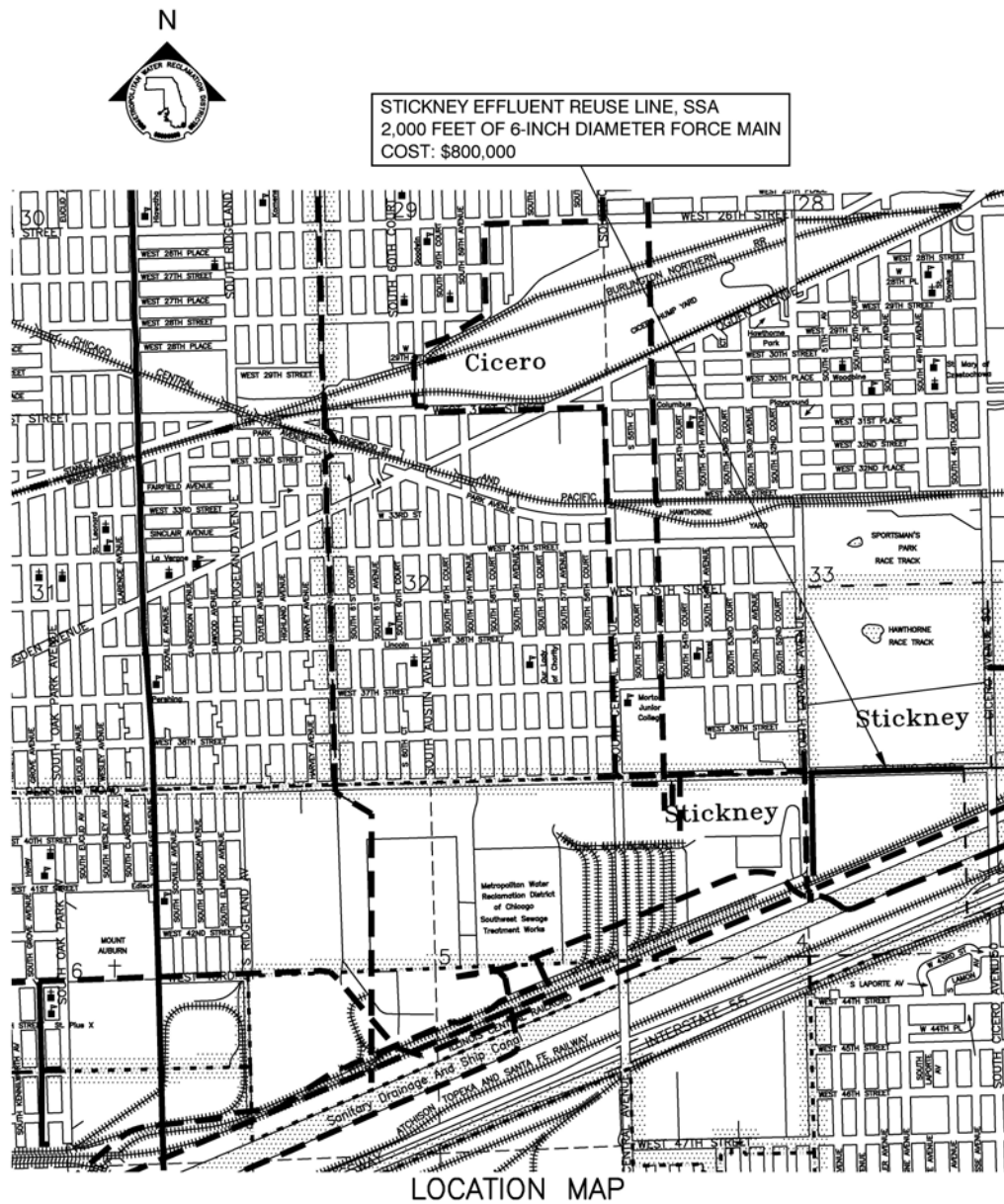
NORTH SHORE 1 REHABILITATION, NSA CONTRACT 10-047-3S



UPPER DES PLAINES INTERCEPTING SEWER 11D, EXT. C REHABILITATION, NSA CONTRACT 11-404-3S



**UPPER DES PLAINES INTERCEPTING SEWER 11D REHABILITATION, NSA
CONTRACT 12-369-3S**

**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

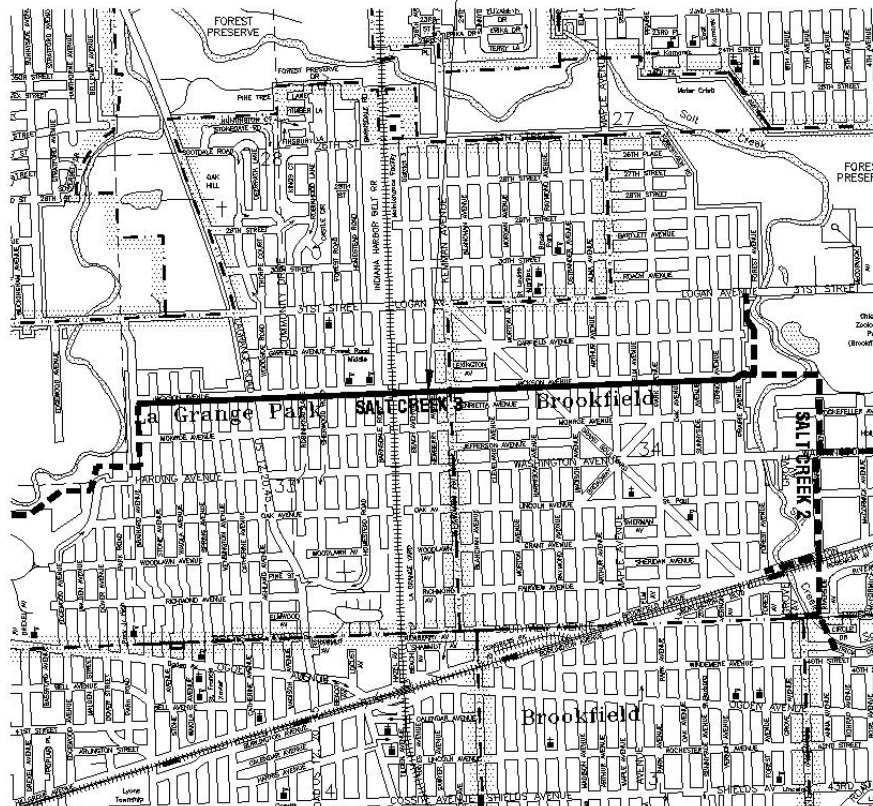
LEGEND:

- = 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

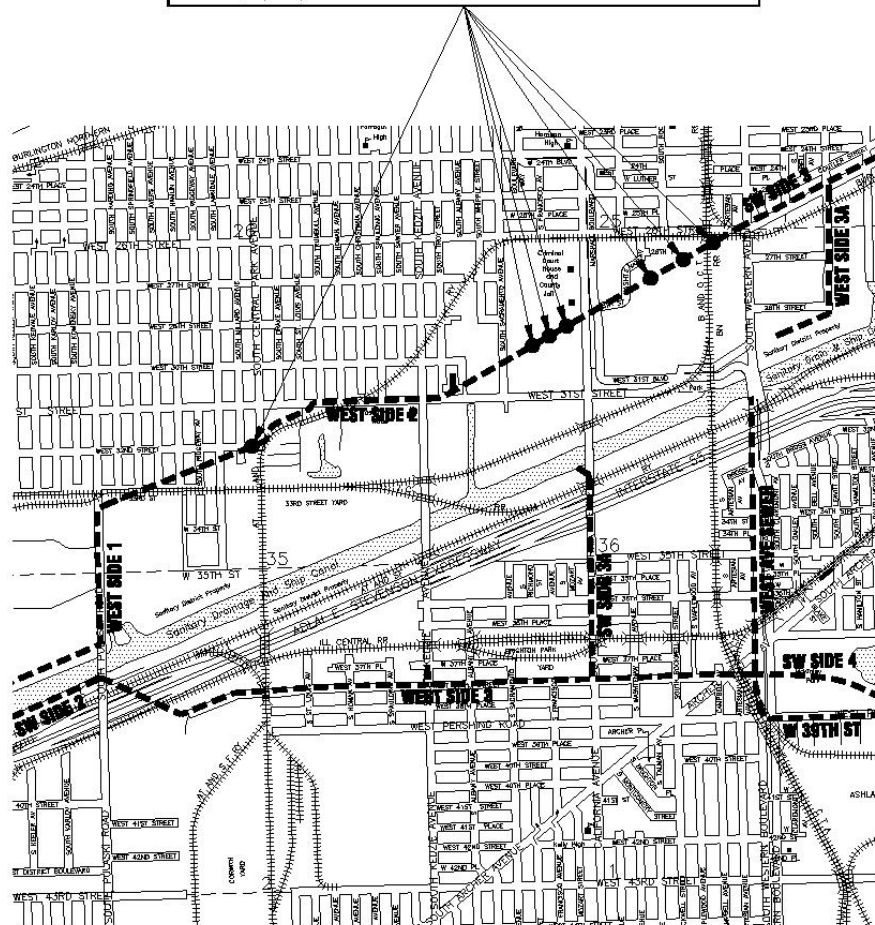
LEGEND:

- = 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

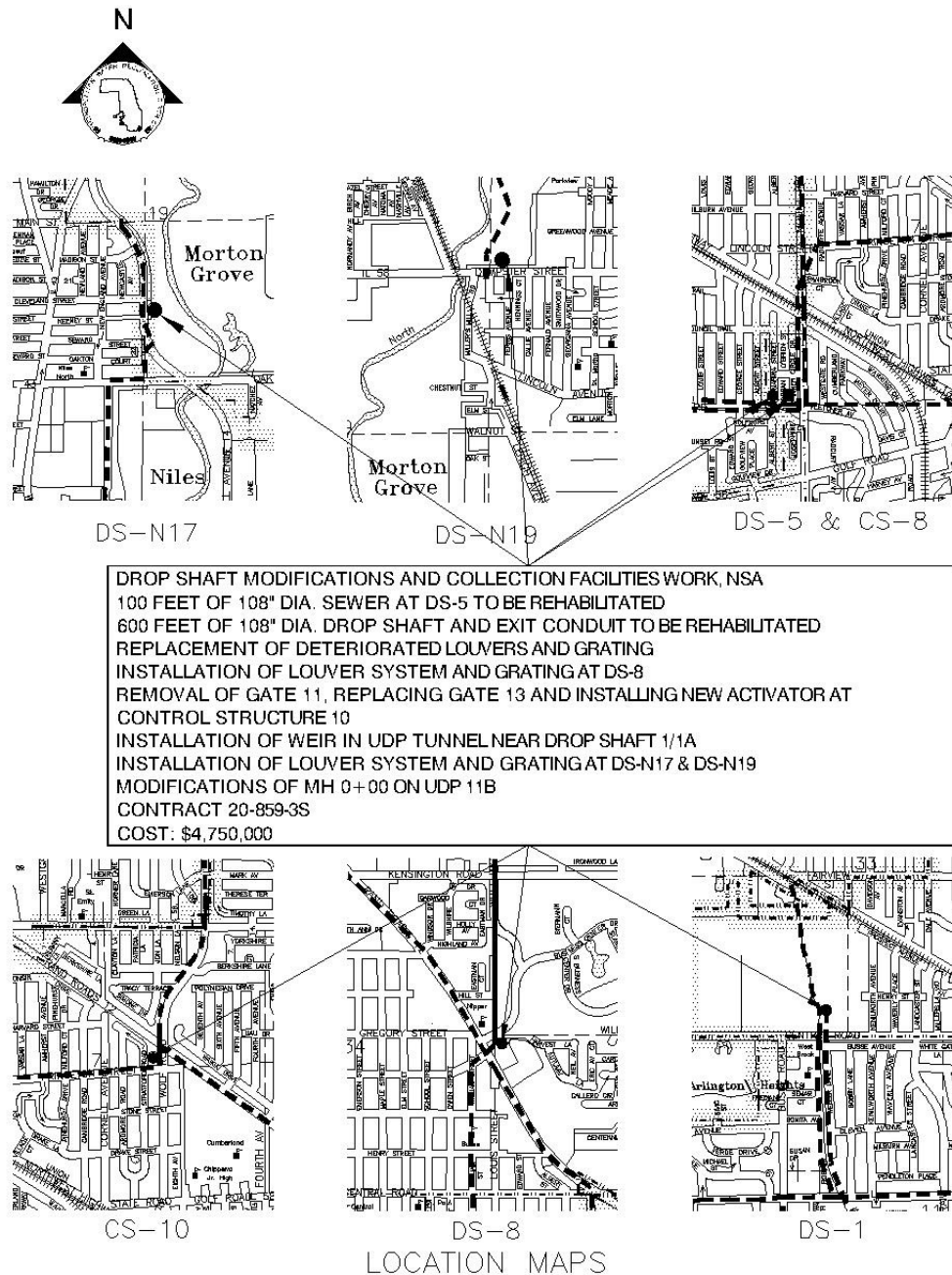


LOCATION MAP

LEGEND:

- = LOCATION OF POINT REPAIRS
- = EXISTING SEWER

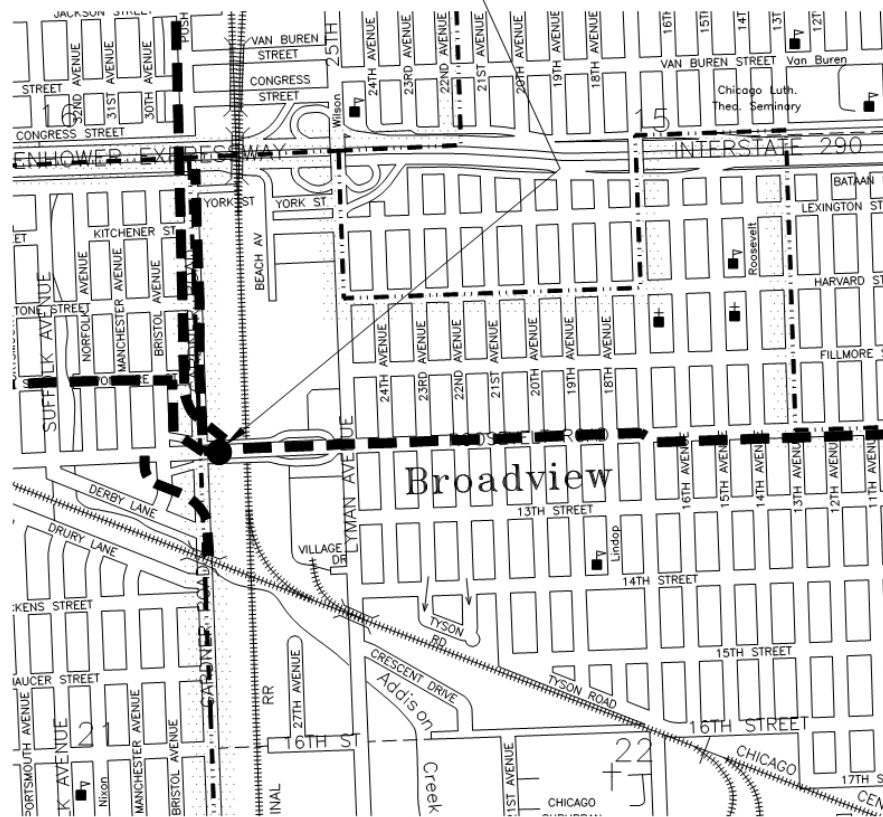
**WEST SIDE INTERCEPTING SEWER NO. 2 REHABILITATION, SSA
 CONTRACT 20-162-3S**



**DROP SHAFT MODIFICATIONS AND COLLECTION FACILITIES
 WORK, NSA
 CONTRACT 20-859-3S**



WESTCHESTER PUMPING STATION RELIEF SEWER, SSA
 ONE 36-INCH DIA. MANHOLE
 320 FEET OF 27-INCH DIA. SEWER
 CONTRACT 21-168-3S
 COST: \$1,000,000



LOCATION MAP

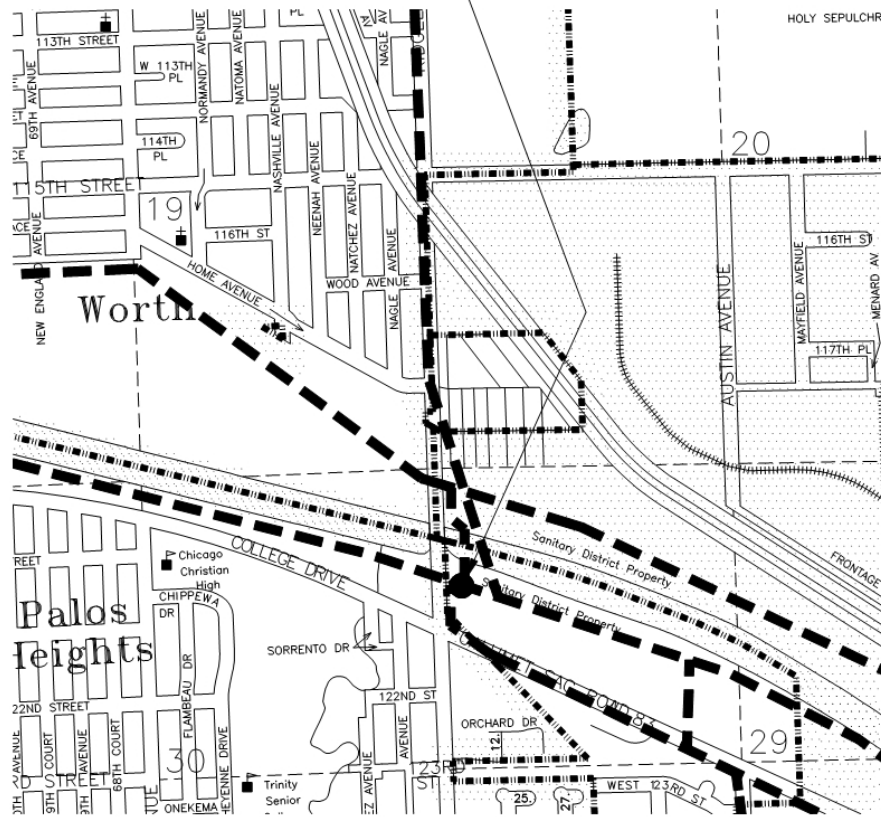
LEGEND:

- = LOCATION OF SEWER MODIFICATIONS
- = EXISTING SEWER

**WESTCHESTER PUMPING STATION RELIEF SEWER, SSA
 CONTRACT 21-168-3S**



CALUMET 18E RELIEF CONNECTING STRUCTURE AND SEWER WORK, CSA
 1 CONNECTING STRUCTURE
 100 FEET OF 48-INCH DIA. CONCRETE SEWER PIPE
 INSTALLATION OF A LOUVER SYSTEM IN THE CALUMET INTERCEPTING SEWER 20R-2 ACCESS MANHOLE
 CONTRACT 21-262-3S
 COST: \$1,200,000



LOCATION MAP

LEGEND:

- = LOCATION OF SEWER MODIFICATIONS
- = EXISTING SEWER

**CALUMET 18E RELIEF CONNECTING STRUCTURE AND SEWER WORK, CSA
 CONTRACT 21-262-3S**

Stormwater Management Capital Improvements Bond Fund Program

Awards in 2022

Project Name	Project Number	Est. Construction Cost	Duration (days)	Est. Award Date
* Addison Creek Channel Improvements, SWRP	11-187-3F	\$ 21,350	683	Feb 2022
Lyons Levee Flood Control Improvements, SSA	13-199-3F	2,358	263	Feb 2022
Total 2022 Awards		\$ 23,708		

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	2,251	Nov 2016
Melvina Ditch Reservoir Improvements, SSA	14-263-3F	16,527	1,654	Nov 2017
* Addison Creek Reservoir, SSA	11-186-3F	78,142	1,344	Jan 2019
Acquisition of Flood-Prone Properties Des Plaines Phase IV, NSA	20-IGA-24	10,000	632	Dec 2021
Total Projects Under Construction		\$ 108,152		

* These projects are 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 Improvement Program.

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 three construction projects: Upper Des Plaines Intercepting Sewer 11D, Ext. C Rehabilitation, NSA, Upper Des Plaines Intercepting Sewer 11D Rehabilitation, NSA, and one other project.		\$ 15,750,000	7.6 %
2 . TREATMENT FACILITIES: Award eight construction projects: Boilers 3, 4, 5 and MCC Replacement, SWRP, Chemical Phosphorus Removal Facility, CWRP, Mechanical Process Improvements at Various Locations, Furnish, Deliver, and Install Disc Filters, EWRP, Furnish, Deliver, and Install Coarse Screens, OWRP, and three other projects.		\$ 75,800,000	36.5 %
3 . SOLIDS PROCESSING AND DISPOSAL FACILITIES: Award three construction projects: North Side Sludge Pipeline Replacement - Section 1, NSA, Sludge Pumping Improvements, Various Locations, and Biogas Combined Heat & Power System, EWRP.		\$ 31,300,000	15.0 %
4 . FLOOD AND POLLUTION CONTROL: Award five construction projects: Addison Creek Channel Improvements, SWRP, McCook Reservoir Rock Wall Stabilization and Geotechnical Instrumentation, SSA, TARP Mainstream Dropshaft DS-M73E at Armitage Avenue, SSA, Rehabilitation of North Branch Pumping Station, NSA & Modification of Pipe Supports, KWRP, and one other project.		\$ 60,458,335	29.0 %
5 . LAND AND RIGHT-OF-WAY ACQUISITION COSTS: Acquisition of land for the expansion of reservoir projects and payments for land easements.		\$ 550,000	0.3 %
6 . PROJECT SUPPORT: Administration, design, and construction inspection for current and future contracts, funding support, and construction services, such as concrete and soil testing.		\$ 24,067,665	11.6 %
Totals		\$ 207,926,000	100.0 %

MEASURABLE GOAL:	2020	2021	2022
	Actual	Estimated	Proposed
Award contracts for the continued implementation of the District's Capital Improvement Program.			
Number of projects proposed	26	30	19
Number of contracts awarded	3	16	19
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. Numbers include all projects in the Capital Improvements Bond Fund, including Stormwater Management projects funded in the Capital Improvements Bond Fund, and are administered by multiple departments.			

50000 CAPITAL IMPROVEMENTS BOND FUND**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:			2020	Budgeted		Change	
Number	Name	Actual		FTEs	Dollars	Dollars	Percent
1700	Collection Design	\$ 21,686	2022	—	\$ —	\$ —	—
			2021	—	\$ —		
1800	Collection Construction	\$ 7,818,587	2022	—	\$ 18,237,500	\$ (31,735,700)	(63.5)
			2021	—	\$ 49,973,200		
2700	Treatment Design	\$ 633,460	2022	—	\$ 83,600	\$ (3,000,000)	(97.3)
			2021	—	\$ 3,083,600		
2800	Treatment Construction	\$ 25,309,246	2022	—	\$ 85,290,000	\$ (24,450,000)	(22.3)
			2021	—	\$ 109,740,000		
2818	Treatment Claims Prevention and Resolution	\$ —	2022	—	\$ 15,000	\$ 15,000	100.0
			2021	—	\$ —		
3700	Solids Processing Design	\$ 55,582	2022	—	\$ 500,000	\$ 250,000	100.0
			2021	—	\$ 250,000		
3800	Solids Processing Construction	\$ 19,954,919	2022	—	\$ 32,515,000	\$ 9,750,700	42.8
			2021	—	\$ 22,764,300		
4341	Flood Mitigation Projects Planning and Design	\$ 677,321	2022	—	\$ 2,342,100	\$ 313,600	15.5
			2021	—	\$ 2,028,500		
4343	Flood Mitigation Projects Construction	\$ 18,201,631	2022	—	\$ 23,467,500	\$ —	—
			2021	—	\$ 23,467,500		
4344	Flood Mitigation Projects Contracted with Other Governments	\$ —	2022	—	\$ —	\$ (10,500,000)	(100.0)
			2021	—	\$ 10,500,000		
4700	Flood and Pollution Control Design	\$ 338,792	2022	—	\$ 2,250,000	\$ 740,500	49.1
			2021	—	\$ 1,509,500		
4800	Flood and Pollution Control Construction	\$ 17,318,952	2022	—	\$ 42,022,500	\$ (42,925,900)	(50.5)
			2021	—	\$ 84,948,400		
5800	Solids Disposal Construction	\$ 4,389,765	2022	—	\$ 500,000	\$ —	—
			2021	—	\$ 500,000		
7601	Capital Financing Program and Other Related Costs	\$ —	2021	—	\$ 452,800	\$ (914,800)	(66.9)
			2020	—	\$ 1,367,600		
7740	Land and Easements	\$ 184,920	2022	—	\$ 250,000	\$ —	—
			2021	—	\$ 250,000		
Totals		\$ 94,904,861	2022	—	\$ 207,926,000	\$ (102,456,600)	(33.0)%
			2021	—	\$ 310,382,600		

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						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation *	Adjusted Appropriation 09/30/21 **	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	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	437	31,000	31,000	25,000	—	40,000	—
612400	Intergovernmental Agreements	4,261,304	10,700,000	24,573,664	24,373,664	13,192,700	100,000	—
612430	Payments for Professional Services	825,738	158,600	823,843	740,208	130,700	151,400	—
612440	Preliminary Engineering Reports and Studies	—	250,000	136,100	—	—	250,000	—
612450	Professional Engineering Services for Construction Projects	1,506,966	6,538,000	11,115,719	5,555,039	1,763,500	5,342,100	—
612470	Personal Services for Post- Award Engineering for Construction Projects	982,987	—	3,774,323	3,774,323	1,025,100	—	—
612780	Safety Repairs and Services	—	100,000	100,000	—	—	100,000	—
200	TOTAL CONTRACTUAL SERVICES	7,577,431	17,787,600	40,574,650	34,478,234	16,122,000	5,993,500	—
645600	Collection Facilities Structures	3,285,606	5,277,500	8,851,698	3,895,765	838,800	500,000	—
645620	Waterway Facilities Structures	20,023,065	56,547,500	122,026,291	88,866,870	20,192,500	35,547,500	—
645630	Army Corps of Engineers Services	10,175,561	18,131,400	29,146,773	13,879,423	7,255,200	21,000,000	—
645650	Process Facilities Structures	14,767,978	58,150,000	92,662,496	62,652,479	22,218,000	56,475,000	—
645680	Buildings	6,093,276	1,000,000	2,263,818	1,219,625	1,193,800	500,000	—
645690	Capital Projects, N.O.C.	—	—	96,239	96,239	—	—	—
645700	Preservation of Collection Facility Structures	979,643	73,912,700	57,832,535	48,883,235	10,409,000	25,637,500	—
645720	Preservation of Waterway Facility Structures	3,686,245	9,035,000	20,723,056	13,558,967	5,977,500	8,607,500	—
645750	Preservation of Process Facility Structures	20,180,416	49,923,300	71,059,787	41,451,487	13,478,500	44,890,000	—
645780	Preservation of Buildings	3,733,405	18,325,000	38,580,297	31,629,800	4,386,600	7,825,000	—
500	TOTAL CAPITAL PROJECTS	82,925,195	290,302,400	443,242,990	306,133,890	85,949,900	200,982,500	—
656010	Land	—	750,000	750,000	—	—	300,000	—
600	TOTAL LAND	—	750,000	750,000	—	—	300,000	—

401 50000	Fund: Capital Improvements Bond Department: Engineering	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation *	Adjusted Appropriation 09/30/21 **	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
667340	Payments for Easements	12,470	250,000	250,000	—	—	250,000	—
727102	Principal - Capital Lease	2,859,470	—	32,017,962	32,017,962	2,993,100	—	—
727112	Interest - Capital Lease	1,530,294	—	7,396,719	7,396,719	1,396,700	—	—
767300	Bond Issuance Costs	—	1,292,600	1,292,600	55,854	1,109,000	400,000	—
700	TOTAL FIXED AND OTHER CHARGES	4,402,235	1,542,600	40,957,280	39,470,535	5,498,800	650,000	—
TOTAL CAPITAL IMPROVEMENTS BOND FUND		\$ 94,904,861	\$ 310,382,600	\$ 525,524,920	\$ 380,082,659	\$107,570,700	\$ 207,926,000	\$ —

* The Capital Improvements Bond Fund is budgeted and accounted for on an obligation basis.

** The appropriation in the Capital Improvements Bond Fund is adjusted to carry forward open value of contracts from the prior year.

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.

NOTE PAGE

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:

Transmittal Letter	449
Appropriations, Expenditures, and Budgeted FTE Positions, 2013 - 2022	450
Organization Chart	451
Budget Narrative	452
Project List	455
Projects Listed by Service Area	459
Project Fact Sheets	463
Project Exhibits	519
Objectives and Program Summary	525
Performance Data	527
Line Item Analysis	529
Position Analysis	531

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET

CHICAGO, ILLINOIS 60611-3154

312.751.5600

September 7, 2021

Mr. Brian A. Perkovich
Executive Director
O F F I C E

Dear Sir:

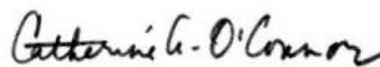
Subject: 2022 Program for the Stormwater Management Fund

The Stormwater Management Fund's program for 2022, as prepared in detail, is transmitted herewith. The budget presentation supports the request for funding of the 2022 initiatives in alignment with and in support of the Strategic 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, 2022 major initiatives and challenges, and 2021 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 2022.

Respectfully submitted,



Catherine A. O'Connor
Director of Engineering

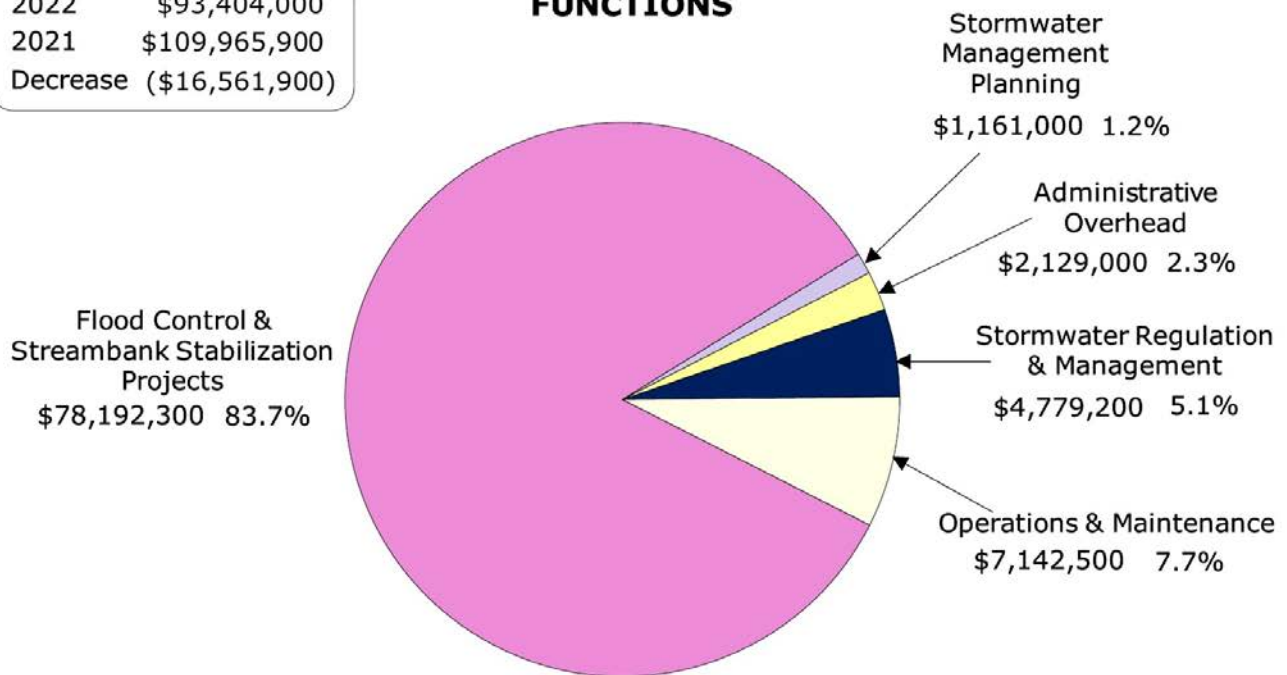


John P. Murray
Director of Maintenance & Operations

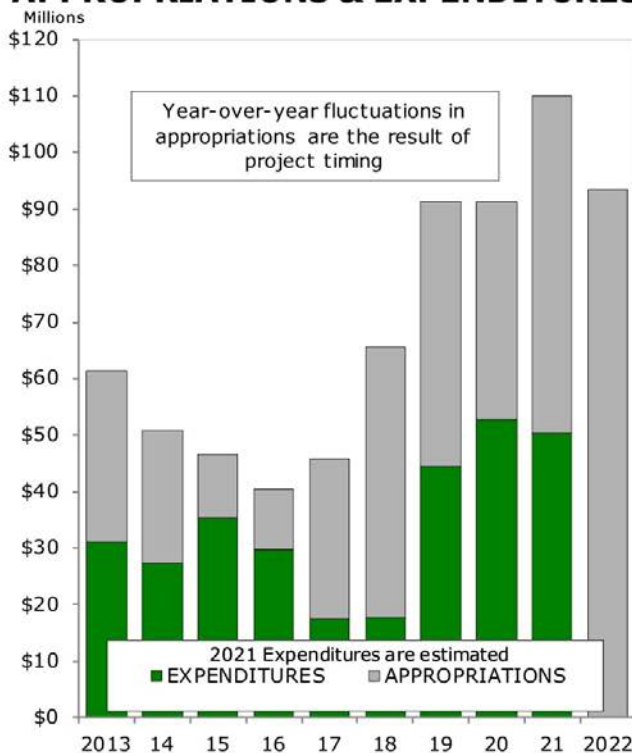
STORMWATER MANAGEMENT FUND

2022 \$93,404,000
2021 \$109,965,900
Decrease (\$16,561,900)

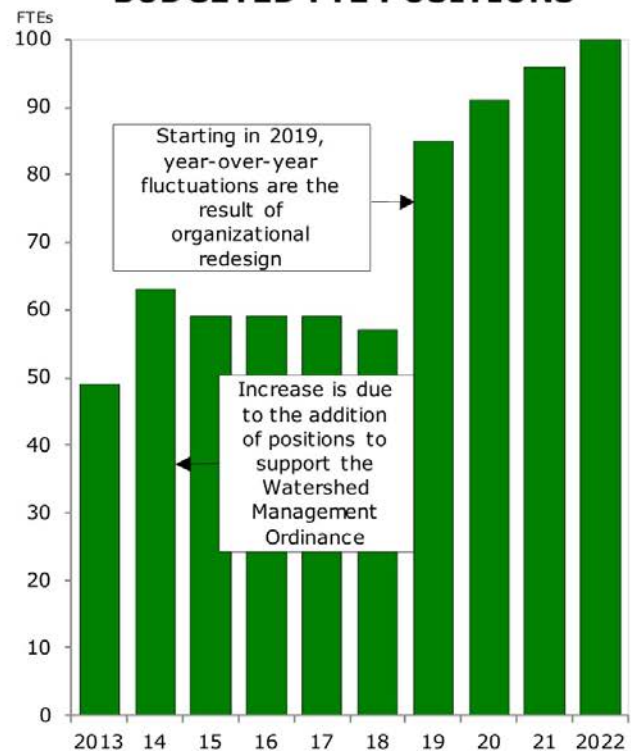
FUNCTIONS



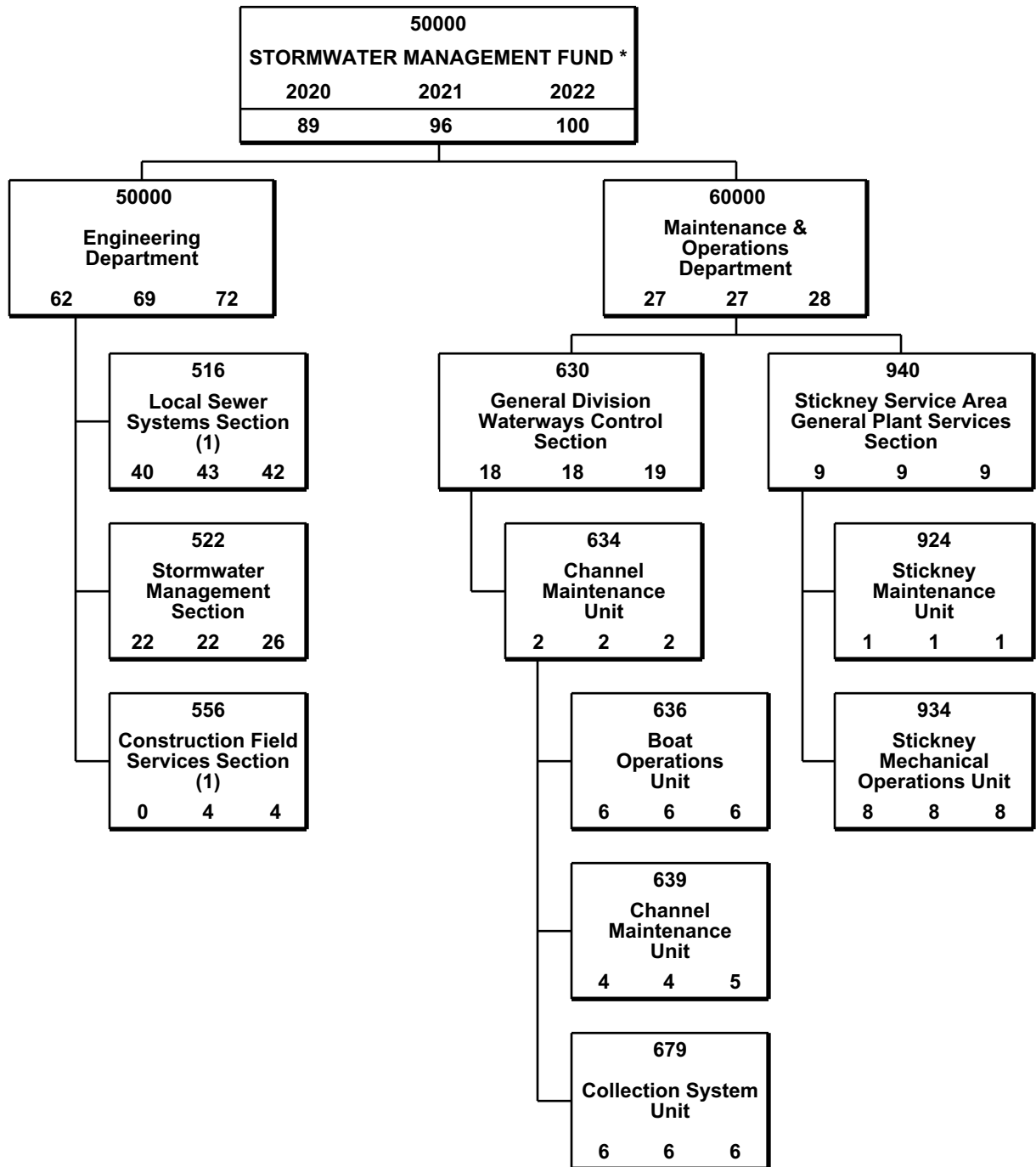
APPROPRIATIONS & EXPENDITURES



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 01/01/21, 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 (M&O) 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 nearly 180 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, 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 2021 Major Accomplishments

- Removed 28,000 cubic yards of debris from small streams and rivers in Cook County, to prevent flooding under the Small Streams Maintenance Program, as described below;
- Developed a Volumetric Approach to Stormwater Planning to serve as a long-term vision plan that is flexible, dynamic, and compatible with local communities timeline and strategies for addressing flooding problems;
- Provided guidance to design engineers and developers considering construction of offsite stormwater detention and volume control facilities and approved permits under which offsite volume control facilities were constructed;
- Advanced negotiations for a strategic partnership with the Chicago Park District for the planning, prioritization, design, and oversight of Green Infrastructure projects. Through regular coordination with the Forest Preserve District of Cook County and City of Chicago, the framework for future strategic partnerships with those agencies is also being developed;
- Called for local stormwater and flood-prone property acquisition projects, resulting in a large submission of potential partnership projects, nine of which were identified for assistance by the District and approved by the Board of Commissioners. The District initiated negotiations of intergovernmental agreements for acquisition of flood-prone properties within the City of Northlake, and the Villages of Lyons, Willow Springs, and Winnetka and initiated preliminary engineering for local stormwater partnership projects within the Villages of Bedford Park, Midlothian, Morton Grove, Rolling Meadows, and Schiller Park.

2022 Appropriation and Position Summary

The 2022 appropriation for the Stormwater Management Fund is \$93,404,000, a decrease of \$16,561,900, or 15.1 percent, from 2021. The staffing level has increased from 96 to 100 positions. The increase is due to the addition of one Principal Civil Engineer, one Senior Civil Engineer, and one Associate Civil Engineer positions for the Engineering Department and one Engineering Technician V position for the M&O Department's Channel Maintenance Unit. The added Engineering Department positions will be used to meet increased work volume associated with Stormwater Master Planning efforts, coordination of partnership opportunities, and outreach efforts and reporting for Stormwater Management programs. The Engineering Technician V position will be assigned to the Channel Maintenance Unit and will be responsible for planning, coordinating, and overseeing the maintenance of stormwater infrastructure and managing various stormwater projects such as streambank stabilization, restoring riparian buffers, and implementing various erosion control measures. The increase in operational costs due to these position changes will be partially offset by revenues generated from WMO permit review fees.

2022 Budget Highlights

The following budget highlights support the District's Strategic Plan Goal of Stormwater Management. The initiatives below illustrate how the District continues to mitigate flooding across Cook County through a proactive, equitable, stormwater management program.

Develop comprehensive framework to guide proactive implementation of stormwater solutions:

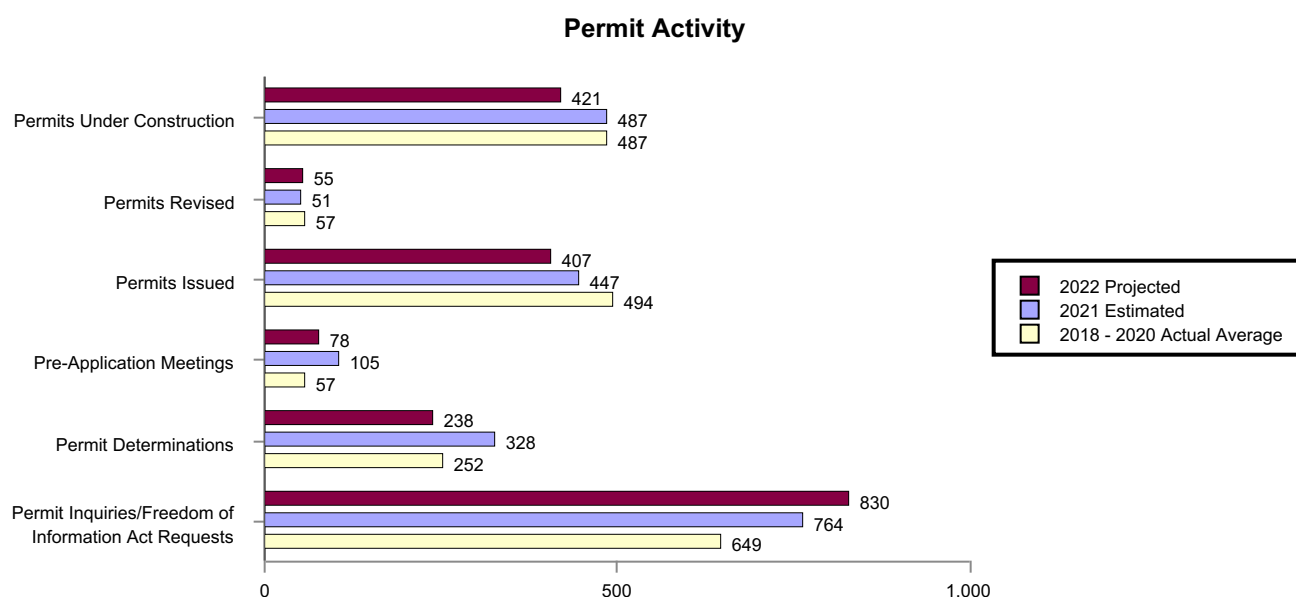
- Adopt an amendment to the WMO that provides clarification of definitions, additional means of compliance with wetland regulations, and initiation of wetland verification service;
- Issue WMO permits and provide information to design engineers, property owners, and municipalities to facilitate the permit submittal process, as shown on the bar chart below;
- Provide guidance to satellite entities to help them achieve compliance with the Infiltration/Inflow Control Program ICP;
- Respond to requests for removal of debris from small streams and rivers under the SSMP;
- Implement the Volumetric Approach to Stormwater Planning and prioritize areas identified with additional storage opportunities to address flooding problems.

Identify and pursue opportunities for partnering on multi-benefit projects:

- Procure Global Positioning System equipment featuring current technology to continue offering local municipalities the opportunity to survey their sanitary sewer systems;
- Advance strategic partnerships with the Chicago Park District and other agencies to facilitate projects that provide stormwater and other environmental benefits;
- Provide technical assistance in identification and evaluation of solutions to local stormwater issues through preliminary engineering services;
- Advance stormwater partnerships for Green Infrastructure, local stormwater projects, and flood-prone property acquisitions with local communities and other agencies;
- Identify and pursue opportunities for partnering on multi-benefit projects and for coordination with other agencies to minimize the cost of potential stormwater management projects through grants and other funding resources.

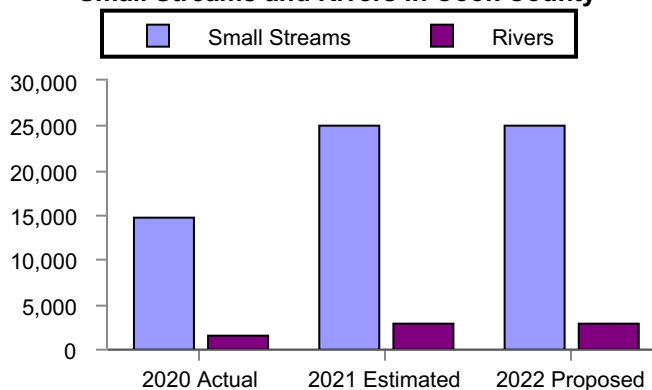
Identify and pilot stormwater management best practices:

- Provide technical guidance to property owners interested in constructing offsite stormwater detention and volume control facilities in accordance with the ongoing pilot study;
- Advance the pilot study for a suburban green schoolyard program.

**SMALL STREAMS MAINTENANCE PROGRAM**

Through the management of the SSMP, the M&O 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 520, 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 521-524.

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 intergovernmental agreements to partner with five communities to acquire 52 flood-prone residential structures. These acquisitions will be completed in 2021 and 2022. Based on the success of the District's program, additional solicitations will be made to identify opportunities to assist local communities with flood-prone property acquisitions in the future.

Stormwater Management Fund Program**Awards in 2022**

Project Name	Project Number	Est. Construction Cost	2022 Appropriation	Duration (days)	Est. Award Date
Winchester Avenue Green Infrastructure Project in Calumet Park, CSA	18-IGA-02	\$ 360	\$ 360	219	Jan 2022
Lake Katherine Commuter Parking Lot in Palos Heights, CSA	18-IGA-14	184	184	89	Jan 2022
Wetland and Park Storage Projects in Winnetka, NSA	18-IGA-24	500	500	305	Jan 2022
Storm Sewers and Outfall to Flagg Creek in Western Springs, SSA	18-IGA-32	753	753	180	Jan 2022
Berry Lane Stormwater Improvements in Flossmoor, CSA	21-IGA-07	208	208	249	Jan 2022
Permeable Paver Parking Lot Project in Forest Park, SSA	21-IGA-08	202	202	118	Jan 2022
Green Infrastructure Alley Improvements in Hazel Crest, CSA	21-IGA-12	400	400	196	Jan 2022
* Addison Creek Channel Improvements, SWRP	11-187-3F	21,350	—	683	Feb 2022
Diversion Channel for Flood Control Project on Midlothian Creek in Robbins, CSA	14-253-AF	7,981	5,573	404	Feb 2022
Culvert Upsizing and Channel Improvements on Boca Rio Ditch in Oak Forest, CSA	18-IGA-26	519	519	183	Feb 2022
South Throop Flood Relief Project, CSA	20-IGA-32	750	750	210	Feb 2022
Flood Control Project in the Worth Woods Subdivision in Worth, CSA	14-256-5F	2,500	1,600	512	Mar 2022
Flood Control Project in the vicinity of 135th Street and Central Avenue in Crestwood, CSA	14-258-5F	9,300	4,933	339	Mar 2022
Green Alley Improvements Project in Oak Park, SSA	19-IGA-14	475	475	59	Mar 2022
Streambank Stabilization Project on Tinley Creek, CSA	19-IGA-22	3,800	1,900	480	Mar 2022
Permeable Paver Parking Lot in Chicago Ridge, CSA	20-IGA-07	228	228	47	Mar 2022
Flood Control in the vicinity of 131st Street and Cypress Lane in Palos Heights, CSA	14-259-5F	134	134	207	Apr 2022
Flood Control Project on the West Fork of the North Branch of the Chicago River, NSA	16-IGA-18	1,000	1,000	240	May 2022
Barbara Vick Outdoor Classrooms in Chicago, CSA	19-IGA-03	100	100	59	May 2022
Permeable Parking and Bioswale at Liberty Green Annex in Berwyn, SSA	20-IGA-02	85	85	90	May 2022
Calumet River Gateway Garden in Chicago, CSA	20-IGA-06	539	539	119	May 2022
Acquisition of Flood-Prone Properties in Prospect Heights, NSA	20-IGA-28	376	376	111	May 2022
Green Alley Improvements in Berwyn, SSA	21-IGA-02	503	503	89	May 2022
Green Parking Lot and Alley Improvements in Cicero, SSA	21-IGA-04	205	205	89	May 2022
Green Alley Improvements in Summit, SSA	21-IGA-15	350	350	89	May 2022
Brookfield Zoo North Parking Lot Green Infrastructure Renovation in Brookfield, SSA	21-IGA-09	400	400	89	Jun 2022
Possum Hollow Woods Green Infrastructure Parking Lot Retrofit in Unincorporated Proviso Township, SSA	21-IGA-10	420	420	89	Jun 2022
Flood Control Project on Midlothian Creek in Robbins, CSA	14-253-5F	11,000	1,200	503	Jul 2022

Awards in 2022 (continued)

Project Name	Project Number	Construction Cost	2022 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	\$ 450	375	Sep 2022
Van Buren & 5th Area Storm Relief Project in Maywood, SSA	20-IGA-29	4,000	—	503	Sep 2022
Main Street Improvements Project in Evanston, NSA	21-IGA-06	323	323	366	Oct 2022
Flood Control Project for the Washington Street Area in Blue Island, CSA	14-260-5F	5,700	—	133	Dec 2022
Total 2021 Awards		\$ 76,445	\$ 24,670		

Projects Under Construction

Project Name	Project Number	Est. Construction Cost	2022 Appropriation	Duration (days)	Award Date
Installation of Green Infrastructure at Chicago Public Schools, Various Locations	15-IGA-20	\$ 16,000	\$ 5,520	2,299	Sep 2016
* Construction of a Levee along Thorn Creek at Arquilla Park in Glenwood, CSA	15-IGA-14	387	—	2,251	Nov 2016
Groveland Avenue Levee Improvements in Riverside, SSA	18-IGA-20	2,506	1,600	1,941	Dec 2018
* Addison Creek Reservoir, SSA	11-186-3F	12,386	—	1,344	Jan 2019
Pilot Study for Investigating Technology to Address Basement Backups, CSA	16-IGA-20	400	400	1,282	Jun 2019
Streambank Stabilization Project on Melvina Ditch in Oak Lawn and Chicago Ridge, CSA	13-248-5F	10,053	1,952	680	Apr 2020
Acquisition of Flood-Prone Properties Des Plaines Phase III, NSA	20-IGA-22	800	624	639	Oct 2020
Stormwater Storage Areas in Niles, NSA	18-IGA-31	2,000	1,000	537	Jan 2021
Expansion of Existing Detention Basin in Orland Park, CSA	18-IGA-33	558	419	271	Apr 2021
Streambank Stabilization Project along Calumet Union Drainage Ditch, CSA	10-882-BF	3,126	1,439	240	Jun 2021
Garfield Park Community Eco Orchard in Chicago, SSA	18-IGA-05	500	250	99	Sep 2021
Public Library Green Parking Lot in Park Ridge, NSA	19-IGA-17	650	50	170	Sep 2021
Washington Street Green Infrastructure Parking Lot Improvements in Lansing, CSA	19-IGA-13	250	50	197	Oct 2021
119th Place Bioswale and Permeable Alley in Blue Island, CSA	20-IGA-03	250	125	90	Oct 2021
Flood Control Project on 1st Avenue from Roosevelt Road to Cermak Road, SSA	14-111-5F	6,253	6,253	373	Nov 2021
133rd Street Drainage Improvements, CSA	20-IGA-33	98	98	192	Nov 2021
Detention Basin at Butterfield Creek in Richton Park, CSA	20-IGA-38	2,000	2,000	249	Nov 2021
Pacific Avenue Industrial Corridor Green Infrastructure in Franklin Park, SSA	21-IGA-11	101	51	173	Nov 2021
Storm Sewers and Outfall in Forest View, SSA	18-IGA-28	1,000	—	180	Dec 2021
Flanagin Subdivision: North Creek Flood Relief Project in Lansing, CSA	20-IGA-37	1,600	1,600	252	Dec 2021
Green Streets Phase II in Kenilworth, NSA	21-IGA-13	400	400	209	Dec 2021
Total Projects Under Construction		\$ 61,318	\$ 23,831		

Projects Under Development

Project Name	Project Number	Est. Construction Cost	2022 Appropriation	Duration (days)	Est. Award Date
Flood Control Project for Deer Creek, CSA	10-884-BF	\$ 6,500	—	683	Jan 2023
Flood Control Project on Farmers and Prairie Creeks, NSA	12-056-5F	14,100	—	713	Feb 2023
Flood Control Project on Calumet-Sag Tributary C in Bremen Township, Midlothian and Crestwood, CSA	21-IGA-18	3,780	—	318	Mar 2023
Flood Control Project on Central Road from Des Plaines River to Greenwood Road, NSA	14-065-5F	12,000	—	683	Apr 2023
Flood Control Project along Plainfield Road in Countryside, La Grange, McCook, and Lyons Township, SSA	14-112-5F	17,000	—	683	Sep 2023
Total Future Awards		<u>\$ 53,380</u>			
Cumulative Projects Under Construction, 2021 Awards, and Future Awards		<u>\$ 191,143</u>			

* 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 2023-2026 not included in the detailed list of Projects Under Development presented above.

2023-2026 Projects Under Development

Projects	2023	2024	2025	2026	Total 2023-2026
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)	—	—	6,325	8,000	14,325
18-082-5F, Citation Lake Stormwater Improvements in Northfield Township, NSA	3,000	2,000	2,000	2,000	9,000
18-146-5F, 91st and Orchard Basin Improvements, Willow Springs, IL	850	—	—	—	850
18-249-5F, Flood Relief for Residential Areas near 147th Street and Wood in Harvey	4,000	4,000	—	—	8,000
18-250-5F, Stony Creek Flood Control Improvements, CSA	—	1,675	1,675	—	3,350
18-251-5F, Roberts Road Drainage Improvements in Palos Hills	3,000	3,000	—	—	6,000
18-252-5F, Thorn Ditch Flood Mitigation Project in South Holland	1,000	—	—	—	1,000
Anticipated District Stormwater Projects from Master Planning	—	—	10,000	15,000	25,000
Total	\$ 26,850	\$ 25,675	\$ 35,000	\$ 40,000	\$ 127,525

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 2022 award, or under development.

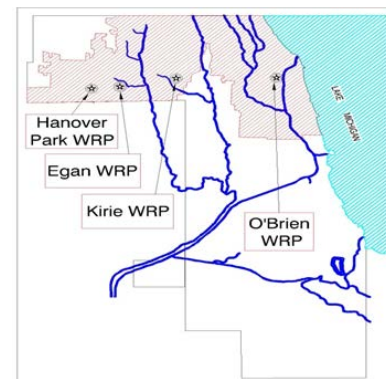
STICKNEY SERVICE AREA (SSA)



Stickney Water Reclamation Plant (SWRP)

			Estimated Substantial Completion Date	Estimated Construction Cost
Projects for 2022 Award				
11-187-3F	* Addison Creek Channel Improvements, SWRP			\$ 21,350,000
18-IGA-32	Storm Sewers and Outfall to Flagg Creek in Western Springs, SSA			753,000
19-IGA-14	Green Alley Improvements Project in Oak Park, SSA			475,000
20-IGA-02	Permeable Parking and Bioswale at Liberty Green Annex in Berwyn, SSA			85,000
20-IGA-29	Van Buren & 5th Area Storm Relief Project in Maywood, SSA			4,000,000
21-IGA-02	Green Alley Improvements in Berwyn, SSA			503,000
21-IGA-04	Green Parking Lot and Alley Improvements in Cicero, SSA			205,000
21-IGA-08	Permeable Paver Parking Lot Project in Forest Park, SSA			201,600
21-IGA-09	Brookfield Zoo North Parking Lot Green Infrastructure Renovation in Brookfield, SSA			400,000
21-IGA-10	Possum Hollow Woods Green Infrastructure Parking Lot Retrofit in Unincorporated Proviso Township, SSA			420,000
21-IGA-15	Green Alley Improvements in Summit, SSA			350,000
Total				\$ 28,742,600
Projects Under Construction				
11-186-3F	* Addison Creek Reservoir, SSA	09/22	\$	12,385,813
14-111-5F	Flood Control Project on 1st Avenue from Roosevelt Road to Cermak Road, SSA	11/22		6,252,989
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	01/22		500,000
18-IGA-20	Groveland Avenue Levee Improvements in Riverside, SSA	04/24		2,506,028
18-IGA-28	Storm Sewers and Outfall in Forest View, SSA	06/22		1,000,000
21-IGA-11	Pacific Avenue Industrial Corridor Green Infrastructure in Franklin Park, SSA	05/22	\$	101,000
Total				\$ 38,745,830
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				\$ 84,488,430

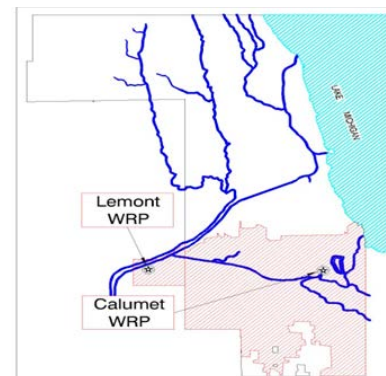
NORTH SERVICE AREA (NSA)



Terrence J. O'Brien Water Reclamation Plant (OWRP)

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects for 2022 Award			
16-IGA-18	Flood Control Project on the West Fork of the North Branch of the Chicago River, NSA		\$ 1,000,000
18-IGA-24	Wetland and Park Storage Projects in Winnetka, NSA		500,000
20-IGA-23	Flood Control Project on Willow Road at McDonald Creek Tributary A in Prospect Heights, NSA		1,800,000
20-IGA-28	Acquisition of Flood-Prone Properties in Prospect Heights, NSA		376,000
21-IGA-06	Main Street Improvements Project in Evanston, NSA		322,500
	Total		\$ 3,998,500
Projects Under Construction			
18-IGA-31	Stormwater Storage Areas in Niles, NSA	07/22	\$ 2,000,000
19-IGA-17	Public Library Green Parking Lot in Park Ridge, NSA	03/22	650,000
20-IGA-22	Acquisition of Flood-Prone Properties Des Plaines Phase III, NSA	07/22	800,000
21-IGA-13	Green Streets Phase II in Kenilworth, NSA	07/22	400,000
	Total		\$ 3,850,000
Projects Under Development			
12-056-5F	Flood Control Project on Farmers and Prairie Creeks, NSA		\$ 14,100,000
14-065-5F	Flood Control Project on Central Road from Des Plaines River to Greenwood Road, NSA		12,000,000
	Total		\$ 26,100,000
North Service Area Grand Total			\$ 33,948,500

CALUMET SERVICE AREA (CSA)



Calumet Water Reclamation Plant (CWRP)

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects for 2022 Award			
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
14-258-5F	Flood Control Project in the vicinity of 135th Street and Central Avenue in Crestwood, CSA		9,300,000
14-259-5F	Flood Control in the vicinity of 131st Street and Cypress Lane in Palos Heights, CSA		134,000
14-260-5F	Flood Control Project for the Washington Street Area in Blue Island, CSA		5,700,000
18-IGA-02	Winchester Avenue Green Infrastructure Project in Calumet Park, CSA		360,000
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-22	Streambank Stabilization Project on Tinley Creek, CSA		3,800,000
20-IGA-06	Calumet River Gateway Garden in Chicago, CSA		538,764
20-IGA-07	Permeable Paver Parking Lot in Chicago Ridge, CSA		227,847
20-IGA-32	South Throop Flood Relief Project, CSA		750,000
21-IGA-07	Berry Lane Stormwater Improvements in Flossmoor, CSA		208,000
21-IGA-12	Green Infrastructure Alley Improvements in Hazel Crest, CSA		400,000
		Total	\$ 43,702,998
Projects Under Construction			
10-882-BF	Streambank Stabilization Project along Calumet Union Drainage Ditch, CSA	01/22	\$ 3,126,000
13-248-5F	Streambank Stabilization Project on Melvina Ditch in Oak Lawn and Chicago Ridge, CSA	02/22	10,053,452
15-IGA-14 *	Construction of a Levee along Thorn Creek at Arquilla Park in Glenwood, CSA	12/22	387,000
16-IGA-20	Pilot Study for Investigating Technology to Address Basement Backups, CSA	12/22	400,000
18-IGA-33	Expansion of Existing Detention Basin in Orland Park, CSA	01/22	558,000

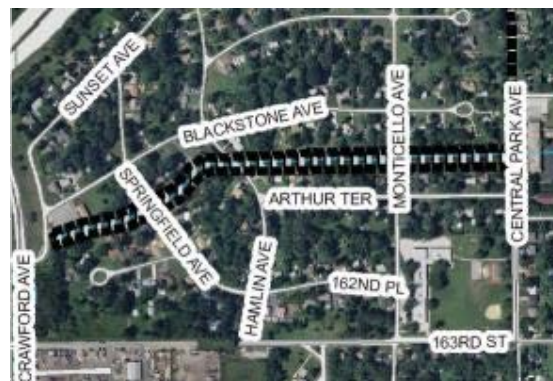
Calumet Water Reclamation Plant (CWRP)

		Estimated Substantial Completion Date	Estimated Construction Cost
Projects Under Construction (continued)			
19-IGA-13	Washington Street Green Infrastructure Parking Lot Improvements in Lansing, CSA	04/22	\$ 250,000
20-IGA-03	119th Place Bioswale and Permeable Alley in Blue Island, CSA	01/22	250,000
20-IGA-33	133rd Street Drainage Improvements, CSA	05/22	98,120
20-IGA-37	Flanagin Subdivision: North Creek Flood Relief Project in Lansing, CSA	08/22	1,600,000
20-IGA-38	Detention Basin at Butterfield Creek in Richton Park, CSA	07/22	\$ 2,000,000
		Total	\$ 18,722,572
Projects Under Development			
10-884-BF	Flood Control Project for Deer Creek, CSA		\$ 6,500,000
21-IGA-18	Flood Control Project on Calumet-Sag Tributary C in Bremen Township, Midlothian and Crestwood, CSA		3,780,000
		Total	\$ 10,280,000
		Calumet Service Area Grand Total	\$ 72,705,570
		Capital Projects Grand Total - All Service Areas	\$ 191,142,500

* 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	IHC Construction Companies, LLC
Estimated Construction Cost	\$3,126,000
Contract Award Date	June 2021
Substantial Completion Date	January 2022
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	Construction



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	\$90,528,020
Contract Award Date	January 2019
Substantial Completion Date	September 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 partially funded under the Capital Improvements Bond Fund. See Section V Capital Budget for additional information (Capital Improvements Bond Fund = \$78,142,207; Stormwater Management Fund = \$12,385,813).

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	February 2022
Substantial Completion Date	December 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).

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	February 2022
Substantial Completion Date	November 2022



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, provide flood protection, and prevent over topping by events up to a 100-year design flood.
Project Justification	Safety/Regulatory. This project will provide protection against overtopping of the levee during a 100-year flood. Overtopping has resulted in major flooding in the recent past (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	Design

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	\$10,053,452	
Contract Award Date	April 2020	
Substantial Completion Date	February 2022	
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 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** \$6,252,989**Contract Award Date** November 2021**Substantial Completion Date** November 2022

Project Description This project will increase the 1st Avenue drainage conveyance capacity by replacing the 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 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 July 2022

Substantial Completion Date November 2023

Project Description This project is a two-phase project on Midlothian Creek in Robbins that 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 2022

Substantial Completion Date March 2023

Project Description This project is a Flood Control Project that will create a naturalized wetland detention along with channel improvements to resemble a park setting. This portion is for the Phase 1 diversion channel. The project will reduce flood damages for over 92 structures. This project is 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	March 2022
Substantial Completion Date	July 2023




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 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 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	Chastain & Associates, LLC	
Engineering Contractor	Not Applicable	
Estimated Construction Cost	\$134,000	
Contract Award Date	April 2022	
Substantial Completion Date	October 2022	
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	

Flood Control Project for the Washington Street Area in Blue Island, CSA

Project Number	14-260-5F	
Service Area	Calumet	
Location	Blue Island, IL	
Engineering Consultant	Environmental Design International, Inc. (Tentative)	
Engineering Contractor	To be determined	
Estimated Construction Cost	\$5,700,000	
Contract Award Date	December 2022	
Substantial Completion Date	April 2023	
Project Description	The project will address flooding in the project area with construction of a new sanitary sewer line and a lift station along Washington Avenue from 119th Place to 121st Street. These proposed sewer improvements, together with additional green infrastructure installations being performed in the project area through partnerships between the District, City of Blue Island, and other funding sources, will address flooding associated with overland flow and basement backups. This project is located in the Calumet-Sag Channel Watershed.	
Project Justification	This project will eliminate basement backups for 43 residential structures with 100-year storm level of protection.	
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	\$16,527,113
Contract Award Date	November 2017
Substantial Completion Date	May 2022



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	Not Applicable
Estimated Construction Cost	\$3,870,000
Contract Award Date	November 2016
Substantial Completion Date	December 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	This project will partner the District, the Chicago Department of Water Management, and the Chicago Public Schools 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	

Flood Control Project on the West Fork of the North Branch of the Chicago River, NSA**Project Number** 16-IGA-18**Service Area** North**Location** Glenview, IL**Engineering Consultant** Not Applicable**Engineering Contractor** Not Applicable**Estimated Construction Cost** \$1,000,000**Contract Award Date** May 2022**Substantial Completion Date** December 2022**Project Description** The project includes the creation of floodwalls, berms, and additional storage along the West Fork of the North Branch of the Chicago River. This project is located in the North Branch of the Chicago River Watershed.**Project Justification** This project will reduce flooding by preventing the West Fork of the North Branch of the Chicago River from backing up into local sewers and divert storm water to new relief storm sewers.**Project Status** Negotiation / Evaluation

Pilot Study for Investigating Technology to Address Basement Backups, CSA

Project Number	16-IGA-20
Service Area	Calumet
Location	Chicago, IL
Engineering Consultant	Not Applicable
Engineering Contractor	Not Applicable
Estimated Construction Cost	\$400,000
Contract Award Date	June 2019
Substantial Completion Date	December 2022



Project Description	This project partners the District and the City of Chicago, through its Departments of Water Management and Transportation, 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	IGA Executed

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	Not Applicable
Estimated Construction Cost	\$360,000
Contract Award Date	January 2022
Substantial Completion Date	September 2022



Project Description	This project is for the Village of Calumet Park to install 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 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	IGA Executed

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	September 2021
Substantial Completion Date	January 2022



Project Description	This project is for the City of Chicago to 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

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 Not Applicable

Estimated Construction Cost \$184,000

Contract Award Date January 2022

Substantial Completion Date April 2022

Project Description This project is for the City of Palos Heights to install a permeable parking lot along with rain gardens, bioswales, and a detention basin at Lake Catherine 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 total \$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	April 2024



Project Description	This project is to improve the Groveland Avenue levee, located in the Village of Riverside (Village), 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 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

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	January 2022	
Substantial Completion Date	November 2022	
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	Not Applicable
Estimated Construction Cost	\$519,300
Contract Award Date	February 2022
Substantial Completion Date	August 2022



Project Description	This project will replace existing deteriorated roadway culverts, upsize and install 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 stream bank 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 December 2021

Substantial Completion Date June 2022

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 July 2022

Project Description This project is for the Village of Niles to construct a new storm sewer and surface and underground stormwater storage areas near Greenwood Avenue to provide flood relief to nearby residential and commercial properties. The Village will own, operate, and maintain the project improvements following their construction.

Project Justification This project will protect an estimated 87 structures from overland flooding.

Project Status IGA Executed



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 Not Applicable

Estimated Construction Cost \$752,937

Contract Award Date January 2022

Substantial Completion Date July 2022

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	April 2021
Substantial Completion Date	January 2022



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	Cost Sharing Agreement

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 2022

Substantial Completion Date July 2022

Project Description This project is for the Chicago Public Schools to 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



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 2021

Substantial Completion Date April 2022

Project Description This project is for the Village of Lansing to 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.

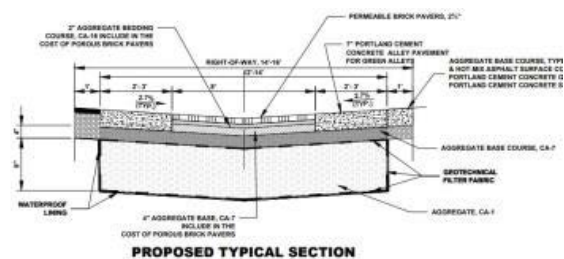
Project Justification The project will reduce the current load to the combined sewer system and help alleviate flooding within the project area.

Project Status Cost Sharing Agreement



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	March 2022
Substantial Completion Date	May 2022
Project Description	This project is for the Village of Oak Park to 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 storm sewer system and help alleviate flooding within the project area.
Project Status	IGA Executed



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 September 2021

Substantial Completion Date March 2022


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 Cost Sharing Agreement



Streambank Stabilization Project on Tinley Creek, CSA

Project Number	19-IGA-22	
Service Area	Calumet	
Location	Orland Park, IL	
Engineering Consultant	Not Applicable	
Engineering Contractor	Not Applicable	
Estimated Construction Cost	\$3,800,000	
Contract Award Date	March 2022	
Substantial Completion Date	June 2023	
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	

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 May 2022

Substantial Completion Date July 2022

Project Description This project is for the Berwyn Park District to construct a permeable paver off-street parking area and bioswale. Berwyn 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 IGA Executed



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 October 2021

Substantial Completion Date January 2022

Project Description This project is for the City of Blue Island to 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



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	May 2022
Substantial Completion Date	September 2022



Project Description	This project is for the City of Chicago to 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

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 2022

Substantial Completion Date April 2022

Project Description This project is for the Village of Chicago Ridge to reconstruct the Police Department parking lot with permeable pavers. The Village of Chicago Ridge will be responsible for operations and maintenance.

Project Justification This project will alleviate flooding within the project area.

Project Status Negotiation / Evaluation



Acquisition of Flood-Prone Properties Des Plaines Phase III, NSA

Project Number 20-IGA-22

Service Area North

Location Des Plaines

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$800,000

Contract Award Date October 2020

Substantial Completion Date July 2022

Project Description This project will fund the purchase of 13 flood-prone homes along the Des Plaines River. This is a cost sharing agreement with the City of Des Plaines.

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 Cost Sharing Agreement



Flood Control Project on Willow Road at McDonald Creek Tributary A in Prospect Heights, NSA

Project Number 20-IGA-23

Service Area North

Location City of Prospect Heights

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$1,800,000

Contract Award Date September 2022

Substantial Completion Date September 2023

Project Description This project will raise Willow Road one foot above the 100-year flood elevation and local roads to the 100-year flood elevation, including the installation of new culverts and compensatory storage areas.

Project Justification This project will reduce flooding of the road and road closures, will reduce groundwater levels which lessen excessive pumping from crawlspaces and basements, and will improve safety in allowing emergency response vehicles the use of the road.

Project Status Negotiation / Evaluation



Acquisition of Flood-Prone Properties Des Plaines Phase IV, NSA

Project Number 20-IGA-24

Service Area North

Location Des Plaines

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$10,000,000

Contract Award Date December 2021

Substantial Completion Date September 2023

Project Description This is a cost sharing agreement with the City of Des Plaines where 37 flood-prone homes near the Des Plaines River will be purchased.

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



This project is funded under the Capital Improvements Bond Fund. See Section V Capital Budget for additional information.

Acquisition of Flood-Prone Properties in Prospect Heights, NSA

Project Number	20-IGA-28
Service Area	North
Location	Prospect Heights
Engineering Consultant	Not Applicable
Engineering Contractor	Not Applicable
Estimated Construction Cost	\$376,000
Contract Award Date	May 2022
Substantial Completion Date	September 2022



Project Description	This project is to acquire a flood-prone property on Wheeling Road.
Project Justification	This property acquisition will eliminate flooding at one residence. A flooding property can pose a safety hazard to residents.
Project Status	Negotiation / Evaluation

Van Buren & 5th Area Storm Relief Project in Maywood, SSA

Project Number 20-IGA-29

Service Area Stickney

Location Maywood, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$4,000,000

Contract Award Date September 2022

Substantial Completion Date January 2024


Project Description This project is for the Village of Maywood to install new storm sewers to alleviate overland flooding and basement backups. The Village will be responsible for operations and maintenance.

Project Justification The proposed separate storm sewers will be constructed in an existing combined sewer area that does not have any storm relief.


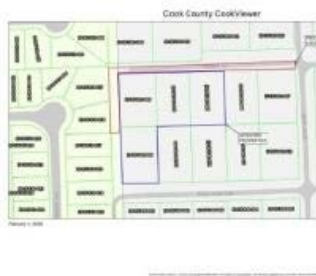
Project Status Negotiation / Evaluation



South Throop Flood Relief Project, CSA

Project Number	20-IGA-32	
Service Area	Calumet	
Location	Calumet Park, IL	
Engineering Consultant	Not Applicable	
Engineering Contractor	Not Applicable	
Estimated Construction Cost	\$750,000	
Contract Award Date	February 2022	
Substantial Completion Date	August 2022	
Project Description	This project proposes the construction of two new stormwater pipelines that feed directly into the Cal-Sag Channel in Calumet Park, Illinois.	
Project Justification	The project will help alleviate flooding along South Throop.	
Project Status	Negotiation / Evaluation	

133rd Street Drainage Improvements, CSA

Project Number	20-IGA-33	 
Service Area	Calumet	
Location	133rd Street ROW and unimproved 86th Ave ROW	
Engineering Consultant	Not Applicable	
Engineering Contractor	Not Applicable	
Estimated Construction Cost	\$98,120	
Contract Award Date	November 2021	
Substantial Completion Date	May 2022	
Project Description	The project will improve stormwater drainage and management, through means that include improvement of swales and roadside ditches, as well as a new 24" RCP storm sewer.	
Project Justification	The project will improve help with flood control during different storm events by allowing better drainage so that the existing storm sewer system can handle the flow. This will reduce the number of structures that flood due to the rain events.	
Project Status	Negotiation / Evaluation	

Flanagin Subdivision: North Creek Flood Relief Project in Lansing, CSA

Project Number 20-IGA-37

Service Area Calumet

Location Lansing, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$1,600,000

Contract Award Date December 2021

Substantial Completion Date August 2022

Project Description This project is for the construction of a new culvert for North Creek in Flanagin Subdivision separate from the subdivision drainage so that the backwater will not flood the subdivision through the open lids in the region.

Project Justification The backwater from the Lansing ditch is the primary source of the subdivision flooding. This project will separate the creek from the subdivision drainage.

Project Status Negotiation / Evaluation



Detention Basin at Butterfield Creek in Richton Park, CSA

Project Number	20-IGA-38
Service Area	Calumet
Location	Richton Park, IL
Engineering Consultant	Not Applicable
Engineering Contractor	Not Applicable
Estimated Construction Cost	\$2,000,000
Contract Award Date	November 2021
Substantial Completion Date	July 2022



Project Description	This project proposes a multi-staged project in the Village of Richton Park to construct a regional detention basin along Governors Highway, south of the intersection of Sauk Trail, at the Butterfield Creek East Branch. The overall project is being funded by multiple sources. The District's funding will be used to construct additional detention storage. The Village of Richton Park will be responsible for long-term operation and maintenance of the project.
Project Justification	The project will provide additional stormwater storage capacity within the Butterfield Creek watershed and address flooding along a portion of the Butterfield Creek East Branch that affects Governors Highway and neighboring properties.
Project Status	Negotiation / Evaluation

Green Alley Improvements in Berwyn, SSA

Project Number 21-IGA-02

Service Area Stickney

Location Berwyn

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$503,000

Contract Award Date May 2022

Substantial Completion Date August 2022

Project Description The City of Berwyn proposes to construct three permeable alleys using permeable pavers for the public benefit of reducing flooding and providing green infrastructure. Two alleys are bounded by 18th Street to the north, Wenonah Avenue to the east, 21st Street to the south, and Wisconsin Avenue to the west, the other alley is bounded by 18th Street to the north, Home Avenue to the east, 19th Street to the south, and Wenonah Avenue to the West.

Project Justification The City of Berwyn has built 20 green alleys with plans to build more. The three green alleys submitted for this project are in areas with reported and observed flooding. The existing alleys are impervious alleys that are failing and have severe cracks. These cracks in the alleyway allow water to collect and flood the alley, adjacent yards, garages, and homes.

Project Status Negotiation / Evaluation



Green Parking Lot and Alley Improvements in Cicero, SSA

Project Number 21-IGA-04

Service Area Stickney

Location Cicero

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$205,000

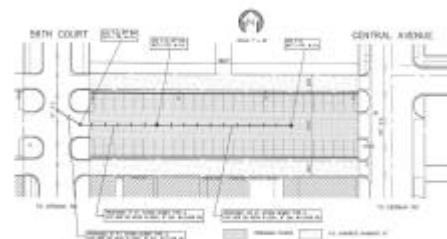
Contract Award Date May 2022

Substantial Completion Date August 2022

Project Description An existing parking lot that was a former CTA "L" stop has no storm sewer drainage system in place, and the pavement has minimal positive drainage to the adjacent streets. This project will help alleviate flooding in this area by converting this parking lot to a green lot using permeable pavers. This parking lot is along 21st Place bounded by 56th Court to the West and Central Avenue to the East. The Town of Cicero is responsible for long term operations and maintenance.

Project Justification The parking lot and adjacent alleys currently suffer from poor drainage with the business owners frequently complaining of alley flooding. Also, due to this poor drainage, the alley pavement and parking lot pavement are in very poor condition.

Project Status Negotiation / Evaluation



Main Street Improvements Project in Evanston, NSA

Project Number 21-IGA-06

Service Area North

Location Evanston, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$322,500

Contract Award Date October 2022

Substantial Completion Date October 2023

Project Description The City of Evanston will reconstruct the parking lanes along several blocks of Main Street using permeable pavers. The City of Evanston 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



Berry Lane Stormwater Improvements in Flossmoor, CSA

Project Number 21-IGA-07

Service Area Calumet

Location Flossmoor

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$208,000

Contract Award Date January 2022

Substantial Completion Date September 2022

Project Description The Village of Flossmoor will install permeable pavers along Berry Lane, from Sunset Avenue to Bob O Link Road. The Village will be responsible for operation and maintenance of the project.

Project Justification This project will increase stormwater infiltration for a contributing drainage area of nearly 90 acres benefiting 93 structures within a 1/8 mile radius. The project will also alleviate the burden on downstream storm sewer infrastructure.

Project Status Negotiation / Evaluation



Permeable Paver Parking Lot Project in Forest Park, SSA

Project Number 21-IGA-08

Service Area Stickney

Location Public Parking Lot at 510 Des Plaines Ave.,
Forest Park, IL

Engineering Consultant Not applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$201,600

Contract Award Date January 2022

Substantial Completion Date May 2022

Project Description The Village of Forest Park will construct a permeable parking lot using permeable pavers on the Village's public parking lot located at 510 Desplaines Avenue, Forest Park, Illinois, to reduce stormwater flooding in the project area and promote interest in green infrastructure in the village.

Project Justification Installation of permeable pavers will significantly reduce the amount of stormwater entering the Village's combined sewer system, thereby reducing the frequency of basement backups.

Project Status Negotiation / Evaluation

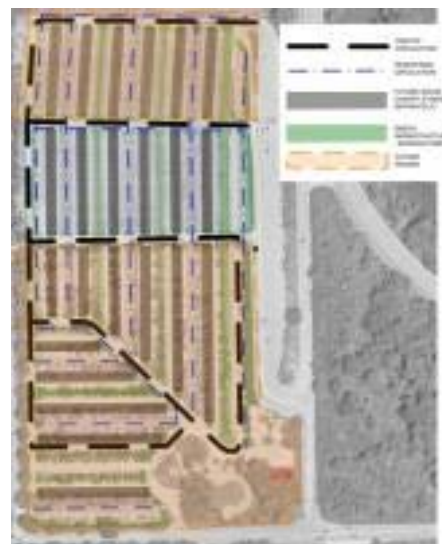


Brookfield Zoo North Parking Lot Green Infrastructure Renovation in Brookfield, SSA**Project Number** 21-IGA-09**Service Area** Stickney**Location** Brookfield, IL**Engineering Consultant** Not Applicable**Engineering Contractor** Not Applicable**Estimated Construction Cost** \$400,000**Contract Award Date** June 2022**Substantial Completion Date** September 2022

Project Description This project is for the Forest Preserve District of Cook County to construct approximately 7,000 linear feet of bioswales within the Brookfield Zoo North Parking Lot. The Forest Preserve District of Cook County will be responsible for operations and maintenance.

Project Justification This project will reduce the current load to the sewer system and alleviate flooding within the project area.

Project Status Negotiation / Evaluation



Possum Hollow Woods Green Infrastructure Parking Lot Retrofit in Unincorporated Proviso Township, SSA

Project Number	21-IGA-10
Service Area	Stickney
Location	Unincorporated Proviso Township, IL
Engineering Consultant	Not Applicable
Engineering Contractor	Not Applicable
Estimated Construction Cost	\$420,000
Contract Award Date	June 2022
Substantial Completion Date	September 2022



Project Description	The Forest Preserve District of Cook County will reconstruct a parking lot using permeable pavers and will restore a portion of the existing asphalt parking lot to natural open space. The Forest Preserve District of Cook County will be responsible for operations and maintenance.
Project Justification	This project will alleviate flooding within the project area.
Project Status	Negotiation / Evaluation

Pacific Avenue Industrial Corridor Green Infrastructure in Franklin Park, SSA

Project Number	21-IGA-11
Service Area	Stickney
Location	Franklin Park, IL
Engineering Consultant	Not Applicable
Engineering Contractor	Not Applicable
Estimated Construction Cost	\$101,000
Contract Award Date	November 2021
Substantial Completion Date	May 2022



Project Description	The Village of Franklin Park will construct over 1,000 square yards of rain gardens within the parkways of six Village street intersections with Pacific Avenue. The Village of Franklin 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	Negotiation / Evaluation

Green Infrastructure Alley Improvements in Hazel Crest, CSA

Project Number 21-IGA-12

Service Area Calumet

Location Hazel Crest

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$400,000

Contract Award Date January 2022

Substantial Completion Date July 2022

Project Description The project consists of providing volume control areas which enable infiltration of storm water draining to alley intersections within downtown Hazel Crest between 169th Street and 171st Street and between Jodave Avenue and Page Avenue, thereby reducing the load onto the existing storm sewer system.

Project Justification Green Infrastructure improvement will reduce stormwater load on the sewer system.

Project Status Negotiation / Evaluation



Green Streets Phase II in Kenilworth, NSA

Project Number 21-IGA-13

Service Area North

Location Kenilworth, IL

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$400,000

Contract Award Date December 2021

Substantial Completion Date July 2022

Project Description This project will allow the Village of Kenilworth to reconstruct at least one street using permeable pavers and will construct porous parkways to collect, store, and filter the first flush of stormwater runoff. The Village of Kenilworth will be responsible for Operations and Maintenance.

Project Justification This project will reduce the current load to the sewer system and alleviate flooding within the project area.

Project Status Negotiation / Evaluation



Green Alley Improvements in Summit, SSA

Project Number 21-IGA-15

Service Area Stickney

Location Summit

Engineering Consultant Not Applicable

Engineering Contractor Not Applicable

Estimated Construction Cost \$350,000

Contract Award Date May 2022

Substantial Completion Date August 2022

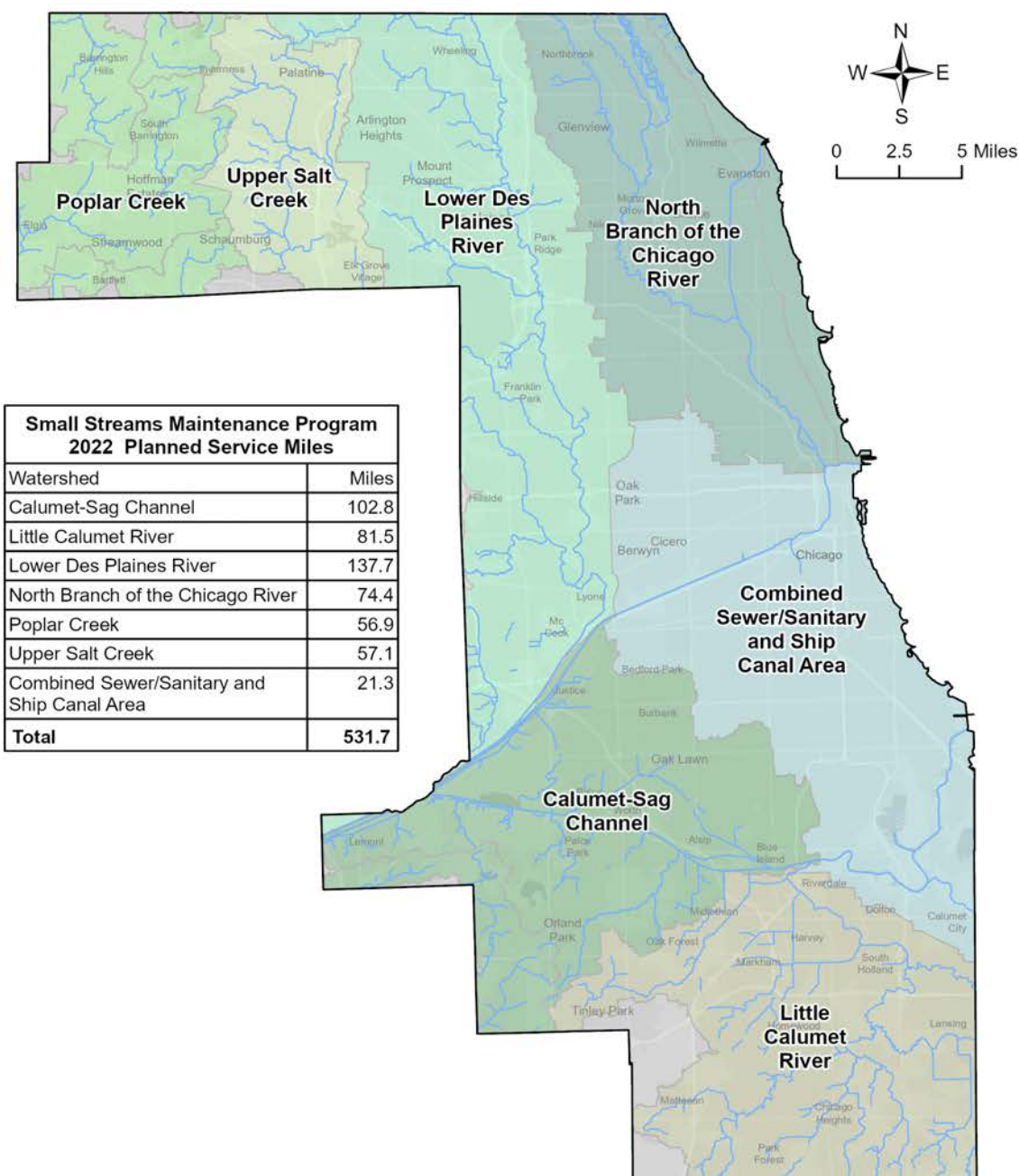
Project Description Two existing stone alleys will be replaced with two permeable alleys using permeable pavers for the public benefit of reducing flooding and providing green infrastructure. The Village of Summit is responsible for long-term operations and maintenance.

Project Justification The existing stone alleys are higher in elevation than the existing yards and do not allow sufficient drainage. The new green alleys will be set at a lower elevation to allow the rear yards to drain to the alley to the permeable base course and alleviate the rear yard flooding.

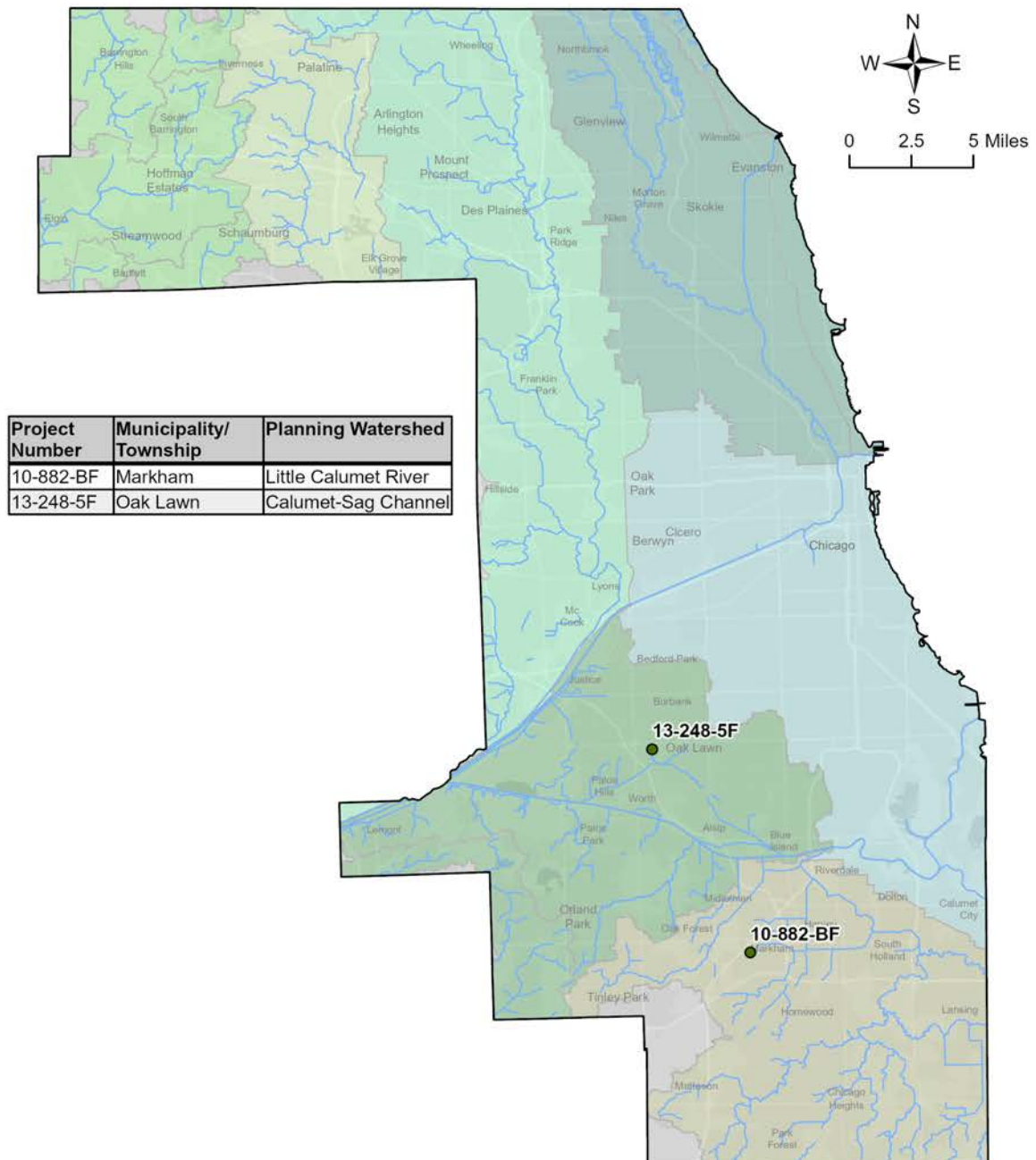
Project Status Negotiation / Evaluation



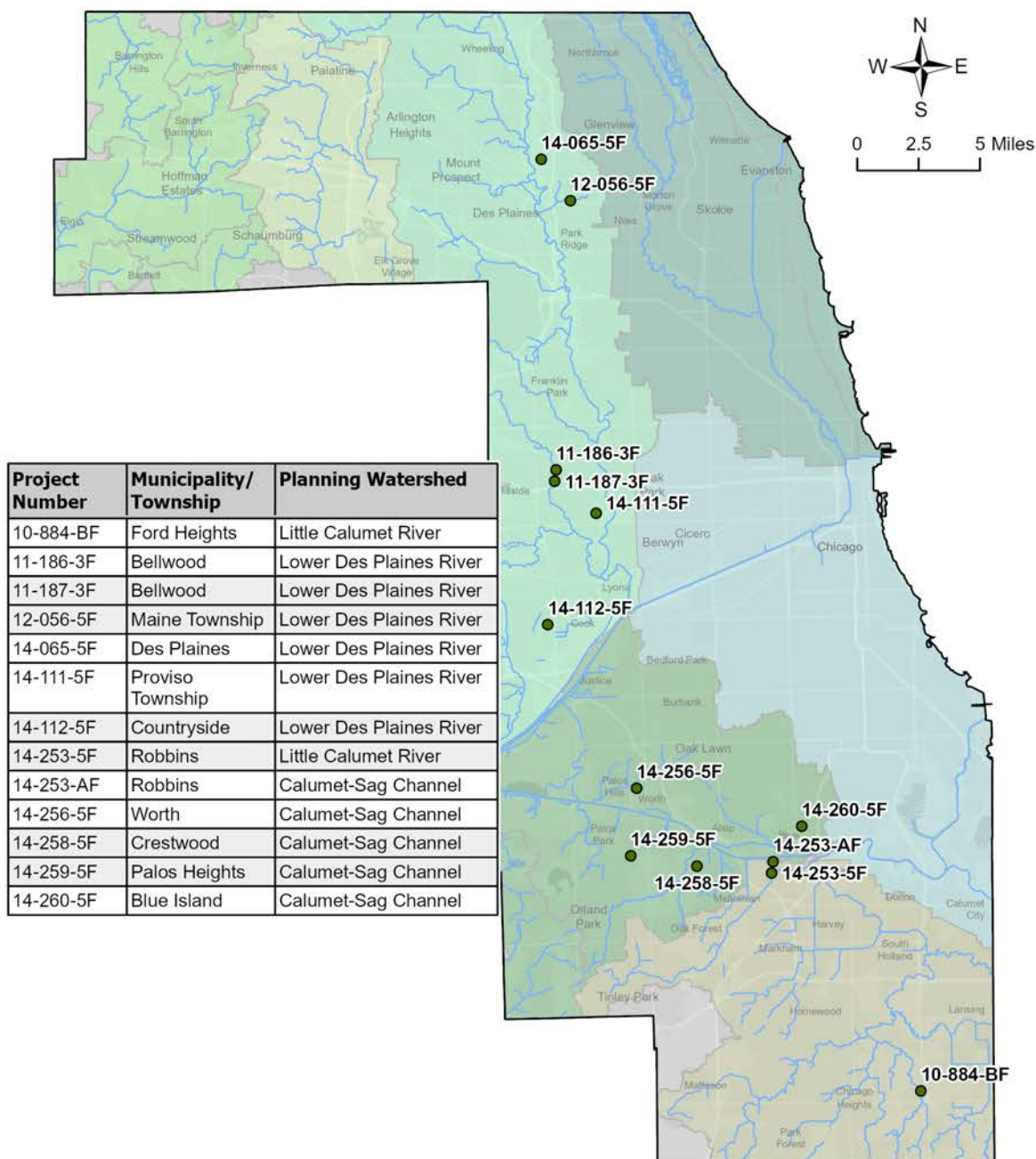
STORMWATER MANAGEMENT WATERSHEDS



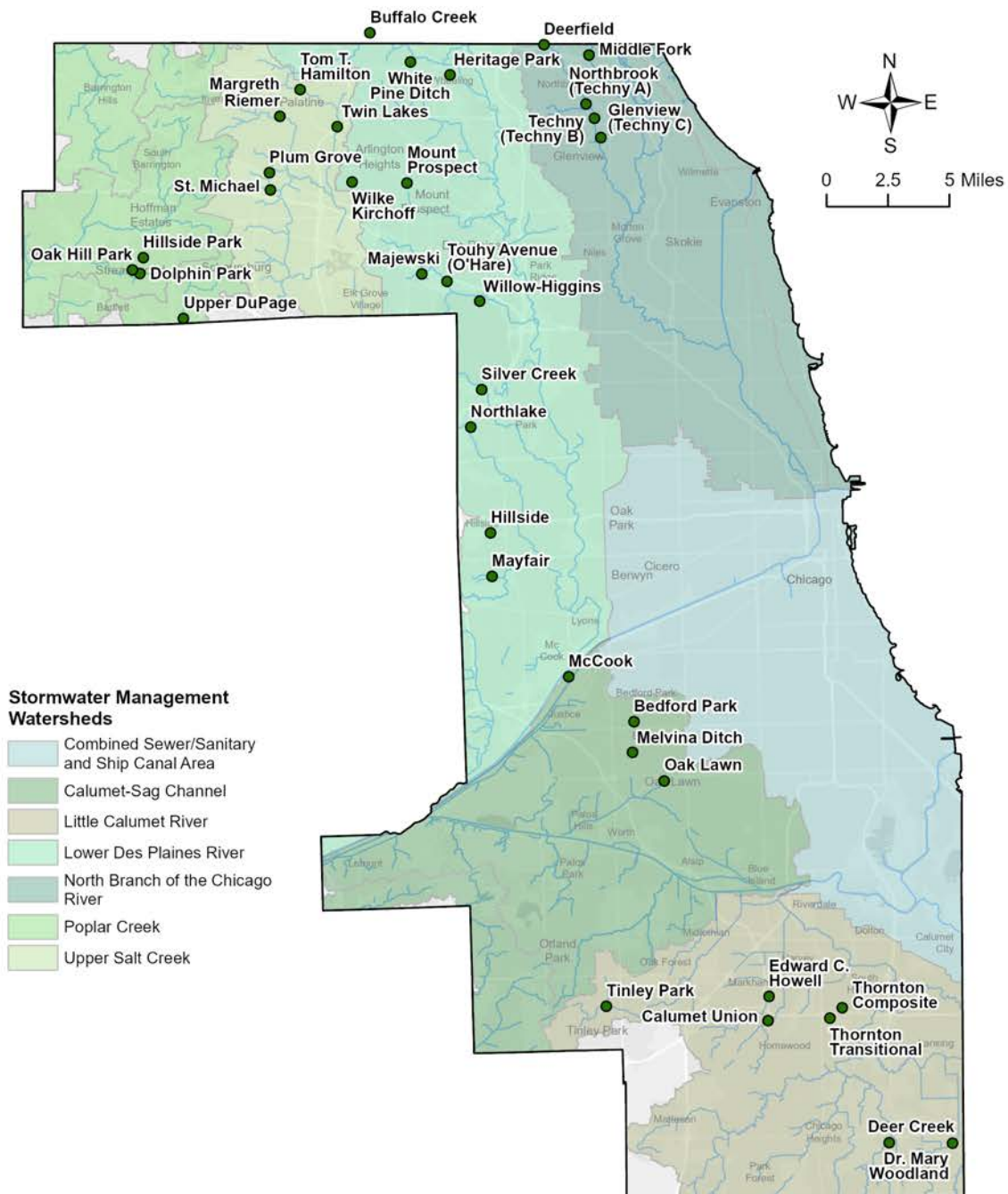
STORMWATER MANAGEMENT PROJECTS STREAMBANK STABILIZATION



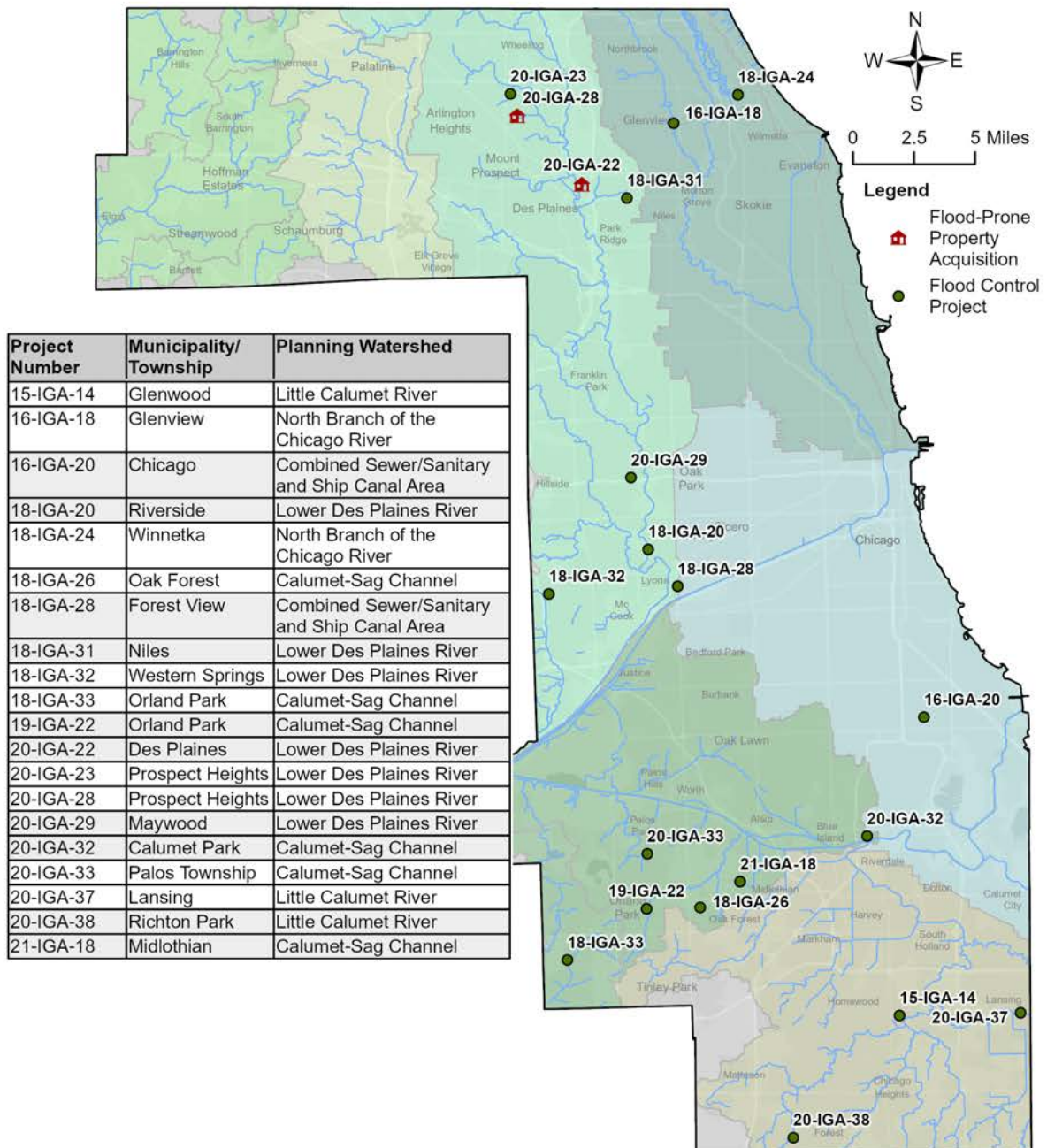
STORMWATER MANAGEMENT PROJECTS FLOOD CONTROL



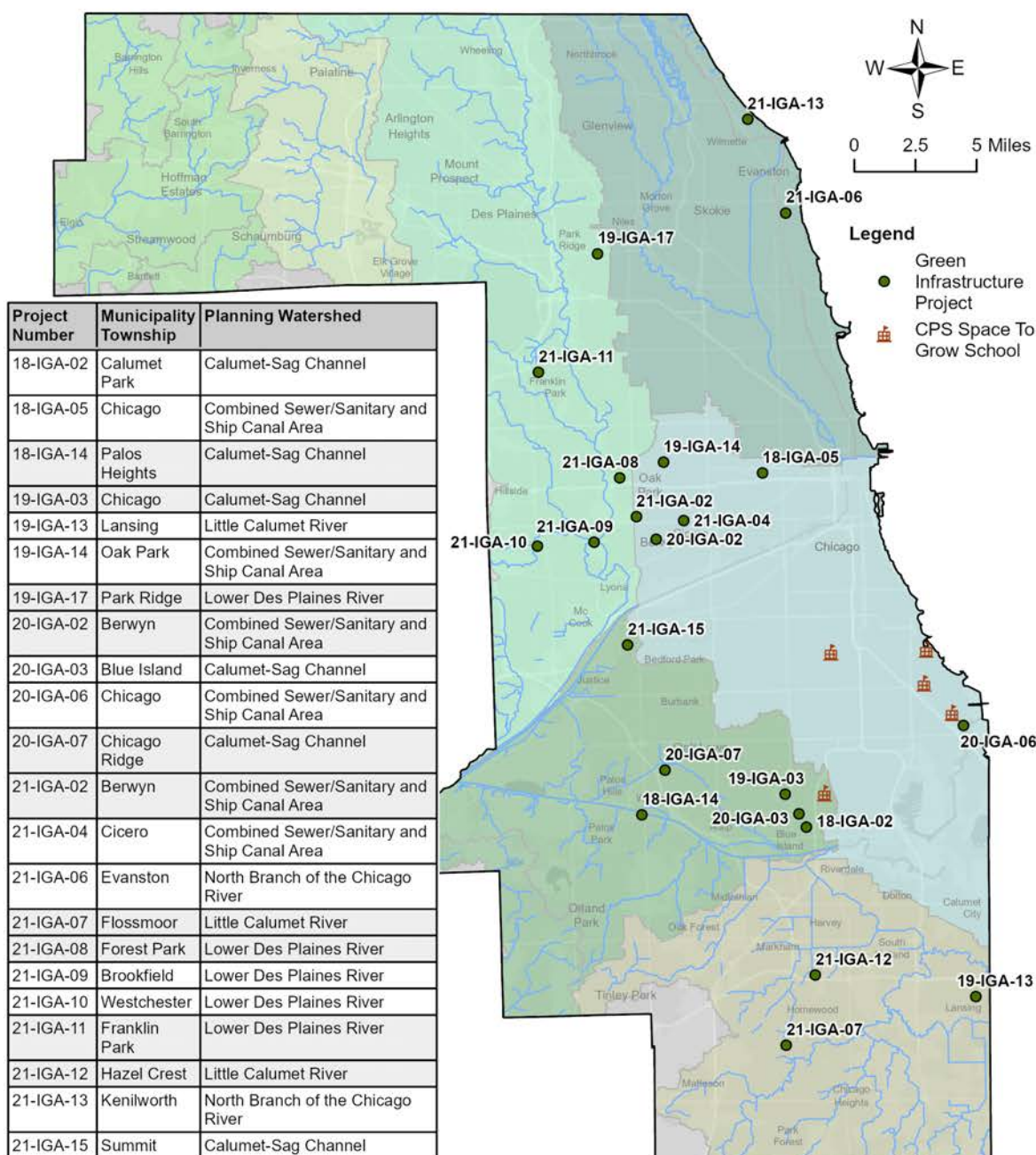
EXISTING MWRD SUPPORTED FLOOD CONTROL RESERVOIRS



STORMWATER MANAGEMENT PROJECTS INTERGOVERNMENTAL AGREEMENTS



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.		\$ 8,045,000	8.6 %
2 . Planning, design, and construction of stormwater management projects by the District or outside agencies under agreement.		\$ 78,216,500	83.7 %
3 . Operation and maintenance of natural and manmade drainageways for the purpose of stormwater management.		\$ 7,142,500	7.7 %
	Totals	\$ 93,404,000	100.0 %

MEASURABLE GOALS:		2020	2021	2022
	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	13	30	33
2 . Expenditures for the acquisition of flood-prone properties in the Stormwater Management and Capital Improvements Bond Funds.	Dollars	\$—	\$6,350,000	\$10,800,000
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	\$17,714,319	\$31,184,800	\$34,037,500
4 . Remove 28,000 cubic yards of debris from 532 miles of small streams and rivers.	Debris Cubic Yards Removed	16,382	28,000	28,000
Further details of Stormwater Management projects, intergovernmental cost sharing agreements, and land acquisitions are in the Stormwater Management Fund narrative.				
Compliance of 114* satellite entities (sewer system owners) with the requirements of the Infiltration/Inflow Control Program.				
*As of February 26, 2021, Palatine Township is no longer considered a satellite entity. As such, the total number of satellite entities is now 114.				
5. Number of satellite entities that have completed the Short-Term Requirements ¹		8	50	96
6. Percentage Complete		7%	44%	84%
7. Annual Summary Reports Received		88	79	96
8. Annual Summary Reports in Compliance ²		30	70	96
¹ Under the Short-Term Requirements, each satellite entity performs a prioritized condition assessment of their high-risk public sewers, conducts rehabilitation work to address infiltration/inflow sources, and develops and submits their individual Private Sector Program and Long Term Operation and Maintenance Program to the District for approval. The deadline to achieve compliance with the Short-Term Requirements was July 10, 2019. Many satellite entities have been delayed in achieving compliance for a variety of reasons. Local Sewers staff have been working with satellite entities that have not yet achieved full compliance with the Short-Term Requirements to identify outstanding tasks and facilitate completion of them. Where required, formal notices of non-compliance are being issued.				
² Annual 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, 2021. In light of the COVID-19 global 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. Formal notices of non-compliance are being issued for satellite entities that have not yet completed Short-Term Requirements.				

50000 STORMWATER MANAGEMENT FUND**OBJECTIVES AND PROGRAM SUMMARY**

PROGRAMS BY PRIORITY:		2020	Budgeted		Change		
Number	Name	Actual	FTEs	Dollars	Dollars	Percent	
4310	Stormwater Management Planning	\$ 807,602	2022 1	\$ 1,161,000	\$ (4,523,100)	(79.6)	a)
			2021 1	\$ 5,684,100			
4320	Stormwater Management Regulation	\$ 3,718,043	2022 42	\$ 4,779,200	\$ (42,300)	(0.9)	
			2021 43	\$ 4,821,500			
4330	Operations and Maintenance	\$ 4,917,900	2022 26	\$ 6,991,500	\$ 606,500	9.5	b)
			2021 25	\$ 6,385,000			
4340	Flood Mitigation Projects	\$41,926,079	2022 27	\$ 78,192,300	\$(12,706,700)	(14)	c)
			2021 23	\$ 90,899,000			
4350	Administrative Overhead	\$ 1,332,485	2022 4	\$ 2,129,000	\$ 94,000	4.6	
			2021 4	\$ 2,035,000			
7604	Social Security and Medicare Contributions	\$ 125,832	2022 —	\$ 151,000	\$ 9,700	6.9	
			2021 —	\$ 141,300			
Totals		\$52,827,941	2022 100	\$ 93,404,000	\$(16,561,900)	(15.1)%	
			2021 96	\$109,965,900			
<p>a) Decrease is due to a revised schedule for Stormwater Master Planning (\$1,648,100), the revised estimate for Program Management of Stormwater Master Planning in Combined Sewer Area (\$820,300), the revised estimate for Program Management of Stormwater Master Planning in Separate Sewer Area (\$764,800), the completion of 18-848-AF, Stormwater Master Plan for the Butterfield Creek Study Area (\$250,000), the completion of 18-848-BF, Stormwater Master Plan for the North Creek and Deer Creek Study Area (\$250,000), the substantial completion of 18-849-AF, Stormwater Master Plan for the Dixmoor, Dolton, Harvey, Phoenix, Posen, and Riverdale Study Area (\$219,900), the substantial completion of 18-848-CF, Stormwater Master Plan for the Weller Creek and Willow Creek Study Area (\$204,600), the substantial completion of 18-849-CF, Stormwater Master Plan for the Avalon Park, Englewood, Greater Grand Crossing, and South Shore Study Area (\$195,000), and the substantial completion of 18-849-BF, Stormwater Master Plan for the Austin, Humboldt Park, and West Garfield Park Study (\$180,000).</p> <p>b) Increase is due to the anticipated demand for the District's updated rain barrel program which allows Cook County residents to purchase rain barrels, a type of green infrastructure, at new lower prices (\$443,500) and the addition of one FTE position (\$77,400).</p> <p>c) 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.</p>							

50000 STORMWATER MANAGEMENT FUND**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
4310	Stormwater Management Planning					
4311	Watershed Councils	Cost	\$ 41,692	\$ 43,000	\$ 43,000	
4313	Watershed Plan Development	Cost	\$ 719,744	\$ 5,577,000	\$ 1,044,300	a)
4314	Publications and Public Information	Cost	\$ 22,032	\$ 23,400	\$ 24,200	
4315	Geographic Information System	Cost	\$ 24,134	\$ 40,700	\$ 49,500	b)
4320	Stormwater Management Regulation					
4321	Permits	Cost	\$ 2,075,422	\$ 2,708,700	\$ 2,659,300	
4322	Watershed Management Ordinance Development	Cost	\$ 105,764	\$ 213,000	\$ 251,400	c)
4323	Inspections	Cost	\$ 753,967	\$ 953,800	\$ 1,435,900	d)
4324	Watershed Management Ordinance Administration	Cost	\$ 621,788	\$ 815,200	\$ 243,600	e)
4326	Watershed Management Ordinance Infiltration/Inflow Control Program	Cost	\$ 161,102	\$ 130,800	\$ 189,000	f)
4330	Operations & Maintenance					
4331	Stormwater Detention Reservoir Activity	Cost	\$ 1,326,728	\$ 1,704,400	\$ 1,752,500	
4332	Small Streams Maintenance	Cost	\$ 2,800,341	\$ 3,807,400	\$ 4,388,100	g)
	Debris Cubic Yards Removed		16,382	28,000	28,000	
	Cost per Cubic Yard		\$ 170.94	\$ 135.98	\$ 156.72	
4334	Operations & Maintenance Contracted with Other Governments	Cost	\$ 178,939	\$ 173,500	\$ 174,300	
4335	Waterways Debris Removal	Cost	\$ 611,892	\$ 699,700	\$ 676,600	
<p>a) Decrease is due to a revised schedule for Stormwater Master Planning (\$1,648,100), the revised estimate for Program Management of Stormwater Master Planning in Combined Sewer Area (\$820,300), the revised estimate for Program Management of Stormwater Master Planning in Separate Sewer Area (\$764,800), the completion of 18-848-AF, Stormwater Master Plan for the Butterfield Creek Study Area (\$250,000), the completion of 18-848-BF, Stormwater Master Plan for the North Creek and Deer Creek Study Area (\$250,000), the substantial completion of 18-849-AF, Stormwater Master Plan for the Dixmoor, Dolton, Harvey, Phoenix, Posen, and Riverdale Study Area (\$219,900), the substantial completion of 18-848-CF, Stormwater Master Plan for the Weller Creek and Willow Creek Study Area (\$204,600), the substantial completion of 18-849-CF, Stormwater Master Plan for the Avalon Park, Englewood, Greater Grand Crossing, and South Shore Study Area (\$195,000), and the substantial completion of 18-849-BF, Stormwater Master Plan for the Austin, Humboldt Park, and West Garfield Park Study (\$180,000).</p> <p>b) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$9,400).</p> <p>c) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$36,500).</p> <p>d) Increase is due to the reallocation of salaries for four FTE positions to more accurately reflect current activities (\$477,200).</p> <p>e) Decrease is due to the reallocation of salaries for five FTE positions to more accurately reflect current activities (\$568,800).</p> <p>f) Increase is due to the reallocation of salaries to more accurately reflect current activities (\$57,700).</p> <p>g) Increase is due to the anticipated demand for the District's updated rain barrel program which allows Cook County residents to purchase rain barrels, a type of green infrastructure, at new lower prices (\$443,500) and the addition of one FTE position (\$67,200).</p>						

50000 STORMWATER MANAGEMENT FUND**PERFORMANCE DATA**

Program Number	Measurable Activity		2020 Actual	2021 Budgeted	2022 Estimated	
4340	Flood Mitigation Projects					
4341	Planning/Design	Cost	\$ 3,498,510	\$ 26,876,800	\$ 23,827,400	h)
4342	Contract Administration	Cost	\$ 632,853	\$ 638,100	\$ 694,300	
4343	Construction	Cost	\$ 18,669,001	\$ 22,458,700	\$ 14,237,400	h)
4344	Flood Mitigation Projects Contracted with Other Governments	Cost	\$ 13,841,678	\$ 35,763,100	\$ 34,264,800	h)
4345	Land and Easements	Cost	\$ 5,284,037	\$ 5,162,300	\$ 5,168,400	
4350	Administrative Overhead	Cost	\$ 1,332,485	\$ 2,035,000	\$ 2,129,000	
7604	Social Security and Medicare Contributions	Cost	\$ 125,832	\$ 141,300	\$ 151,000	
	Totals		\$ 52,827,941	\$ 109,965,900	\$ 93,404,000	
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						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601010	Salaries of Regular Employees	\$ 8,761,688	\$ 10,075,200	\$ 10,075,200	\$ 6,290,895	\$ 8,950,000	\$ 10,482,900	\$ —
601060	Compensation Plan Adjustments	265,654	494,500	494,500	151,039	207,700	479,400	—
601070	Social Security and Medicare Contributions	125,832	141,300	141,300	95,090	130,100	151,000	—
601080	Salaries of Nonbudgeted Employees	—	—	—	—	—	20,000	—
601100	Tuition and Training Payments	11,524	67,500	67,500	8,384	9,300	91,500	—
601250	Health and Life Insurance Premiums	739,430	914,000	914,000	568,928	781,000	920,400	—
601270	General Salary Adjustments	—	—	—	—	—	168,800	—
100	TOTAL PERSONAL SERVICES	9,904,128	11,692,500	11,692,500	7,114,336	10,078,100	12,314,000	—
612010	Travel	10	4,400	4,400	—	—	6,000	—
612030	Meals and Lodging	1,210	13,600	13,600	470	1,100	16,200	—
612040	Postage, Freight, and Delivery Charges	1,205	2,500	2,500	2,500	700	2,500	—
612050	Compensation for Personally-Owned Automobiles	3,890	19,800	19,800	727	1,600	19,800	—
612080	Motor Vehicle Operating Services	118	3,100	3,100	—	2,900	3,100	—
612250	Court Reporting Services	7,559	22,000	22,000	12,000	10,000	18,000	—
612280	Subscriptions and Membership Dues	11,200	20,700	20,700	18,871	20,000	21,000	—
612330	Rental Charges	2,111	53,000	53,000	52,500	52,500	53,000	—
612400	Intergovernmental Agreements	13,453,015	35,478,900	35,034,400	23,601,172	17,992,100	33,937,500	—
612430	Payments for Professional Services	856,967	727,000	1,094,500	867,687	772,500	800,200	—
612440	Preliminary Engineering Reports and Studies	1,551,670	7,564,600	7,564,600	5,034,853	3,276,800	3,124,300	—
612450	Professional Engineering Services for Construction Projects	1,941,961	6,980,800	6,980,800	2,743,142	1,520,600	6,990,400	—
612490	Contractual Services, N.O.C.	502,094	414,500	414,500	205,084	231,400	422,200	—
612520	Waste Material Disposal Charges	25,011	60,000	60,000	52,955	30,900	60,000	—
612620	Repairs to Waterway Facilities	2,341,055	2,970,000	2,914,000	2,725,316	2,725,400	3,005,000	—
612790	Repairs to Marine Equipment	—	66,500	66,500	66,500	60,000	66,500	—
612800	Repairs to Office Furniture and Equipment	—	4,700	4,700	2,400	2,400	6,000	—
612820	Computer Software Maintenance	—	—	—	—	—	2,300	—
612860	Repairs to Vehicle Equipment	—	4,500	4,500	—	4,500	4,700	—
612990	Repairs, N.O.C.	—	6,700	6,700	2,305	3,400	2,000	—
200	TOTAL CONTRACTUAL SERVICES	20,699,076	54,417,300	54,284,300	35,388,482	26,708,800	48,560,700	—

501 50000	Fund: Stormwater Management	LINE ITEM ANALYSIS						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
623130	Buildings, Grounds, Paving Materials, and Supplies	—	5,000	5,000	5,000	5,000	5,000	—
623520	Office, Printing, and Photographic Supplies, Equipment, and Furniture	3,030	15,500	14,300	7,000	4,300	15,500	—
623560	Processing Chemicals	1,382	5,000	5,000	5,000	5,000	5,000	—
623680	Tools and Supplies	2,478	11,500	11,500	10,893	8,500	11,500	—
623700	Wearing Apparel	5,483	8,500	8,500	6,500	6,200	9,500	—
623720	Books, Maps, and Charts	—	—	—	—	—	300	—
623800	Computer Software	—	9,000	10,200	9,685	9,700	—	—
623820	Fuel	—	7,200	7,200	7,200	5,000	9,000	—
623990	Materials and Supplies, N.O.C.	4,993	66,500	122,500	117,324	66,500	510,000	—
300	TOTAL MATERIALS AND SUPPLIES	17,366	128,200	184,200	168,602	110,200	565,800	—
634860	Vehicle Equipment	—	605,000	682,000	670,182	670,200	510,000	—
634990	Machinery and Equipment, N.O.C.	12,610	60,000	60,000	36,221	53,000	30,000	—
400	TOTAL MACHINERY AND EQUIPMENT	12,610	665,000	742,000	706,403	723,200	540,000	—
645620	Waterway Facilities Structures	13,573,481	28,115,800	27,727,800	9,010,938	4,088,200	22,814,700	—
645630	Army Corps of Engineers Services	49,999	—	—	—	—	—	—
645690	Capital Projects, N.O.C.	80,750	100,000	100,000	—	75,000	100,000	—
645720	Preservation of Waterway Facility Structures	4,115,321	10,407,100	10,795,100	9,416,977	5,385,100	4,121,800	—
500	TOTAL CAPITAL PROJECTS	17,819,551	38,622,900	38,622,900	18,427,915	9,548,300	27,036,500	—
656010	Land	3,203,926	2,640,000	1,440,000	51,983	60,000	400,000	—
600	TOTAL LAND	3,203,926	2,640,000	1,440,000	51,983	60,000	400,000	—
667330	Right-of-Way Properties	—	—	2,600,000	828,250	2,973,400	3,237,000	—
667340	Payments for Easements	1,171,283	1,800,000	400,000	184,777	200,000	750,000	—
700	TOTAL FIXED AND OTHER CHARGES	1,171,283	1,800,000	3,000,000	1,013,027	3,173,400	3,987,000	—
TOTAL STORMWATER MANAGEMENT FUND		\$ 52,827,940	\$ 109,965,900	\$ 109,965,900	\$ 62,870,748	\$ 50,402,000	\$ 93,404,000	\$ —

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.

Fund: Stormwater Management		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
50000	Engineering Department					
516	Local Sewer Systems Section					
HP18	Principal Civil Engineer	2	3		3	
HP17	Senior Civil Engineer	9	10		10	
HP15	Associate Civil Engineer	9	9		9	
HP14	Assistant Civil Engineer	7	8		8	
HP14	Engineering Technician V	3	3		3	
HP12	Engineering Technician IV	5	6		7	
HP12	Engineering Technician IV #4	1	1		1	
HP11	Administrative Specialist	1	1		—	
HP11	Engineering Technician III	1	1		—	
HP09	Administrative Clerk	2	1		1	
TOTAL 516	Local Sewer Systems Section	40	43	4,418,672	42	4,390,761
522	Stormwater Management Section					
HP20	Managing Civil Engineer	1	1		1	
HP18	Principal Civil Engineer	3	3		4	
HP17	Senior Civil Engineer	7	7		8	
HP15	Associate Civil Engineer	6	6		7	
HP14	Assistant Civil Engineer	3	3		3	
HP14	Public Affairs Specialist	1	1		1	
HP11	Administrative Specialist	1	1		2	
TOTAL 522	Stormwater Management Section	22	22	2,656,427	26	3,033,296
556	Construction Field Services Section					
HP17	Senior Civil Engineer	—	1		1	
HP15	Associate Civil Engineer	—	1		1	
HP14	Engineering Technician V	—	1		1	
HP12	Engineering Technician IV	—	1		1	
TOTAL 556	Construction Field Services Section	—	4	412,394	4	413,586
TOTAL	Engineering Department	62	69	7,487,492	72	7,837,643

Fund: Stormwater Management		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	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	281,689	2	281,689
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	565,936	6	531,156
639	Channel Maintenance Unit					
HP15	Associate Civil Engineer	1	1		1	
HP14	Engineering Technician V	1	1		2	
NR8650	Maintenance Laborer Class A Shift	2	2		2	
TOTAL 639	Channel Maintenance Unit	4	4	369,274	5	458,850
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	530,088	6	531,960
TOTAL 630	General Division	18	18	1,746,988	19	1,803,655
940	Stickney Service Area General Plant Services Section					
924	Stickney Maintenance Unit					
PR7773	Pipefitter	1	1		1	
TOTAL 924	Stickney Maintenance Unit	1	1	105,560	1	108,160
934	Stickney Mechanical Operations Unit					
NR8650	Maintenance Laborer Class A Shift	4	4		4	

Fund: Stormwater Management		POSITION ANALYSIS				
		2020	2021		2022	
					Proposed by the Executive Director	
Pay Plan & Grade	Class Title	Actual FTEs	Budgeted FTEs	Appropriation in Dollars	Budgeted FTEs	Appropriation in Dollars
NR6831	Operating Engineer I	4	4		4	
TOTAL 934	Stickney Mechanical Operations Unit	8	8	785,907	8	785,907
TOTAL 940	Stickney Service Area General Plant Services Section	9	9	891,467	9	894,067
TOTAL	Maintenance & Operations Department	27	27	2,638,455	28	2,697,722
TOTAL	Stormwater Management	89	96	10,125,947	100	10,535,365
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 2022, are included in this section. A tax levy ordinance for the principal and interest due in 2022 and 2023 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 Budget and Financial Summaries, Schedules, and Exhibits section, starting on page 68.

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 2022.

Reserve Claim Fund:

Description of Fund, Purpose, and Operation	535
Line Item Analysis	537

Bond Redemption & Interest Fund:

Description of Fund, Purpose, and Operation	538
Appropriation for Payment of Outstanding Bonds, 2022	541

Retirement Fund:

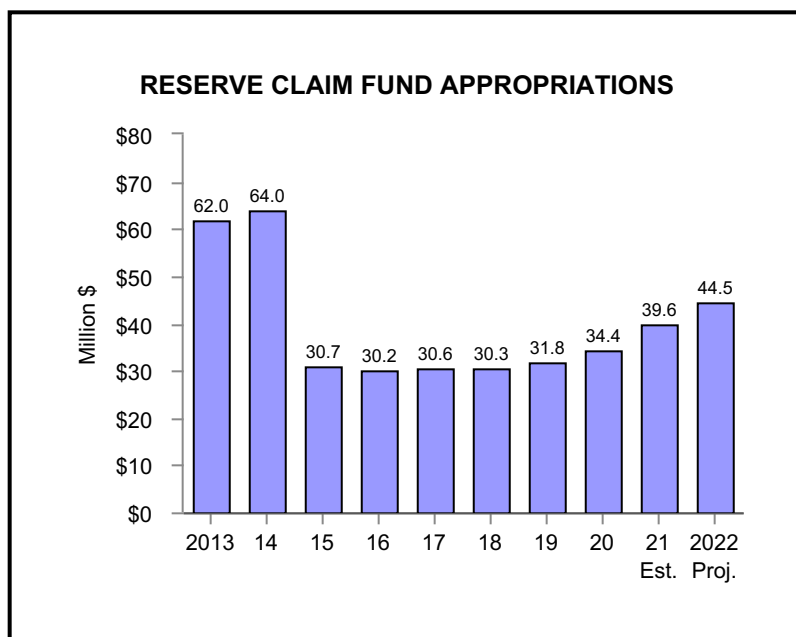
Description of Fund, Purpose, and Operation	543
Appropriation Ordinance (continued)	546

RESERVE CLAIM FUND

Description of Fund, Purpose, and Operation

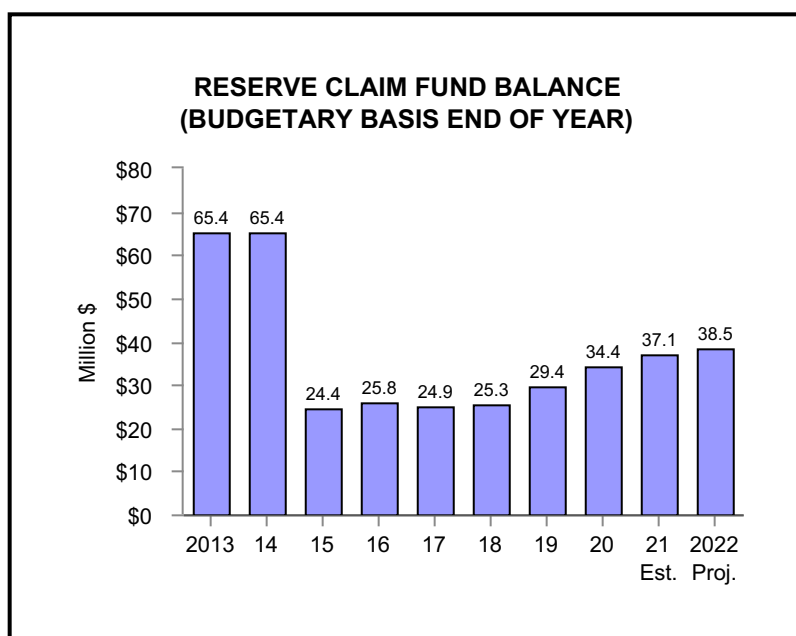
The Reserve Claim Fund is the District's self-insurance fund. It is maintained at an appropriation level adequate to meet potential liabilities. The fund is capable of providing coverage for those risks that can be expected to be encountered and is able to pay such claims without exposing the agency 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 \$85.4 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 reserves. The estimated 2021 year-end fund balance is \$37.1 million and the projection for 2022 is \$38.5 million.



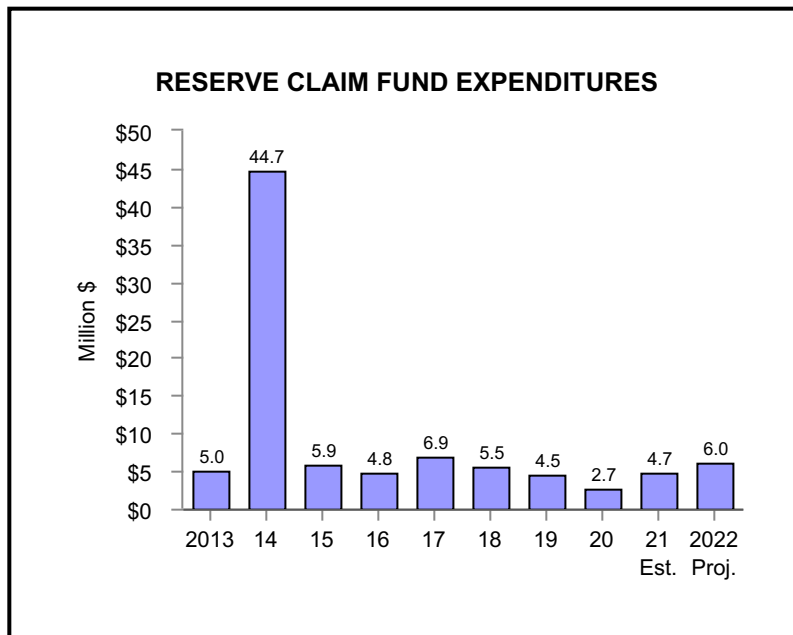
The Statutory Limit for Budget Year 2022 Proj. is \$85.4 million.

In 2015, the reduction is due to a settlement in 2014.

Description of Fund, Purpose, and Operation (continued)

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 2022, 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						
		2020	2021				2022	
Account Number	Account Name	Expenditure	Original Appropriation	Adjusted Appropriation 09/30/21	Expenditure (Committed Budget plus Disbursement) 09/30/21	Estimated Expenditure 12/31/21	Proposed by Executive Director	Recommended by Committee on Budget and Employment
601090	Employee Claims	\$ 2,596,588	\$ 10,000,000	\$ 10,000,000	\$ 2,105,030	\$ 3,359,000	\$ 10,000,000	\$ —
100	TOTAL PERSONAL SERVICES	2,596,588	10,000,000	10,000,000	2,105,030	3,359,000	10,000,000	—
667220	General Claims and Emergency Repair and Replacement Costs	54,882	29,624,900	29,624,900	463,766	1,350,000	34,465,300	—
700	TOTAL FIXED AND OTHER CHARGES	54,882	29,624,900	29,624,900	463,766	1,350,000	34,465,300	—
TOTAL RESERVE CLAIM FUND		\$ 2,651,470	\$ 39,624,900	\$ 39,624,900	\$ 2,568,796	\$ 4,709,000	\$ 44,465,300	\$ —
NOTE: Amounts may not add up due to rounding.								

BOND REDEMPTION & INTEREST FUND

Description of Fund, Purpose, and Operation

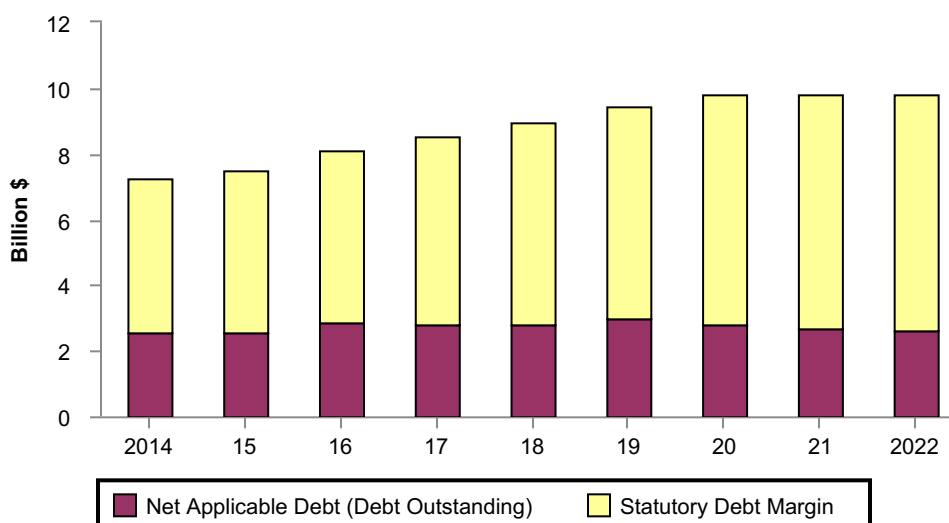
The District's Bond Redemption & Interest Fund is a debt service fund established to account for annual property tax levies and certain other revenues, principally interest on investments, which are used for the payment of interest and redemption of general obligation bond issues. Sub-funds are established for each debt issue.

Debt Limits, Margins, and Borrowing Authority

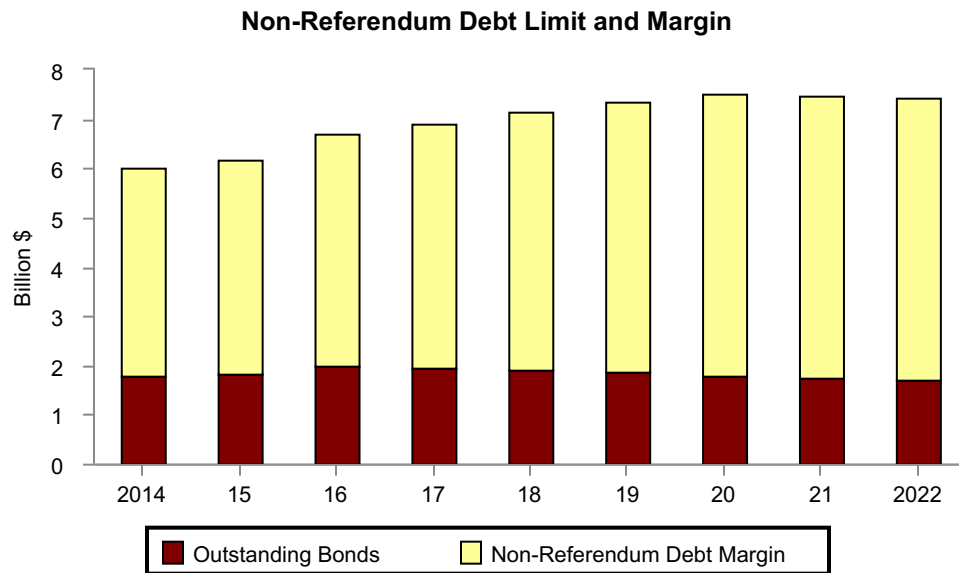
Applicable Illinois State Statutes establish the following limitations relative to the District:

- 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 (\$170.9 billion for 2020) within the District boundary. On December 31, 2021, the District's statutory debt limit is estimated at \$9.8 billion, with a net applicable debt of \$2.6 billion and an estimated statutory debt margin of \$7.2 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, 2021, it is estimated that the District's outstanding capital improvement and refunding bonds will total \$1.7 billion with a non-referendum statutory debt limit of \$5.7 billion and a non-referendum bonded debt margin of \$4.0 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 2021 tax year, is \$175.5 million.

Description of Fund, Purpose, and Operation (continued)

- 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.

BOND REDEMPTION & INTEREST FUND

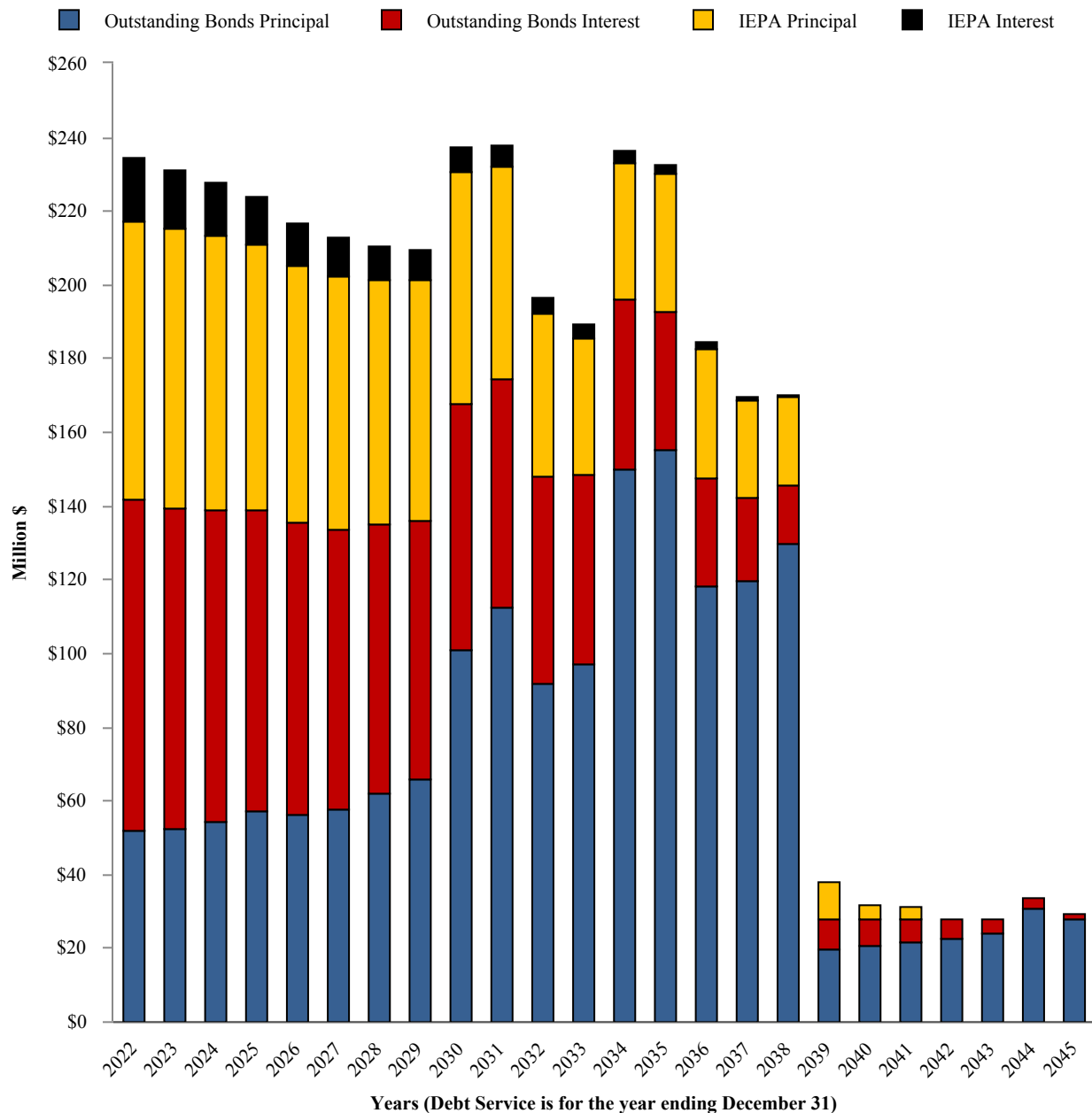
Description of Fund, Purpose, and Operation (continued)

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 \$6.0 to \$10.0 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 2022**

BOND ISSUE	RATES OF INTEREST	January 1, 2022			July 1, 2022			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	5,094,547	(1)	—	5,094,547	(2)	7,580,000	(2) 17,769,094
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	1,240,625	(1)	—	1,240,625	(2)	—	(2) 2,481,250
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	1,092,550	(1)	—	1,092,550	(2)	1,085,000	(2) 3,270,100
2016 Alternate Revenue Unlimited Tax Series E	5.0	1,250,000	(1)	—	1,250,000	(2)	1,125,000	(2) 3,625,000
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)	1,815,000	(2) 2,815,000
State Revolving Fund Bonds - Series:								
14M SRF L175372	2.221	\$ 11,097		\$ 33,315	\$ 10,805		\$ 33,607	\$ 88,824
14N SRF L175371	1.750	10,569		31,731	10,292		32,008	84,600
14O SRF L175305	1.750	24,258		70,365	23,643		70,982	189,248
16A SRF L174555	1.750	988,526		2,867,395	963,437		2,892,485	7,711,843
14P SRF L175369	1.560	27,697		91,607	26,984		92,322	238,610
16C SRF L175367	1.760	183,262		494,198	178,913		498,547	1,354,920
14Q SRF L175539	1.760	22,493		58,744	21,976		59,262	162,475
14R SRF L175517	1.840	320,302		723,988	313,641		730,649	2,088,580
16G SRF L174708	2.000	96,263		196,911	94,294		198,881	586,349
16H SRF L172130	2.000	96,286		196,958	94,316		198,928	586,488
16K SRF L172741	2.000	30,671		66,744	30,003		67,411	194,829
14B SRF L175171	2.210	24,171		64,400	23,460		65,111	177,142
14C SRF L174559	2.295	184,638		5,453,453	122,060		533,363	6,293,514
14D SRF L175263	1.860	104,988		293,854	102,255		296,588	797,685
14E SRF L173062	1.860	357,695		967,001	348,702		975,994	2,649,392
14F SRF L175342	1.750	638,362		1,732,876	623,200		1,748,038	4,742,476
14G SRF L175152	1.860	166,553		450,264	162,367		454,452	1,233,636
14H SRF L175355	1.860	9,255		28,913	8,987		29,183	76,338
14K SRF L175366	1.860	42,190		118,088	41,093		119,187	320,558
14L SRF L175368	1.750	41,504		124,606	40,414		125,697	332,221
09D SRF L174558	2.295	266,684		1,045,577	254,687		1,057,575	2,624,523
12A SRF L174710	2.295	59,349		179,799	57,286		181,863	478,297
12B SRF L174712	2.295	50,827		153,984	49,062		155,751	409,624
12C SRF L174621	1.995	109,042		3,663,113	72,504		363,458	4,208,117
12D SRF L174988	1.930	183,107		851,745	174,889		859,965	2,069,706
12E SRF L174709	1.930	40,211		135,836	38,900		137,148	352,095
12F SRF L174989	1.930	375,002		1,593,983	359,620		1,609,366	3,937,971
12G SRF L174923	1.930	287,335		770,548	279,900		777,985	2,115,768
12H SRF L174924	1.930	166,126		752,931	158,860		760,198	1,838,115
12L SRF L175161	2.210	338,229		11,129,575	215,248		989,069	12,672,121
12J SRF L175172	1.995	19,736		64,217	19,096		64,858	167,907
12K SRF L174925	1.995	102,624		3,166,287	71,041		351,909	3,691,861

(1) Interest Payable June 1, 2022 (2) Interest and Principal Payable December 1, 2022

BOND REDEMPTION & INTEREST FUND**Appropriation for Payment of Outstanding Bonds During the Year 2022**

BOND ISSUE	RATES OF INTEREST	January 1, 2022		July 1, 2022		TOTAL PAYABLE
		INTEREST PAYABLE	PRINCIPAL PAYABLE	INTEREST PAYABLE	PRINCIPAL PAYABLE	
State Revolving Fund Bonds - Series (continued):						
09A SRF L173074	1.250	\$ 162,884	\$ 1,176,570	\$ 155,530	\$ 1,183,923	\$ 2,678,907
09B SRF L173064	—	—	191,445	—	191,445	382,890
09C SRF L173063	—	—	55,979	—	55,979	111,958
09I SRF L174675	1.250	35,232	280,349	33,480	282,101	631,162
07A SRF L172625	2.500	263,711	1,121,517	249,693	1,135,536	2,770,457
07B SRF L172850	2.500	185,369	739,767	176,122	749,015	1,850,273
07C SRF L172770	—	—	1,666,667	—	1,666,667	3,333,334
09G SRF L173075	1.250	103,756	756,776	99,027	761,506	1,721,065
09H SRF L173800	—	—	18,396	—	18,397	36,793
09E SRF L173005	1.250	132,975	1,006,522	126,685	1,012,814	2,278,996
07D SRF L172763	2.500	60,150	255,806	56,952	259,003	631,911
09F SRF L174557	1.250	221,647	1,600,498	211,644	1,610,502	3,644,291
04G SRF L172611	2.500	17,177	117,308	15,711	118,774	268,970
04H SRF L172849	2.500	300,695	1,468,027	282,345	1,486,377	3,537,444
01A SRF L172126	2.570	117,404	1,780,932	94,519	1,803,817	3,796,672
97DD SRF L171152	2.905	29,119	490,405	21,997	497,528	1,039,049
01B SRF L172127	2.500	160,536	1,767,038	138,449	1,789,126	3,855,149
01C SRF L172128	2.500	179,523	1,517,621	160,553	1,536,592	3,394,289
04A SRF L172485	2.500	109,333	680,121	100,831	688,623	1,578,908
04B SRF L172488	2.500	127,722	794,514	117,791	804,446	1,844,473
04C SRF L172493	2.500	11,026	75,299	10,084	76,241	172,650
04D SRF L172494	2.500	10,573	72,210	9,671	73,113	165,567
04E SRF L172495	2.500	38,570	220,070	35,820	222,822	517,282
04F SRF L172496	—	—	99,367	—	99,368	198,735
12O SRF L175166	1.995	35,487	110,765	34,382	111,871	292,505
16B SRF L172129	1.840	32,200	77,360	31,489	78,073	219,122
12I SRF L175222	2.210	44,110	112,950	42,862	114,199	314,121
12M SRF L175168	2.210	115,234	273,438	112,213	276,460	777,345
12N SRF L175164	1.995	22,173	66,477	21,511	67,141	177,302
14I SRF L175223	1.860	73,689	199,213	71,837	201,066	545,805
14J SRF L175219	2.210	38,834	103,466	37,690	104,609	284,599
14A SRF L173076	2.210	709,747	23,354,505	451,680	2,075,482	26,591,414
97CC SRF L172031	2.535	14,905	1,175,945	—	—	1,190,850
16D SRF L175460	1.750	58,751	176,387	57,209	177,930	470,277
Refunding Bonds - Series:						
2014 Limited Tax Series D	2.0 to 5.0	\$ 394,875	(1) \$ —	\$ 394,875	(2) \$ 15,795,000	(2) \$ 16,584,750
2007 Unlimited Tax Series A	4.0 to 5.0	613,875	(1) —	613,875	(2) 24,555,000	(2) 25,782,750
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		\$ 53,643,028	\$ 81,176,716	\$ 52,801,157	\$ 89,817,386	\$ 277,438,287

(1) Interest Payable June 1, 2022 (2) Interest and Principal Payable December 1, 2022

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.

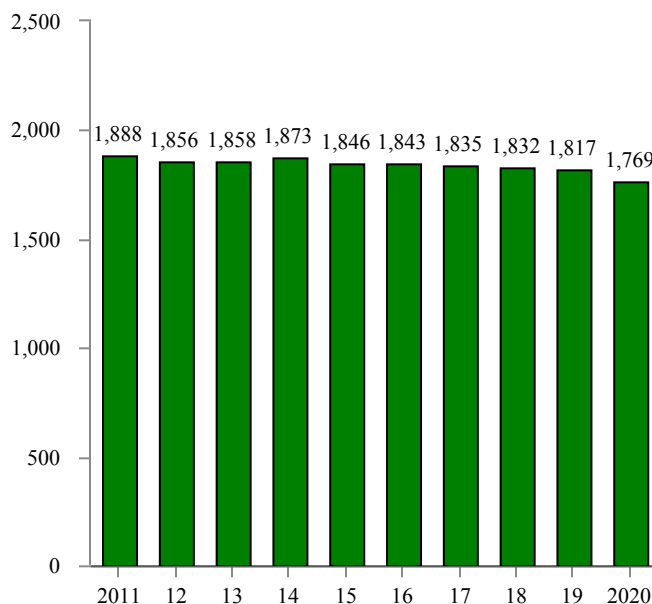
The 2021 appropriation included a planned \$10.0 million transfer to provide advance funding to maintain growth in the Retirement Fund's funded ratio, pending legislative authority to make such a transfer. While the legislative initiative to amend the District's statute (70 ILCS 2605/5.9) was successful, the effective date of the legislation is January 1, 2022.

The 2022 appropriation includes an anticipated \$30.0 million transfer of excess revenue from the Corporate Fund, including surplus revenues identified and reserved from 2019 and 2020, as well as projected for 2022.

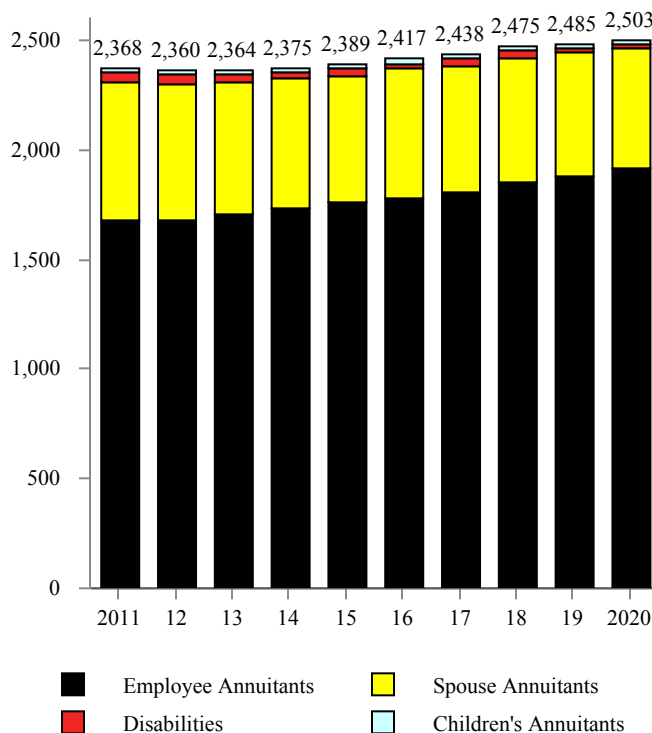
For the 2022 Budget, the gross property tax levy totals \$72.1 million, a decrease of \$0.7 million, or 0.9 percent, below the 2021 adjusted levy. The 2022 Personal Property Replacement Tax allocation to the Retirement Fund is \$18.4 million. The 2022 appropriation is \$118.8 million, an increase of \$20.6 million, or 21.0 percent, above the 2021 Adjusted Budget, the result of less advance funding provided by the District in 2020.

As of December 31, 2020, the Fund had 1,769 active (contributing) participants, 1,917 employee annuitants, 546 spouse annuitants, and 20 child annuitants. In addition, the Fund had 20 District employees receiving disability benefits at the end of the year.

Active Participants



Beneficiaries



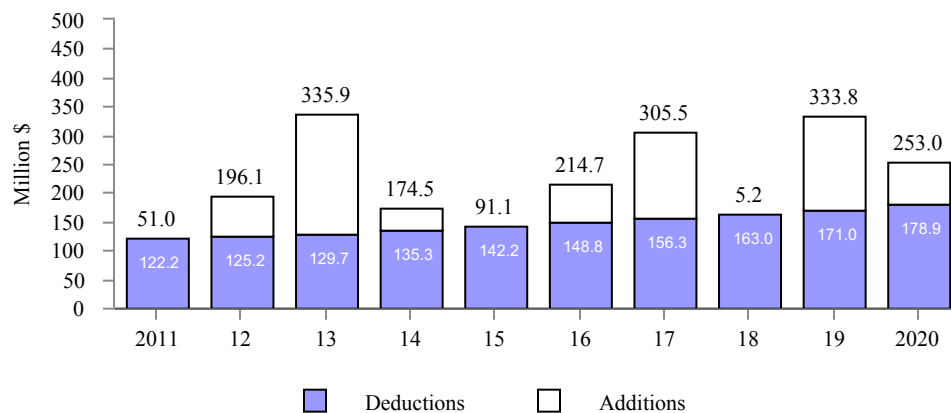
Description of Fund, Purpose, and Operation (continued)

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 2022, 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.

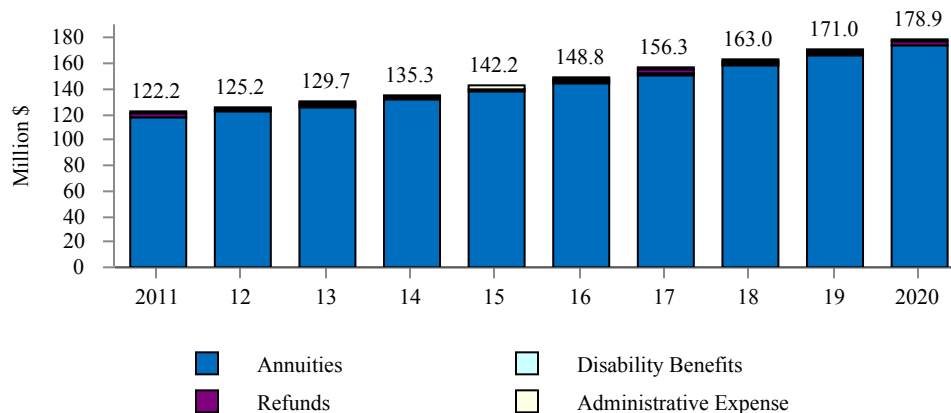
Total additions for 2020 were \$253.0 million, or \$80.9 million less than in 2019, due to the overall increase in investment markets during the year. Additions in 2020 were the combined effect of employee and employer contributions of \$128.9 million, net investment income of \$123.9 million, securities lending income of \$199,200, and other income of \$2,700.

Additions vs. Deductions



Deductions for 2020 were \$178.9 million, which included annuity payments of \$174.2 million, refunds of \$2.3 million, administrative expenses of \$1.6 million, and disability benefits of \$0.8 million.

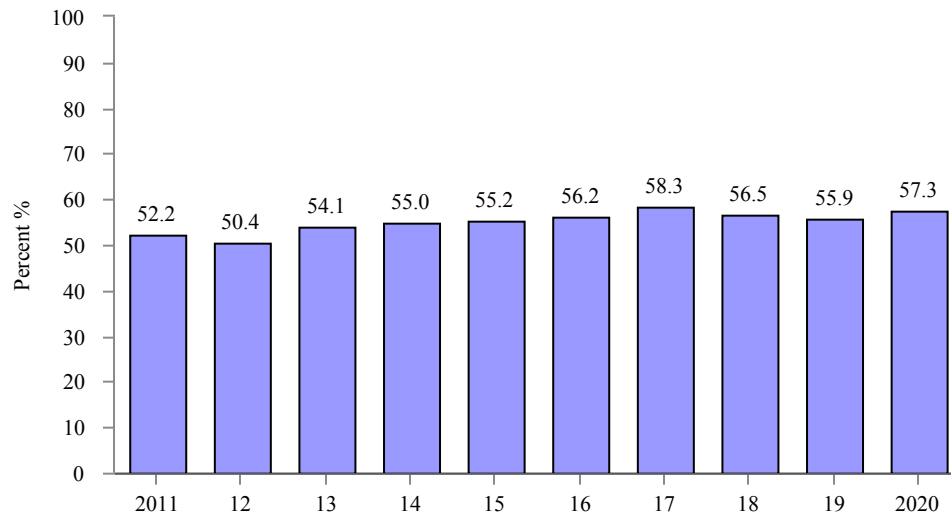
Deductions



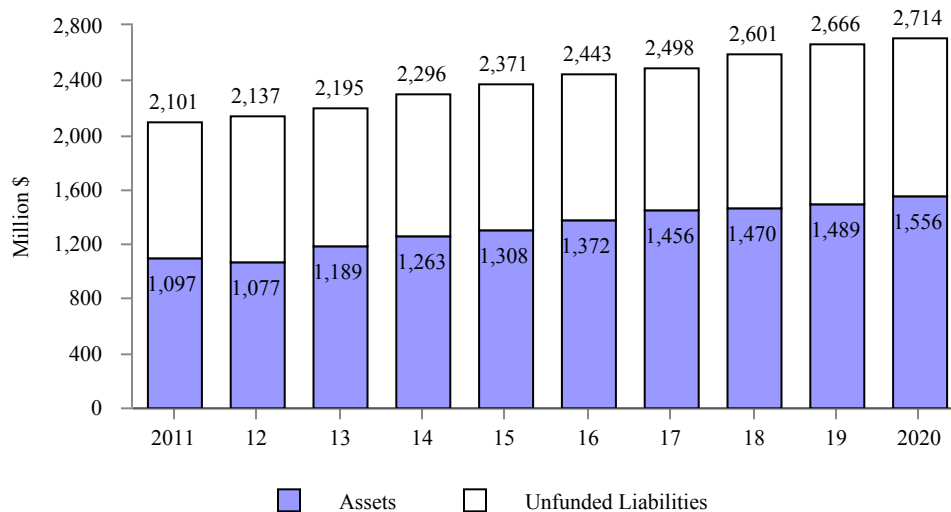
Description of Fund, Purpose, and Operation (continued)

As of December 31, 2020, the funded ratio of the Fund was 57.3 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



APPROPRIATION ORDINANCE NUMBER O21-003**ANNUAL APPROPRIATION ORDINANCE OF THE
METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO
FOR THE FISCAL YEAR BEGINNING JANUARY 1, 2022
AND ENDING DECEMBER 31, 2022
(CONTINUED)**

And an amount of Estimated Expenditures for the Purpose of the Metropolitan Water Reclamation District Retirement Fund of \$118,754,000.

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, 2022.

Approved as to Form and Legality:

Approved:

General Counsel

*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 2022 levies.

This section includes 2022 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 2022 Tax Levy for Payment of Outstanding Bonds, can also be found in this section.

Retirement Fund and Corporate Fund	547
Construction Fund	548
Bond Redemption & Interest Fund:	
Tax Levy Ordinance for Outstanding Bonds	549
Tax Levy for Payment of Outstanding Bonds, 2022	552
Reserve Claim Fund	554
Stormwater Management Fund	555

ORDINANCE NUMBER 021-004

**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR
BEGINNING JANUARY 1, 2022 AND ENDING DECEMBER 31, 2022
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, 2022
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, 2022, for the fiscal year ending December 31, 2022, 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 \$72,053,900 which includes the sum of \$2,521,887 as a reserve for loss in collection of taxes, distributed as

Contributions for Service Retirement Allowances and Spouses' Allowances	\$ 13,798,100
Contributions for Ordinary Disability Benefits	787,500
Contributions for Duty Disability Benefits	169,900
Contributions for Expense of Administration	1,439,200
Contributions for Children's Annuities	99,600
Contributions for Current and Past Service Requirements	55,759,600
	<u><u>\$ 72,053,900</u></u>

For Corporate Purposes of the said Metropolitan Water Reclamation District of Greater Chicago, "the sum of \$284,500,000 which includes the sum of \$9,957,500 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 2022 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, 2022, 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, 2022.

Approved as to Form and Legality:

Approved:

General Counsel

*President,
Board of Commissioners of the
Metropolitan Water Reclamation District
of Greater Chicago*

ORDINANCE NUMBER 021-005

**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR BEGINNING
JANUARY 1, 2022 AND ENDING DECEMBER 31, 2022
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, 2022
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, 2022 for the fiscal year ending December 31, 2022, 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

2022 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, 2022, 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 2022 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 2022 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, 2022.

Approved as to Form and Legality:

General Counsel

Approved:

*President,
Board of Commissioners of the
Metropolitan Water Reclamation District
of Greater Chicago*

ORDINANCE NUMBER 021-006

**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR BEGINNING
JANUARY 1, 2022 AND ENDING DECEMBER 31, 2022
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:

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 Chicago, as said territorial limits exist on January 1, 2022, and all taxable property in townships or parts of townships disconnected from the Metropolitan Water Reclamation District of Greater Chicago prior to January 1, 2022, but after the issuance of any bonds, the amounts of money hereinafter stated:

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	29,141,192
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	3,390,363
2016 Alternate Revenue Unlimited Tax Series E	07/07/16	3,755,182
2016 Unlimited Tax Series C	07/07/16	1,554,405
2016 Limited Tax Series D	07/07/16	2,916,322

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 021-006

**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR BEGINNING
JANUARY 1, 2022 AND ENDING DECEMBER 31, 2022
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	1,655,940
16K SRF L172741	208,297
16P SRF L172744	551,457
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	538,368
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 021-006

**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR BEGINNING
JANUARY 1, 2022 AND ENDING DECEMBER 31, 2022
TO PAY THE INTEREST ON OUTSTANDING BONDS AND TO
DISCHARGE THE PRINCIPAL THEREOF (CONTINUED)**

Refunding Bonds - Series:

2007 Unlimited Tax Series B	03/21/07	\$ 4,996,749
2007 Limited Tax Series C	03/21/07	5,541,607
2016 Unlimited Tax Series A	07/07/16	40,975,648
2016 Limited Tax Series B	07/07/16	6,467,876
		<u>\$ 245,854,195</u>

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 2022 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, 2022, 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, 2022 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, 2022.

Approved as to Form and Legality:

Approved:

General Counsel

*President,
Board of Commissioners of the
Metropolitan Water Reclamation District
of Greater Chicago*

BOND REDEMPTION AND INTEREST FUND

2022 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	6/1/22 - 12/1/22	\$ 160,000	\$ —	\$ 5,804	\$ 165,804
2009 Limited Tax Series	08/26/09	6/1/22 - 12/1/22	34,320,000	—	1,244,767	35,564,767
2011 Limited Tax Series B	07/27/11	6/1/22 - 12/1/22	9,821,250	18,300,000	1,019,942	29,141,192
2011 Unlimited Tax Series C	07/27/11	6/1/22 - 12/1/22	2,067,431	—	74,985	2,142,416
2014 Limited Tax Series C	01/06/15	6/1/22 - 12/1/22	2,481,250	—	89,994	2,571,244
2014 Unlimited Tax Series A	01/06/15	6/1/22 - 12/1/22	5,000,001	—	181,347	5,181,348
2014 Alternate Revenue Unlimited Tax Series B	01/06/15	6/1/22 - 12/1/22	2,141,700	1,130,000	118,663	3,390,363
2016 Alternate Revenue Unlimited Tax Series E	07/07/16	6/1/22 - 12/1/22	2,443,751	1,180,000	131,431	3,755,182
2016 Unlimited Tax Series C	07/07/16	6/1/22 - 12/1/22	1,500,001	—	54,404	1,554,405
2016 Limited Tax Series D	07/07/16	6/1/22 - 12/1/22	909,251	1,905,000	102,071	2,916,322
State Revolving Funds Bonds - Series:						
09D SRF L174558	07/01/13	7/1/22 - 1/1/23	\$ 448,136	\$ 2,176,387	\$ 95,190	\$ 2,719,713
12A SRF L174710	07/01/14	7/1/22 - 1/1/23	104,041	374,255	17,348	495,644
12B SRF L174712	07/01/14	7/1/22 - 1/1/23	89,103	320,520	14,857	424,480
12C SRF L174621	07/01/16	7/1/22 - 1/1/23	197,057	684,227	31,964	913,248
12D SRF L174988	07/01/15	7/1/22 - 1/1/23	307,962	1,761,744	75,067	2,144,773
12E SRF L174709	07/01/15	7/1/22 - 1/1/23	71,132	280,963	12,770	364,865
12F SRF L174989	07/01/15	7/1/22 - 1/1/23	598,207	3,437,475	146,372	4,182,054
12G SRF L174923	07/01/18	7/1/22 - 1/1/23	548,269	1,611,079	78,318	2,237,666
12H SRF L174924	07/01/15	7/1/22 - 1/1/23	280,757	1,557,358	66,667	1,904,782
12I SRF L175222	07/01/16	7/1/22 - 1/1/23	82,030	242,664	11,776	336,470
12J SRF L175172	07/01/15	7/1/22 - 1/1/23	34,930	132,976	6,090	173,996
12K SRF L174925	07/01/15	7/1/22 - 1/1/23	185,194	672,750	31,117	889,061
12L SRF L175161	07/01/16	7/1/22 - 1/1/23	623,512	1,844,508	89,514	2,557,534
12M SRF L175168	07/01/18	7/1/22 - 1/1/23	226,776	616,624	30,590	873,990
12N SRF L175164	07/01/16	7/1/22 - 1/1/23	40,248	139,752	6,528	186,528
12O SRF L175166	07/01/15	7/1/22 - 1/1/23	63,139	229,365	10,609	303,113
14A SRF L173076	07/01/16	7/1/22 - 1/1/23	1,276,908	3,777,415	183,317	5,237,640
14B SRF L175171	07/01/16	7/1/22 - 1/1/23	43,289	133,852	6,425	183,566
14C SRF L174559	07/01/16	7/1/22 - 1/1/23	330,900	979,946	47,544	1,358,390
14D SRF L175263	07/01/18	7/1/22 - 1/1/23	196,630	602,764	28,994	828,388
14E SRF L173062	07/01/18	7/1/22 - 1/1/23	691,901	2,121,003	102,022	2,914,926
14F SRF L175342	07/01/19	7/1/22 - 1/1/23	1,173,228	3,584,822	172,572	4,930,622
14G SRF L175152	07/01/18	7/1/22 - 1/1/23	323,774	992,522	47,741	1,364,037
14H SRF L175355	07/01/17	7/1/22 - 1/1/23	16,651	59,895	2,776	79,322
14I SRF L175223	07/01/18	7/1/22 - 1/1/23	192,195	589,169	28,340	809,704
14J SRF L175219	07/01/16	7/1/22 - 1/1/23	74,401	230,051	11,042	315,494
14K SRF L175366	07/01/18	7/1/22 - 1/1/23	82,792	253,796	12,208	348,796
14L SRF L175368	07/01/18	7/1/22 - 1/1/23	77,715	255,349	12,080	345,144
14M SRF L175372	07/01/18	7/1/22 - 1/1/23	20,817	68,397	3,236	92,450
14N SRF L175371	07/01/18	7/1/22 - 1/1/23	22,205	72,957	3,451	98,613
14O SRF L175305	07/01/18	7/1/22 - 1/1/23	45,797	150,473	7,119	203,389
14P SRF L175369	07/01/18	7/1/22 - 1/1/23	55,104	192,026	8,963	256,093
14Q SRF L175539	07/01/20	7/1/22 - 1/1/23	72,284	219,427	10,580	302,291
14R SRF L175517	07/01/21	7/1/22 - 1/1/23	1,061,897	2,675,486	135,553	3,872,936

BOND REDEMPTION AND INTEREST FUND

2022 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 (continued):						
16A SRF L174555	07/01/18	7/1/22 - 1/1/23	\$ 1,913,342	\$ 6,286,658	\$ 297,409	\$ 8,497,409
16B SRF L172129	07/01/20	7/1/22 - 1/1/23	71,505	192,452	9,574	273,531
16C SRF L175367	07/01/19	7/1/22 - 1/1/23	510,405	1,549,425	74,709	2,134,539
16D SRF L175460	07/01/18	7/1/22 - 1/1/23	110,141	375,865	17,627	503,633
16G SRF L174708	07/01/21	7/1/22 - 1/1/23	328,330	749,801	39,103	1,117,234
16H SRF L172130	07/01/21	7/1/22 - 1/1/23	272,680	622,716	32,476	927,872
16I SRF L173798	07/01/22	7/1/22 - 1/1/23	508,539	1,089,443	57,958	1,655,940
16K SRF L172741	07/01/20	7/1/22 - 1/1/23	58,404	142,603	7,290	208,297
16P SRF L172744	07/01/22	7/1/22 - 1/1/23	121,425	410,731	19,301	551,457
09A SRF L173074	07/01/12	7/1/22 - 1/1/23	273,878	2,405,030	97,162	2,776,070
09B SRF L173064	06/21/11	7/1/22 - 1/1/23	—	382,890	13,887	396,777
09C SRF L173063	01/15/11	7/1/22 - 1/1/23	—	111,958	4,061	116,019
09I SRF L174675	06/21/11	7/1/22 - 1/1/23	58,100	573,062	22,892	654,054
07A SRF L172625	06/17/10	7/1/22 - 1/1/23	427,703	2,342,755	100,483	2,870,941
07B SRF L172850	07/01/10	7/1/22 - 1/1/23	304,962	1,545,312	67,108	1,917,382
07C SRF L172770	01/01/11	7/1/22 - 1/1/23	—	3,333,334	120,898	3,454,232
09G SRF L173075	07/01/13	7/1/22 - 1/1/23	174,137	1,546,928	62,422	1,783,487
09H SRF L173800	04/23/11	7/1/22 - 1/1/23	—	36,793	1,334	38,127
09E SRF L173005	08/06/11	7/1/22 - 1/1/23	221,560	2,057,436	82,658	2,361,654
07D SRF L172763	06/10/10	7/1/22 - 1/1/23	97,555	534,357	22,919	654,831
09F SRF L174557	07/01/16	7/1/22 - 1/1/23	372,707	3,271,583	132,176	3,776,466
04G SRF L172611	01/31/07	7/1/22 - 1/1/23	23,923	245,047	9,755	278,725
04H SRF L172849	07/01/09	7/1/22 - 1/1/23	470,859	3,066,584	128,301	3,665,744
01A SRF L172126	07/01/04	7/1/22 - 1/1/23	71,947	3,724,725	137,703	3,934,375
97DD SRF L171152	07/01/04	7/1/22 - 1/1/23	7,439	512,086	18,843	538,368
01B SRF L172127	07/01/05	7/1/22 - 1/1/23	163,956	3,691,194	139,824	3,994,974
01C SRF L172128	06/16/06	7/1/22 - 1/1/23	224,106	3,170,184	123,109	3,517,399
04A SRF L172485	05/15/08	7/1/22 - 1/1/23	158,192	1,420,716	57,266	1,636,174
04B SRF L172488	05/28/08	7/1/22 - 1/1/23	184,799	1,659,673	66,898	1,911,370
04C SRF L172493	03/27/07	7/1/22 - 1/1/23	15,356	157,294	6,262	178,912
04D SRF L172494	01/31/07	7/1/22 - 1/1/23	14,727	150,841	6,005	171,573
04E SRF L172495	05/30/08	7/1/22 - 1/1/23	57,574	459,708	18,762	536,044
04F SRF L172496	04/23/11	7/1/22 - 1/1/23	—	198,736	7,208	205,944
Refunding Bonds - Series:						
2007 Unlimited Tax Series B	03/21/07	6/1/22 - 12/1/22	\$ 4,821,863	\$ —	\$ 174,886	\$ 4,996,749
2007 Limited Tax Series C	03/21/07	6/1/22 - 12/1/22	5,347,651	—	193,956	5,541,607
2016 Unlimited Tax Series A	07/07/16	6/1/22 - 12/1/22	14,046,500	25,495,000	1,434,148	40,975,648
2016 Limited Tax Series B	07/07/16	6/1/22 - 12/1/22	2,066,500	4,175,000	226,376	6,467,876
TOTAL			\$ 104,004,381	\$ 133,244,917	\$ 8,604,897	\$ 245,854,195

(A) Reserve at 3.5%

ORDINANCE NUMBER O21-007

**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR BEGINNING
JANUARY 1, 2022 AND ENDING DECEMBER 31, 2022
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, 2022
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, 2022, for the fiscal year ending December 31, 2022, 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.

Approved as to Form and Legality:

General Counsel

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 2022 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, 2022, 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, 2022.

Approved:

*President,
Board of Commissioners of the
Metropolitan Water Reclamation District
of Greater Chicago*

ORDINANCE NUMBER 021-008

**FOR THE LEVY OF TAXES FOR THE FISCAL YEAR BEGINNING
JANUARY 1, 2022 AND ENDING DECEMBER 31, 2022
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, 2022
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, 2022, for the fiscal year ending December 31, 2022, 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 \$57,926,000 which includes the sum of \$2,027,410 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 2022, 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, 2022, 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, 2022.

Approved as to Form and Legality:

Approved:

General Counsel

*President,
Board of Commissioners of the
Metropolitan Water Reclamation District
of Greater Chicago*

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 48 years.

Compensation Plan Narrative	557
Salary Schedules	558
User Charge Rates/Property Tax Levies and Collections	559
Property Tax Base	560
Awards and Achievements Recognition	562
Financial Glossary	571
Glossary of Technical Terms	575
Acronyms	577

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	\$9,598.78
EX02	\$2,692.31	EX10	\$9,598.78	EX18	\$5,399.33
EX03	\$7,280.28	EX11	\$10,798.64	EX19	\$9,598.78
EX04	\$2,656.08 to \$4,134.26	EX12	\$10,798.64	EX20	None
EX05	\$9,598.78	EX13	\$9,598.78	EX21	\$2,884.62
EX06	\$2,656.08 to \$4,134.26	EX14	\$10,798.64	EX22	\$3,076.92
EX07	\$11,998.53	EX15	\$10,798.64	EX23	None
EX08	\$9,598.78	EX16	\$673.08	EX24	None

Technical, Administrative, and Managerial (HP)

HP07	\$1,380.01 to \$2,009.88	HP14	\$2,855.91 to \$4,427.38	HP21	\$5,745.84 to \$8,621.36
HP08	\$1,501.95 to \$2,212.79	HP15	\$3,134.54 to \$4,775.08	HP22	\$6,342.50 to \$9,419.51
HP09	\$1,648.19 to \$2,456.38	HP16	\$3,478.69 to \$5,204.54	HP23	\$7,052.25 to \$10,258.69
HP10	\$1,843.26 to \$2,781.14	HP17	\$3,882.96 to \$5,709.02		
HP11	\$2,070.89 to \$3,160.01	HP18	\$4,358.32 to \$6,302.09	TM01	\$1,200.00
HP12	\$2,347.24 to \$3,620.10	HP19	\$4,948.34 to \$7,038.31	TM02	\$1,400.00
HP13	\$2,656.08 to \$4,134.26	HP20	\$5,240.19 to \$7,944.94		

Labor Trades (LT)

NR1541	\$3,348.80	NR6275	\$5,012.80	PR5153	\$4,068.80	PR5975	\$4,520.80	PR7579	\$4,334.40
NR1835	\$3,005.60	NR6441	\$3,616.80	PR5155	\$4,228.80	PR5989	\$4,640.80	PR7743	\$4,144.00
NR1853	\$3,392.80	NR6810	\$3,547.20	PR5159	\$4,268.80	PR6453	\$4,288.00	PR7773	\$4,160.00
NR1857	\$3,616.80	NR6831	\$4,164.00	PR5353	\$3,884.80	PR6459	\$4,608.00	PR7775	\$4,400.00
NR2483	\$3,392.80	NR6832	\$4,313.60	PR5553	\$3,944.00	PR6473	\$3,192.00	PR7779	\$4,560.00
NR3641	\$2,431.20	NR7393	\$4,549.60	PR5555	\$4,190.40	PR6479	\$3,452.00		
NR3642	\$2,660.00	NR7394	\$5,412.00	PR5753	\$4,224.00	PR7343	\$4,080.00	NR1027	\$1,380.00 to \$1,680.00
NR5369	\$3,410.40	NR7399	\$3,686.40	PR5755	\$4,476.00	PR7347	\$4,560.00	PR1025	\$2,229.60 to \$3,648.80
NR6210	\$3,732.80	NR8331	\$3,616.80	PR5759	\$4,560.00	PR7349	\$4,320.00	TR3509	\$2,141.93
NR6232	\$3,919.20	NR8650	\$3,392.80	PR5933	\$4,170.40	PR7423	\$4,524.00		
NR6233	\$4,115.20	NR8651	\$3,230.40	PR5935	\$4,450.40	PR7424	\$4,964.00		
NR6251	\$4,774.40	NR8652	\$2,252.80	PR5953	\$3,800.00	PR7425	\$5,284.00		
NR6271	\$4,806.40	NR8660	\$1,986.60	PR5955	\$4,142.40	PR7573	\$4,054.40		
NR6272	\$4,549.60	NR8661	\$2,185.40	PR5973	\$4,360.80	PR7575	\$4,254.40		

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 \$4,358.32 to \$6,302.09 bi-weekly. By multiplying those rates by 26, it can be determined that the annual salary range for such positions is \$113,316.32 to \$163,854.34. 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. The step level of an incumbent 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.

USER CHARGE RATES

Year	Large Commercial/Industrial Users				Tax-Exempt Users			Revenues in \$ millions
	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	
2022*								\$ 38.0
2021	278.81	202.93	117.81	35.4 %	278.81	202.93	117.81	40.0
2020	273.88	209.94	124.16	31.9 %	273.88	209.94	124.16	45.9
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

* the 2022 numbers are pending

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

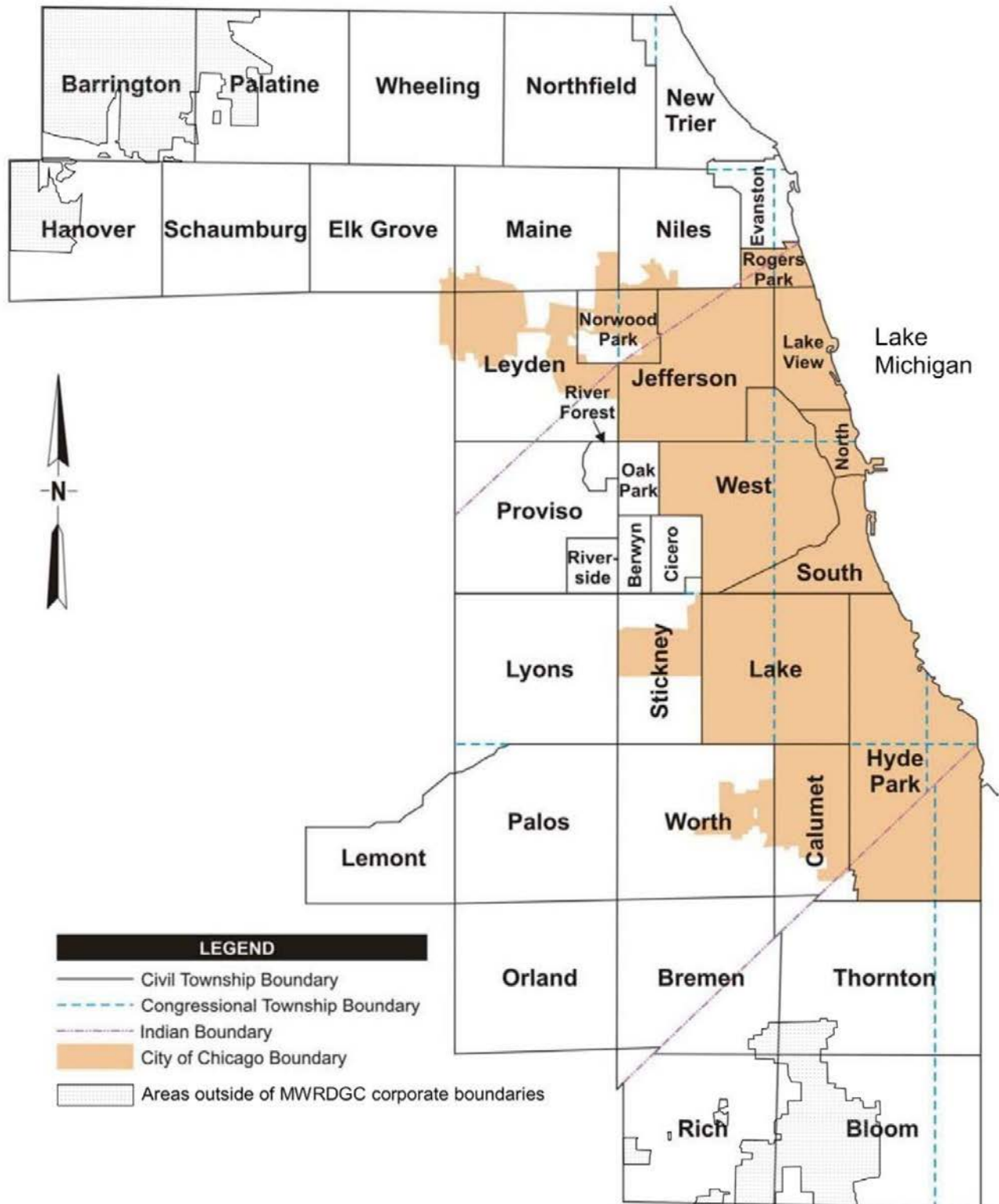
(in thousands of dollars)

Fiscal Year Ended Dec. 31	Taxes Levied for the Fiscal Year	Collected within the First Year		
		Amount	Percentage of Levy	Final Due Date
2020	\$ 637,188	\$ —	—	8/1/2021
2019	637,188	619,659	97.2	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

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, 2020.

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:

<https://www.ilsos.gov/departments/archives/IRAD/cook.html>

PROPERTY TAX BASE

MWRDGC Equalized Assessed Valuation by Township 2015 - 2020 (in \$ millions)

Township	2015	2016	2017	2018	2019	2020	Average Annual Change
Suburban							
Barrington	\$ 326	\$ 319	\$ 328	\$ 320	\$ 360	\$ 365	1.92 %
Berwyn	581	600	735	707	690	866	7.09 %
Bloom	440	456	490	483	477	525	2.71 %
Bremen	1,425	1,480	1,648	1,617	1,608	1,854	4.18 %
Calumet	176	179	199	189	199	221	3.94 %
Cicero	536	554	647	629	626	840	7.94 %
Elk Grove	3,103	3,516	3,559	3,521	4,247	4,362	5.71 %
Evanston	2,196	2,670	2,740	2,721	3,432	3,462	8.06 %
Hanover	1,379	1,608	1,615	1,575	1,810	1,804	4.31 %
Lemont	711	755	914	892	899	1,021	6.44 %
Leyden	2,409	2,753	2,794	2,727	3,287	3,541	7.49 %
Lyons	3,373	3,523	4,267	4,124	4,132	4,815	6.03 %
Maine	3,666	4,308	4,383	4,281	5,040	4,996	5.14 %
New Trier	4,075	4,987	5,097	4,921	5,220	5,209	4.00 %
Niles	3,818	4,461	4,542	4,456	5,059	5,259	5.42 %
Northfield	4,627	5,531	5,716	5,585	6,375	6,344	5.15 %
Norwood Park	727	839	852	839	1,031	1,016	5.74 %
Oak Park	1,334	1,387	1,656	1,592	1,692	2,029	7.03 %
Orland	2,753	2,890	3,310	3,221	3,213	3,567	4.15 %
Palatine	2,557	2,977	2,987	2,913	3,302	3,316	4.23 %
Palos	1,290	1,350	1,577	1,509	1,495	1,673	4.19 %
Proviso	2,573	2,679	3,150	3,065	3,063	3,728	6.28 %
Rich	962	1,007	1,098	1,073	1,044	1,211	3.68 %
River Forest	470	486	586	565	557	640	5.03 %
Riverside	474	495	575	555	546	613	4.12 %
Schaumburg	3,892	4,497	4,549	4,449	5,168	5,248	4.92 %
Stickney	914	956	1,102	1,073	1,078	1,338	6.60 %
Thornton	1,651	1,699	1,770	1,715	1,712	2,014	3.46 %
Wheeling	4,152	4,894	4,952	4,906	5,622	5,714	5.33 %
Worth	2,752	2,880	3,341	3,239	3,255	3,785	5.17 %
City of Chicago							
Hyde Park	3,890	4,077	4,143	4,280	4,325	4,481	3.50 %
Jefferson	11,311	11,735	11,960	13,439	13,404	13,528	4.00 %
Lake	6,684	6,970	6,978	7,309	7,310	7,410	2.59 %
Lake View	9,521	9,782	10,020	11,077	11,125	11,347	4.70 %
North Chicago	14,197	14,839	15,718	18,174	18,619	18,659	7.04 %
Rogers Park	1,376	1,433	1,449	1,624	1,626	1,657	3.96 %
South Chicago	14,559	15,297	16,119	18,201	18,761	19,375	6.56 %
West Chicago	9,427	9,883	10,380	12,222	12,646	13,060	7.77 %
Total EAV	130,305	140,752	147,946	155,788	164,055	170,893	5.26 %

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	2018	<i>Engineering Excellence Merit Award for the Mayfair Reservoir Expansion</i>
	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"</i>
		<i>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 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>
	1994	<i>Outstanding Civil Engineering Achievement received for Sidestream Elevated Pool Aeration Project</i>

AWARDS AND ACHIEVEMENTS RECOGNITION

American Society of Civil Engineers - Illinois Section (continued)	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	2015	<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 Innovation	2015	<i>Top 100 finalist in Chicago Innovation Awards for Space To Grow: Greening Chicago Schoolyards</i>
Chicago Metropolitan Agency For Planning	2021	<i>CMAAP Regional Excellence Award in the category of Regional Resilience</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>
Consulting Engineers Council of Illinois	1985	<i>Engineering Excellence Honor Award for the Tunnel and Reservoir Plan Mainstream System Phase I</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>
Funders Network	2020	<i>Partners for Places Award for Space To Grow: Greening Chicago Schoolyards</i>
Government Finance Officers Association of the United States and Canada	2021-1985	<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>

AWARDS AND ACHIEVEMENTS RECOGNITION

Government Finance Officers Association of the United States and Canada (continued)	2020-2007	<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 2020</i>
	2020-1975	<i>Certificate of Achievement for Excellence in Financial Reporting - Comprehensive Annual Financial Report for Fiscal Years 1975 through 2020</i>
	2020-1993	<i>Certificate of Achievement for Excellence in Financial Reporting for the MWRD Retirement Fund - Comprehensive Annual Financial Report for Fiscal Years 1993 through 2020</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>
	2015	<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>
	2017	<i>Illinois Mined Land Reclamation Award in the non-coal category for the McCook Reservoir</i>
Illinois Department of Natural Resources	2016	<i>Illinois Mined Land Reclamation Award in the non-coal category for the Thornton Composite Reservoir</i>
	2021	<i>Nomination for the Secretary of Defense Freedom Award</i>
Illinois Employer Support of the Guard and Reserve		
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</i>
		<i>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</i>
		<i>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</i>
		<i>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>

AWARDS AND ACHIEVEMENTS RECOGNITION

Illinois Safety Council and Greater Chicago Safety Council (continued)	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>
	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 County Stormwater Management Commission	2019	<i>Best Management Practice Project of the Year for the Buffalo Creek Reservoir Expansion</i>
Lake Michigan Water Analysts	1995	<i>Award of Excellence</i>
Local Initiatives Support Corporation Chicago	2018	<i>Neighborhood Development Award, in the category of: BlueCross BlueShield of Illinois Healthy Community, for the Space To Grow Partnership</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	2020	<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Platinum Award for 29 consecutive years of full compliance for Calumet Water Reclamation Plant; Platinum Award for 24 consecutive years of full compliance for Lemont Water Reclamation Plant; Platinum Award for 16 consecutive years of full compliance for James C. Kirie Water Reclamation Plant; Platinum Award for 15 consecutive years of full compliance for Terrence J. O'Brien Water Reclamation Plant; Platinum Award for 13 consecutive years of full compliance for Hanover Park Water Reclamation Plant; and Platinum Award for seven consecutive years of full compliance for John E. Egan Water Reclamation Plant</i>
		<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Gold Award for Stickney Reclamation Plant</i>
	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>

AWARDS AND ACHIEVEMENTS RECOGNITION

National Association of Clean Water Agencies (NACWA), formerly known as Association of Metropolitan Sewerage Agencies (continued)	2019	<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>
	2016	<i>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</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>
		<i>Utility of the Future Today Recognition</i>
	2015	<i>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</i>
		<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Gold Award for John E. Egan and Stickney Water Reclamation Plants</i>
	2014	<i>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</i>
		<i>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</i>
		<i>NACWA Award for Compliance with National Pollutant Discharge Elimination System, Gold Award for John E. Egan and Stickney Water Reclamation Plants</i>

AWARDS AND ACHIEVEMENTS RECOGNITION

National Association of Clean Water Agencies (NACWA), formerly known as Association of Metropolitan Sewerage Agencies (continued)

- 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*
- NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award 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*
- 2010 *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*
- NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award for Hanover Park Water Reclamation Plant*
- 2009 *NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Gold Award for Hanover Park and North Side Water Reclamation Plants*
- 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*
- 2008 *National Environmental Achievement Award in Public Information and Education - Education Program category for "Mission Possible: Educating People to Promote Beneficial Use of Biosolids"*
- 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*
- 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*
- 2007 *NACWA Award for Compliance with National Pollutant Discharge Elimination System, Silver Award for Hanover Park Water Reclamation Plant*
- NACWA Award for Full Compliance with National Pollutant Discharge Elimination System, Platinum Award for Stickney, Calumet, and Lemont Water Reclamation Plants*

AWARDS AND ACHIEVEMENTS RECOGNITION

National Association of Clean Water Agencies (NACWA), formerly known as Association of Metropolitan Sewerage Agencies (continued)	2007	<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> <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> <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>
	2000	<i>Award for Compliance with National Pollutant Discharge Elimination System, Silver Award for John E. Egan and James C. Kirie Water Reclamation Plants</i> <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>
	1999	<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> <i>National Environmental Achievement Award - Research and Technology for Optimization of Conventional Low Technology Sludge Process to Produce Class A Sludge</i>
	1998	<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>

AWARDS AND ACHIEVEMENTS RECOGNITION

National Association of Clean Water Agencies (NACWA), formerly known as Association of Metropolitan Sewerage Agencies (continued)	1997	<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	2021-2003	<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>
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>
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>

AWARDS AND ACHIEVEMENTS RECOGNITION

United States Environmental Protection Agency (continued)	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>
United States Green Building Council		<i>Award for the Affirmative Action Program</i>
	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>
United States Patent and Trademark Office	2020	<i>Patent for Production of Carbon-Based Compounds from Cellulosic Feedstock Fermentation; Application Number 62/965,592</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 Plan</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>
	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>
Waterfront Center	2008	<i>Excellence on the Waterfront Award for Sidestream Elevated Pool Aeration Project</i>

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-U): 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.

FINANCIAL GLOSSARY (continued)

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.

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).

FINANCIAL GLOSSARY (continued)

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.

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 (IIRP): 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.
CALSMA	Calumet Solids Management Area	kWh	kilowatt-hour
CAWS	Chicago Area Waterway System	KWRP	Kirie Water Reclamation Plant
CBOD	Carbonaceous Biochemical Oxygen Demand	LASMA	Lawndale Avenue Solids Management Area
CIBF	Capital Improvements Bond Fund	LSSS	Local Sewer Systems Section
CIP	Capital Improvement Program	LWRP	Lemont Water Reclamation Plant
CPI	Consumer Price Index	mg/L	milligrams per liter
CSA	Calumet Service Area	M&O	Maintenance & Operations
CSO	Combined Sewer Overflow	M&R	Monitoring & Research
CUP	Chicago Underflow Plan	MBE	Minority-owned Business Enterprise
CWRP	Calumet Water Reclamation Plant	MGD	Millions of Gallons per Day
DWP	Detailed Watershed Plan	MOB	Main Office Building - 100 E. Erie St., Chicago, Illinois
EAV	Equalized Assessed Valuation	MOBA	Main Office Building McMillan Pavilion - 111 E. Erie St., Chicago, Illinois
EBPR	Enhanced Biological Phosphorus Removal	MOBC	Main Office Building Complex - MOB & MOBA
ESG	Environmental, Social, Governance/Leadership	MSPS	Mainstream Pumping Station
EQ	Exceptional Quality	MWRD	Metropolitan Water Reclamation District
EWRP	Egan Water Reclamation Plant	NAA	Net Assets Appropriable
FEMA	Federal Emergency Management Agency	NACWA	National Association of Clean Water Agencies
FTE	Full-Time Equivalent	NBPS	North Branch Pumping Station
GAAP	Generally Accepted Accounting Principles	NPDES	National Pollutant Discharge Elimination System
GASB	Government Accounting Standards Board	NSA	North Service Area
GFOA	Government Finance Officers Association	OM&R	Operations, Maintenance, & Replacement costs
GIS	Geographic Information System	OPEB	Other Postemployment Benefits
GPS	Global Positioning System	OUC	Office of Underground Coordination
HPWRP	Hanover Park Water Reclamation Plant	OWRP	O'Brien Water Reclamation Plant (formerly known as Northside Water Reclamation Plant)
HSOM	High Strength Organic Materials	P&MM	Procurement & Materials Management
HVAC	Heating, Ventilation, and Air Conditioning	PPRT	Personal Property Replacement Tax
IDOT	Illinois Department of Transportation	RAPS	Racine Avenue Pumping Station
IEPA	Illinois Environmental Protection Agency	RAS	Return Activated Sludge
IGA	Intergovernmental Agreement	RFP	Request for Proposal
IT	Information Technology		

ACRONYMS (continued)

RMIS	Risk Management Information System
SAP	SAP is a German computer software firm
SBE	Small Business Enterprise
SP	Strategic 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
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** Construction began on the 31-mile Mainstream tunnel system; Egan Treatment Plant placed into operation.
- 1977** Construction began on the Calumet tunnel system.
- 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; construction began on the Des Plaines TARP tunnel.
- 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.
- 1990** Army Corps of Engineers and the District began construction of the O'Hare-CUP Reservoir, the first of three reservoirs in the TARP program.
- 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; construction began on the McCook Reservoir.
- 2000** District celebrated the 100th anniversary of the reversal of the Chicago River and completed a century of protecting Chicago's water environment; construction began on Thornton Transitional Reservoir.
- 2003** Construction began on the major capital improvement program for the Calumet, North Side, and Stickney Water Reclamation Plants.
- 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.
- 2007** District celebrated 100th anniversary of the Lockport Powerhouse and Dam.
- 2009** Construction of the Thornton Composite Reservoir began.
- 2010** District celebrated the 100th anniversary of the North Shore Channel.
- 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.
- 2014** District celebrated its 125th anniversary.
- 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.



FRONT COVER: In the summer of 2021, native flowers were blooming at our streambank stabilization project on Addison Creek near Jerome Park in Northlake, Illinois. We partnered with the City of Northlake to strengthen 750 feet of streambank to alleviate flooding and install native plants that reduce erosion and provide a habitat for monarch butterflies.

BACK COVER: The MWRD partnered with the Illinois Monarch Project to increase the monarch's habitat by planting and growing more milkweed – the sole food source for monarch caterpillars.

Milkweed and nectar plants are flourishing at many of our water reclamation plants to support the butterflies. The MWRD received certification for our first monarch waystation at our Stickney Water Reclamation Plant. Since 2020, more than 3,000 people have taken our Save the Monarch pledge, and we have distributed more than 6,000 complimentary milkweed seed packets to Cook County residents. Together, we can help the Illinois Monarch Project realize its goal. Visit mwrdd.org/save-monarchs to take the pledge.

Metropolitan Water Reclamation District of Greater Chicago

100 East Erie Street 📍 Chicago, Illinois 60611-3154



mwrdd.org