City of Chicago

Office of the City Clerk

Document Tracking Sheet

F2019-112

Meeting Date:	7/24/2019
Sponsor(s):	Dept./Agency
Type:	Report
Title:	Comprehensive Annual Financial Report of Metropolitan Water Reclamation District of Greater Chicago (2018)
Committee(s) Assignment:	

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET   CHICAGO, ILLINOIS 60611-3154   312.751.5600

BOARD OF COMMISSIONERS

Kari K. Steele
President
Barbara J. McGowan
Vice President
Frank Avila
Chairman of Finance
Cameron Davis
Kimberly Du Buclet
Marcelino Garcia
Josina Morita
Debra Shore
Mariyana T. Spyropoulos

Jacqueline Torres
Clerk/Director of Finance

312.751.6500   f: 312.894.1104
jacqueline.torres@mwrd.org

June 11, 2019

City of Chicago
City Clerk
121 N LaSalle Street
Room 107
Chicago, IL 60602

Dear City Clerk Anna Valencia:

Enclosed is your requested copy of the Metropolitan Water Reclamation District's Comprehensive Annual Financial Report (CAFR) for the year ending December 31, 2018 be placed on file with the City Clerk's office.

Very truly yours,

Jacqueline Torres
Clerk/Director of Finance

2019 JUL 17 AM 11:46

COMPREHENSIVE ANNUAL FINANCIAL REPORT OF THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Chicago, Illinois

2019 JUL 19 PM 2:42

As of and for the year ended
December 31, 2018

Prepared by the Finance Department
JACQUELINE TORRES, Clerk/Director of Finance

Incorporated May 29, 1889

Page intentionally left blank

TABLE OF CONTENTS

I.
INTRODUCTORY SECTION

Ducks seem to enjoy the newly improved Cherry Creek East Branch in October after the completion of a flood-control project, which includes a new meandering creek alignment as well as pools, riffles, and in-stream structures near Governors Highway. Representatives from the MWRD, Village of Flossmoor, Homewood-Flossmoor (H-F) High School District #233 and Calvary Assembly of God Church held a ribbon-cutting ceremony to celebrate the completion of the $3.3 million Cherry Creek East Branch flood control project which will reduce flood elevations and remove homes from Federal Emergency Management Agency (FEMA) flood plain maps.

Page intentionally left blank

Metropolitan Water Reclamation District of Greater Chicago

Board of Commissioners and Principal Officers

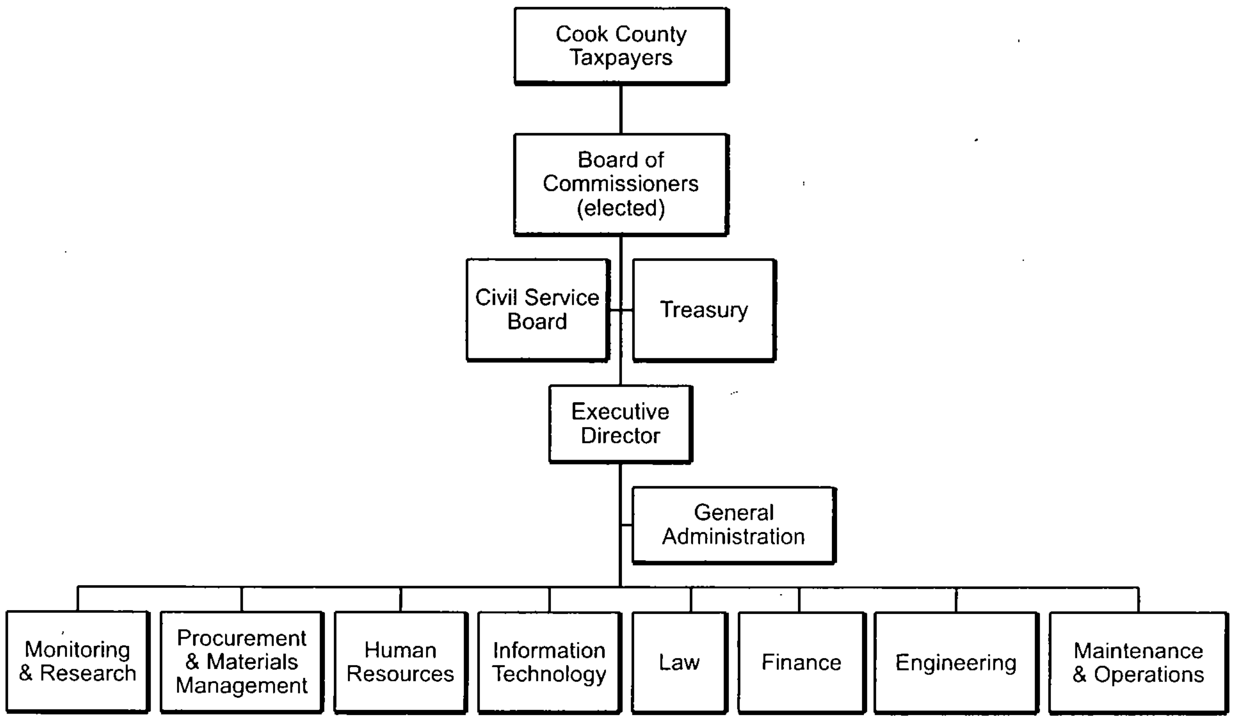
Board of Commissioners:
Honorable Mariyana T. Spyropoulos, President
Honorable Barbara J. McGowan, Vice President
Honorable Frank Avila, Chairman, Committee on Finance
Honorable Cameron Davis
Honorable Kimberly Du Buclet
Honorable Marcelino Garcia
Honorable Josina Morita
Honorable Debra Shore
Honorable Kari K. Steele

Principal Officers:
Brian Perkovich, Executive Director
Mary Ann Boyle, Treasurer
Allison Fore, Public and Intergovernmental Affairs Officer
Darlene A. LoCascio, Director of Procurement and Materials Management
Eileen M. McElligott, Administrative Services Officer
Susan T. Morakalis, General Counsel
John P. Murray, Director of Maintenance and Operations
Catherine A. O'Connor, Director of Engineering
Edward W. Podczerwinski, Director of Monitoring and Research
Beverly K. Sanders, Director of Human Resources
John H. Sudduth, Director of Information Technology
Jacqueline Torres, Clerk/Director of Finance

Main Office
100 East Erie Street
Chicago, Illinois 60611

Metropolitan Water Reclamation District of Greater Chicago

Organization Chart



1,966 Budgeted
Positions in 2018

Metropolitan Water Reclamation District of Greater Chicago

President's Annual Message **2018**

Now entering our 130th year, it gives me tremendous pride to serve as President of this critical agency that has demonstrated historic influence on shaping the region and is working to protect our water environment through our innovative work. The Metropolitan Water Reclamation District of Greater Chicago (MWRD) works each day to improve the environmental health of Cook County and promote sustainable and resilient endeavors that protect our planet. Our list of accomplishments for 2018 have impacts that stretch beyond the boundaries we serve, while also bolstering the local communities and directly impacting more than five million people who live in Cook County. In 2018, we continued to strengthen our finances, expanded resource recovery efforts, increased stormwater management protection, and upgraded infrastructure at our plants and in the communities that we call home.

Here are a few of the highlights from 2018 that made this year as memorable as it was impressive.

Mariyana T. Spyropoulos
President of the Board of Commissioners

McCook Reservoir

The highly anticipated Stage I of the McCook Reservoir was placed into service in December 2017, and it has made an incredible impact in its first year alone, protecting our waterways from pollution and our streets and basements from flooding. The reservoir has captured more than 20 billion gallons of water, and that number is climbing with each passing storm. Part of the MWRD's famed Tunnel and Reservoir Plan (TARP), the reservoir protects a huge swath of Cook County from the north suburbs along the lakefront south through Chicago into the southwest suburbs. Unpredictable weather patterns tested the reservoir 12 days into January and again in February when an unprecedented 2.77 inches of rain fell over two days, combining with snowmelt and frozen ground to wreak havoc on the region. The reservoir took on an estimated 12 billion gallons of water.

not including several billion gallons of snowmelt that came as a result of 60-degree weather. Because of the reservoir's holding capacity, water was not released into Lake Michigan.

In addition to completing Stage I of McCook, engineering and mining work continued on Stage II this year, and we made significant strides in constructing the Des Plaines Inflow Tunnel to reduce combined sewer overflows.

McCook received instant worldwide recognition On October 2, the Water Environment Federation (WEF) named the McCook Reservoir as a 2018 recipient of the WEF Project Excellence Award. Two weeks later, the Illinois Section of the American Society of Civil Engineers honored the MWRD and project partner, the U.S. Army Corps of Engineers (USACE), with the Outstanding Civil Engineering Achievement, Mega Project Award for our roles on the Chicago Underflow Plan and McCook Reservoir project.

Producing Clean Water

Treating 1.4 billion gallons per day is no small feat for our hard-working staff and water reclamation plants (WRPs). In order to maintain that quality, we have to brace for uncontrollable and unpredictable quantities of water, meet stringent regulations, and treat that wastewater and urban runoff before returning it to our environment. The National Association for Clean Water Agencies lauded MWRD in 2018 for complete and consistent compliance of National Pollutant Discharge Elimination System permits. Reaching these standards requires close attention to detail by our operations staff and Industrial Waste Division, and it also requires continued investment.

We replaced 36 Imhoff tanks at the Stickney WRP with a $224 million project consisting of nine 160-foot diameter primary settling tanks and six 132-foot long aerated grit tanks, associated support facilities, service tunnels, and conduits. The new tanks will also increase and improve grit removal and protect downstream piping and equipment.

We also made key investments in maintaining TARP pumps and other WRP infrastructure, and committed to rehabilitating the Lockport Powerhouse and Controlling Works. We completed intercepting sewer construction projects that improve conveyance from local municipal sewers to our WRPs. The Salt Creek 2 Intercepting Sewer project will benefit 173,000 people living in Lyons, Brookfield, Riverside, and North Riverside, while the Calumet 19F Intercepting Sewer project will benefit another 60,000 people living in the Tinley Park area.

Financially Sound

We cannot complete these wide-ranging projects and invest in new technologies without being on sound financial footing. This year Fitch Ratings reaffirmed our financial stability with a AAA credit rating The Fitch report confirmed our steady financial performance, our sufficient reserves to cover unexpected expenditures and overfunding of pension contributions. This is accomplished by continuing to reduce energy costs, strengthening our long-term retirement reserves, promoting a favorable labor environment, discovering new revenue streams through resource recovery, and leasing of MWRD property.

As further evidence of excellence in fiscal management, the Government Finance Officers Association of the United States and Canada also awarded the MWRD with the Distinguished Budget Presentation Award for the 34th consecutive year. More significant to the taxpayers is tax reduction and low rates. As in the past three years, the Board of Commissioners passed a pair of ordinances to abate property taxes. This year, it was by more than a combined $44 million. MWRD rates continue to be substantially lower than the average sewer service charge across the country.

Stormwater Management Projects

Delivering flood relief to communities across Cook County in 2018, we kicked off and completed several important projects that will promote local and regional resilience. Here are some stormwater projects we celebrated.

- The Tinley Creek widening and reshaping project was completed in May to relieve Crestwood homeowners from flooding. The streambank stabilization project provides protection from the 100-year flood event for approximately 173 homes and businesses and improves an existing pedestrian path.
- We partnered with the City of Chicago to complete the Albany Park Stormwater Diversion Tunnel to relieve the North Side neighborhood of major flooding. The tunnel diverts a flow of 2300 cubic feet of water per second and conveys the overflowing water at the North Branch of the Chicago River more than a mile east to the North Shore Channel.
- A $3 3 million Cherry Creek East Branch Flood Control project in Flossmoor was completed and will provide a new-

- flood relief channel and improved conveyance for water. This project resulted in 16 homes and six parcels being removed from the regulatory flood plain.
- We joined the City of Northlake to complete the Addison Creek Wetlands Restoration Project to restore natural stream function, improve water quality of Addison Creek and provide a flood control benefit to the area. As a result, the 100-year base flood elevation will be reduced by up to three feet at several locations within the project area.
- The Melvina Ditch Reservoir expansion project broke ground in April. The project more than doubles the existing Melvina Ditch Reservoir storage capacity and will alleviate flooding for residents of Burbank and Oak Lawn.
- The Buffalo Creek Reservoir expansion project construction began in May and will alleviate flooding while improving public recreation for Buffalo Grove and other downstream communities. The project will include public access improvements and expand the reservoir's capacity by an additional 58.6 million gallons.
- We pledged our support for 14 projects that will assist municipalities and other government agencies throughout Cook County in projects to prevent flooding as part of MWRD's Phase II Stormwater Management Program. The projects represent approximately $66.8 million in estimated construction costs, benefiting more than 2,000 affected structures impacted by flood waters. Diverse approaches such as new storm sewers, culverts and outfalls are being built to address flooding throughout the region.
- We requested green infrastructure (GI) project applications and received 100 project applications. This gave us dozens of important projects to select that will reduce the amount of water flowing through the gray infrastructure of pipes and lessening the amount of urban flooding that impacts our communities. At our Sustainability Summit in October, we honored exemplary GI projects in the Village of Skokie and City of Berwyn.
- Our stormwater management projects also claimed honors. A Niles flood relief project was awarded the Public Works Project of the Year in the Environment category by the American Public Works Association. Besides reducing surface water flooding, the project with its 12,500 feet of new sewers will also protect the Chicago River from combined sewer overflows that drain into the waterway. The Westchester Reservoir expansion project was also recognized with a Merit Award from the American Council of Engineering Companies' Illinois Chapter. The Mayfair Reservoir Expansion Project provides an additional 34-acre-feet of stormwater storage

Resource Recovery

We continued to make strides in meeting phosphorus discharge limits at our WRPs, while recovering large quantities of phosphorus and nitrogen at our nutrient recovery facility at Stickney WRP and other WRPs. Recovering nutrients before they are sent downstream will make them available for reuse and protect our waterways from contamination.

At the Stickney WRP, we continue to take these recovered nutrients and create a high value fertilizer known as Crystal Green. The Egan WRP is building upon a successful deammonification process, O'Brien WRP is growing algae for potential use in plastic products and Stickney and Calumet WRPs are working with companies to attract high strength organic materials.

We received a grant with our partners at the University of Illinois-Urbana to address nutrient loss reduction strategies and protect regional and national waterways downstream. In June, we joined central Illinois farmers at our Fulton County site to host a Field Day, where we highlighted best practices to reduce nutrients from running off into waterways.

Exceptional Quality Compost

The MWRD received commendation from the National Biosolids Partnership for establishing an elite biosolids program that has met and exceeded national standards for the last 10 years. In 2018, we continued to develop an Exceptional Quality compost operation that blends woodchips with part of the 145,000 tons of biosolids we produce each year to provide a premium quality product that supplies organic matter and improves the structure and porosity of soils. This fall, the Board authorized plans to make this product free to the public.

Open House, Tours and Outreach

This spring we hosted tours at six WRPs in conjunction with national Infrastructure Week to educate hundreds of visitors on our work and distribute free 40-pound bags of compost and free saplings. In October, our O'Brien WRP again welcomed the public as part of the Chicago Architecture Center's Open House Chicago. Nearly 900 visitors came for free guided facility tours, family friendly activities and the opportunity to meet and learn from MWRD staff

We participated in 145 outreach events at farmers markets, community fairs and parades to promote our values in protecting our water environment The District led more than 150 group tours of our plants and facilities, including numerous international visits, like prestigious engineering delegations from China. In addition, District speakers presented at more than 60 locations, such as schools and libraries. Our goal in these endeavors is to share our water wellness values and educate citizens on how they can help us protect and improve the quality of our water.

Restore the Canopy

Now in its third year, our "Restore the Canopy" initiative sparked the MWRD's distribution of approximately 16,500 oak tree saplings in 2018 at various fairs, farmers markets, schools and our WRPs to green our communities. Trees are a significant tool in managing stormwater by absorbing rain and lessening the load to our sewer systems. This program has distributed 58,000 saplings; since one medium-sized oak tree can absorb up to 2,800 gallons of rainwater per year, these trees will be able to capture 162,400,000 gallons of stormwater annually.

Space to Grow

Working with our partners at the Chicago Department of Water Management, Chicago Public Schools, Healthy Schools Campaign and Openlands, we completed six more schools this year through the award-winning Space to Grow program. The schoolyards at Fernwood Elementary, Cook Academy, Field Elementary, Morton School of Excellence, Nathaniel Davis and Farnsworth Elementary were transformed into beautiful, vibrant and functional community spaces for physical activities, outdoor learning, environmental literacy and community engagement that addressed neighborhood flooding.

Unwanted Medicine Collection and Chlorides

More than 334 pounds of unused or expired medications were collected at three water reclamation plants and properly destroyed. Although our drug collection boxes are open year round, U.S. Drug Enforcement Administration National Prescription Drug Take Back Days highlight efforts to educate the public about the potential for abuse of drugs and harm to the environment. The MWRD held a chlorides workshop to discuss best salting strategies that will keep roads safe but reduce the amount of chlorides entering the waterways.

Waterways

In keeping with our mission, we worked to not only clean our waterways by removing 2,500 cubic yards of debris, but we also partnered to attract more visitors. We worked with Friends of the Chicago River to promote Overflow Action Days and with the Lathrop Riverfront Group to highlight improved access to the waterways. We also worked with the USACE to remove the North Branch Dam to allow upstream fish migration and improve navigation and surroundings for boaters.

New Veterans Policy

To salute our veterans, we formally adopted a policy to increase contracting opportunities for veteran-owned and operated small business enterprises. Under the terms of the new policy, a successful bidder must meet a three-percent veteran-owned business enterprise goal on contracts in which two or more eligible veteran-owned and operated small business enterprises are available to bid on a contract or subcontract. A nominal goal of three percent for veteran-owned businesses will allow the MWRD to say more than a simple 'thank you for your service' to our veterans.

Calumet WRP Roof Collapse

I would be remiss not to mention an event that impacted our MWRD family the morning of August 30. An explosion triggered the collapse of the sludge concentration building roof at the Calumet WRP, injuring 10 workers. This event turned into a shining example of the hard working MWRD staff who came to each other's aid and kept operations running smoothly. We are also thankful for the tremendous effort put forth by the Chicago Fire Department and other responders.

While we triumphed through so many achievements this year, the Calumet event also brought us closer together in difficult circumstances and reminded us of the hard work so many of our staff exhibit each day. Our staff work in challenging conditions. We are deployed in the tanks, in the labs, in the pipes, in the tunnels, in the reservoirs, and in the intercepting sewers. We are operating the heavy machinery, filtering debris, processing solids, removing contaminants, engineering the trains, driving the trucks, cleaning our water and completing all facets of work that make our jobs so diverse and unique. We realize that many of these tasks and exercises, while often forgotten or overlooked by the public, are intrinsic in protecting our water environment and our planet. I am grateful to tell their stories and inform residents of our service area about the great lengths our staff go to in order to protect the water environment.

Page intentionally left blank

Multi-Year Awards

1975-2017
Government Finance Officers Association of the United States and Canada
Certificate of Achievement for Excellence in Financial Reporting/Comprehensive Annual Financial Report

1993-2017
Government Finance Officers Association of the United States and Canada
Certificate of Achievement for Excellence in Financial Reporting Award
for Retirement Fund's Comprehensive Annual Financial Report

1985-2018
Government Finance Officers Association of the United States and Canada
Award for Distinguished Budget Presentation

2007-2017
Government Finance Officers Association of the United States and Canada
Certificate of Achievement for Excellence in Financial Reporting Award
for the Retiree Health Care Trust Fund's Comprehensive Annual Financial Report

National Association of Clean Water Agencies, formerly known as Association of Metropolitan Sewerage Agencies
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
Platinum Award for 10 consecutive years of full compliance for Hanover Park Water Reclamation Plant.

Individual Year Awards (partial listing)

2015
Construction Industry Service Corporation (CISCO)
Public Body of the Year
Project of the Year - Infrastructure category
for constructing the Wet Weather Treatment Facility and Reservoir at the Lemont Water Reclamation Plant

Government Finance Officers Association of the United States and Canada
Budget document received outstanding in the overall category of Communications Device

2016
American Infrastructure Magazine; American Public Works Association; American Public Works Association, Chicago Metro Chapter; American Society of Civil Engineers - Illinois Section; Water and Wastes Digest
PUBBY Award for Water Project of the Year: Thornton Composite Reservoir
Project of the Year for the Thornton Composite Reservoir
Outstanding Civil Engineering Achievement Award, Over $25 Million Category, for the Thornton Composite Reservoir
Top Projects for 2016 Award

American Society of Civil Engineers - Illinois Section
Outstanding Civil Engineering Achievement Award, Under $10 Million Category,
for the Busse Reservoir South Dam Modification Project

Federation of Women Contractors
Advocate of the Year Award

Friends of the Chicago River
Chicago River Blue Awards Green Ribbon Award
for Disinfection at the Calumet Water Reclamation Plant and O'Brien Water Reclamation Plant and Thornton Reservoir

Illinois Department of Natural Resources
Illinois Mined Land Reclamation Award in the non-coal category for the Thornton Composite Reservoir

National Association of Clean Water Agencies, formerly known as Association of Metropolitan Sewerage Agencies
Utility of the Future Today Recognition

National Association of Flood and Stormwater Management Agencies (NAFSMA)
Green Infrastructure Award, First Place in the Large Agency Category for the Space to Grow Program

Risk and Insurance Magazine
Honorable Mention in the national Theodore Roosevelt Workers' Compensation and Disability Management (TEDDY) Award competition for excellence in safety and workers' compensation risk management

Stormwater Solutions Magazine
Top 10 Stormwater Project for the Blue Island Green Infrastructure Project

2017

American Council of Engineering Companies of Illinois
Special Achievement Water Resources Award for the Wescott Park Stormwater Storage Facility Project in the Village of Northbrook

Friends of the Chicago River
Chicago River Blue Awards Green Ribbon Award for the Wescott Park Stormwater Storage Facility Project in the Village of Northbrook

Illinois Association for Floodplain and Stormwater Management
Flood Reduction Project Award for Floodway Buyouts in the Village of Glenview

Illinois Department of Natural Resources
Illinois Mined Land Reclamation Award in the non-coal category for the McCook Composite Reservoir

Illinois Water Environment Association
Mariyana Spyropoulos, President, is the recipient of the annual Public Official of the Year award. The Public Official of the Year award is presented to an elected or appointed public official who 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.

Interstate Mining Compact Commission
Kenes C. Bowling National Mine Reclamation Award for the McCook Reservoir

Water Environment Federation
Project Excellence Award for the Nutrient Recovery Facility at the Stickney Water Reclamation Plant
Water Quality Improvement Award for the Calumet Tunnel and Reservoir Plan
Schroepfer Innovative Facility Design Medal for the Calumet Tunnel and Reservoir Plan

2018

American Council of Engineering Companies of Illinois
Engineering Excellence Merit Award for the Mayfair Reservoir Expansion

American Public Works Association
Chicago Metro Chapter Suburban Branch: Public Works Project of the Year Award for the Niles Flood Relief Project

American Society of Civil Engineers
Outstanding Civil Engineering Award, Over $100 Million Category, for the McCook Reservoir

American Society of Landscape Architects - Illinois Chapter
Merit Award for Planning and Analysis for the Robbins Park Project

Friends of the Chicago River
Chicago River Blue Awards Green Ribbon Award for the Wescott Park Stormwater Storage Facility Project in the Village of Northbrook

Illinois Association for Floodplain and Stormwater Management
Flood Reduction Project Award for Floodway Buyouts in the Village of Glenview

Illinois Department of Natural Resources
Illinois Mined Land Reclamation Award in the non-coal category for the McCook Composite Reservoir

Metropolitan Planning Council
Burnham Award for Excellence in Planning for the Space to Grow Partnership

National Biosolids Partnership
Ten-year Platinum Award for the Dedication to Environmentally Sound Biosolids Management Practices

National Institute of Governmental Purchasing 2018-2003
Outstanding Agency Accreditation Achievement Award

Water Environment Federation
Project Excellence Award for the McCook Reservoir

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Metropolitan Water Reclamation District

of Greater Chicago, Illinois

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

December 31, 2017

Christopher P. Morrill

Executive Director/CEO

Protecting Our Water Environment

BOARD OF COMMISSIONERS
Kari K Steele
President
Barbara J McGowan
Vice President
Frank Avila
Chairman of Finance
Cameron Davis
Kimberly Du Buclet
Marcelino Garcia
Josina Morita
Debra Shore
Mariyana T Spyropoulos

Metropolitan Water Reclamation District of Greater Chicago
100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312.751.5600

Jacqueline Torres
Clerk/Director of Finance

312.751.6500 f: 312.894.1104
jacqueline.torres@mwrd.org

May 10, 2019

To the Citizens of the Metropolitan Water Reclamation District of Greater Chicago and to the Financial Community:

The Comprehensive Annual Financial Report (CAFR), of which this transmittal letter is a component, has been prepared in accordance with Chapter 70, Illinois Compiled Statutes, Act 2605/5.13, for the fiscal year ended December 31, 2018. This statute requires that the Clerk/Director of Finance prepare and publish the financial statements and any other data necessary to reflect the true financial condition and operations of the Metropolitan Water Reclamation District of Greater Chicago (the District) within six months of the close of each fiscal year.

The CAFR's basic financial statements have been prepared in conformance with generally accepted accounting principles (GAAP) in the United States of America, promulgated by the Governmental Accounting Standards Board (GASB). In accordance with Chapter 70, Illinois Compiled Statutes, Act 2605/5.12, the District's basic financial statements for the period ended December 31, 2018, have been subject to an audit by independent accountants. The unmodified opinion of RSM US LLP has been included in the Financial Section of this report.

District management assumes full responsibility for the completeness and reliability of all the information presented in this report. To provide a reasonable basis for making these representations, management of the District has established a comprehensive internal control framework that is designed both to protect the government's assets from loss, theft, or misuse and to compile sufficient reliable information for the preparation of the District's financial statements in accordance with GAAP. The cost of internal controls should not outweigh their benefits; therefore, the District's comprehensive framework of internal controls has been designed to provide reasonable assurance, rather than absolute assurance, that the financial statements will be free from material misstatement. Management understands the risks of financial processing and has implemented procedures to evaluate the effectiveness of these controls District management and Internal Audit staff continually evaluate the internal control structure.

Both the investment community and taxpayers rely on the CAFR for basic information about the District, its past performance, current financial condition, future plans, and services provided. Financial data and the facts contained herein create an indispensable profile for potential bond investors. Taxpayers can, with full confidence, assess the level, efficiency, and effectiveness of the services provided and the related costs.

GAAP requires that management provide a narrative introduction, overview, and an analysis to accompany the basic financial statements in the form of a Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The District's MD&A can be found immediately following the independent auditor's report.

MISSION STATEMENT

The District will protect the health and safety of the public in its service area, protect the quality of the water supply source (Lake Michigan), improve the quality of water in watercourses in its service area, protect businesses and homes from flood damages and manage water as a vital resource for its service area. The District's service area is 882.1 square miles of Cook County, Illinois. The District is committed to achieving the highest standards of excellence in fulfilling its mission.

BACKGROUND

The District was originally organized as the Sanitary District of Chicago in 1889 under an act of the Illinois General Assembly. The enabling act was in direct response to a typhoid and cholera epidemic. The District reversed the flow of the Chicago and Calumet River systems to divert contaminated water from Lake Michigan so it could be diluted as it flowed downstream into the Mississippi River. Subsequently, the District built collection treatment facilities to treat sewage in an environmentally effective manner.

The District operates primarily within the boundaries of Cook County. Although the District exercises no direct control over wastewater collection and transmission systems maintained by cities, towns, and villages in Cook County, it does control municipal sewer construction by permits in suburban Cook County. Furthermore, the District provides the main sewer lines for the collection of wastewater from local sewer systems together with the treatment and disposal thereof. Combined sewage and stormwater runoff is stored, treated, and released using District facilities. The District owns and operates 7 water reclamation plants (WRP) and 23 pumping stations that treat an average of 1.3 billion gallons of wastewater each day. The Central (Stickney) WRP is the largest plant in the world. The District controls approximately 76.1 miles of navigable waterways that serve as headwaters of the Illinois Waterway system. Stringent federal and state standards require that the District's wastewater treatment processes keep the waterways free of pollution. The District monitors industries in Cook County to assure that hazardous substances not suitable for a sewer are disposed of in an environmentally responsible way that complies with applicable laws.

The multi-award winning Metropolitan Water Reclamation District of Greater Chicago is headed by the Board of Commissioners who determine its policies. (Front row, L to R) Marcelino Garcia, President Mariyana T. Spyropoulos, Vice President Barbara J. McGowan, Debra Shore and Chairman of Finance Frank Avila (Back row, L to R) Josina Morita, Cameron Davis, Kari K. Steele and Kimberly Du Buclet

REPORTING ENTITY

The District is governed by a nine-member Board of Commissioners, elected at large for six-year terms. The terms are staggered so that three commissioners are elected every two years. The Executive Director, who is appointed by the Board of Commissioners, manages and controls all District operations and serves as the Chief Executive Officer.

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 City Colleges of Chicago, and various municipalities and school districts outside the City of Chicago but within the District's boundaries. However, these governments do not meet the established criteria for inclusion in the reporting entity and are therefore excluded.

Improve Water Quality

The District cost effectively collected and treated approximately 493.6 billion gallons of wastewater from businesses and homes and captured stormwater runoff from its service area. Our performance for treating this wastewater approaches 100 percent compliance with all applicable effluent standards at all water reclamation plants. Disinfection technology has been implemented and placed into service at two plants using multiple cost-effective strategies. Chlorination/de-chlorination has been implemented at the Calumet Water Reclamation Plant and ultraviolet technology at the O'Brien Water Reclamation Plant.

Provide Stormwater Management

Flooding continues to be the number one issue facing the District. The Stormwater Management Program is aggressively working to minimize flooding damage by helping communities with local flooding issues, acquiring flood-prone properties, and partnering with municipalities or other local governments on large capital green infrastructure projects. Since 2004 the District has distributed more than 140,500 low-cost rain barrels, and since 2016, the District distributed more than 55,000 tree saplings as a part of the "Restore the Canopy, Plant a Tree" initiative.

The District undertakes stormwater management projects under two phases of its Stormwater Management Program. Phase I consists of projects identified under Detailed Watershed Plans (DWPs), which were completed in 2010. Phase I projects address regional waterway overbank flooding and streambank stabilization concerns. The District performed construction work on four Phase I projects in 2018, one of which was substantially completed. It is anticipated that an additional four Phase I projects will begin construction in 2019.

The District initiated Phase II of its Stormwater Management Program in 2013 to address local flooding problems not necessarily involving overbank flooding. Since then, the District solicited information from Cook County communities and other governmental organizations for local stormwater project partnership opportunities. Between 2014 and 2018, a total of 19 shovel ready projects were completed with partial District funding. Construction on one Phase II conceptual design project continued in 2018 while another conceptual design project began construction later that year. In 2018, the District again solicited local communities and other governmental organizations for partnership opportunities, and as a result the District intends to partner on an additional 14 shovel ready projects to be constructed in 2019 and beyond, and to assist with preliminary designs for 6 future conceptual projects.

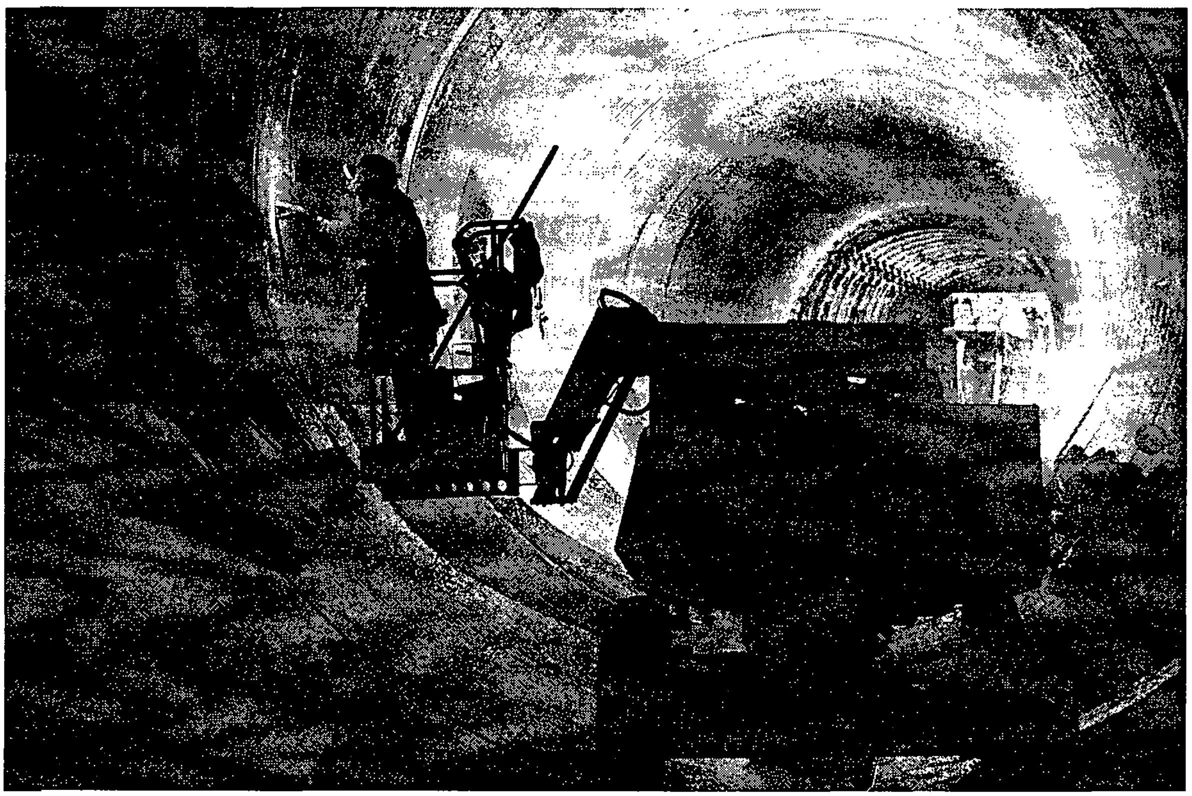
For circumstances where a flood control project is not feasible, the District initiated a Flood-Prone Property Acquisition Program in 2015 and through 2018 has partnered with seven local municipalities in order to remove a total of 157 structures from the floodplain. As each property is acquired, deed restrictions are imposed and recorded, requiring the properties to remain as open space into perpetuity. The municipalities will own the acquired properties and perform all required maintenance The District initiated another call for Flood-Prone Property projects and will soon partner with additional municipalities to remove more properties from the floodplain.

On October 3, 2013, the District's Board of Commissioners adopted the Watershed Management Ordinance (WMO), which replaced the Sewer Permit Ordinance and established uniform, minimum, county-wide stormwater management regulations for new development and redevelopment in Cook County. Components regulated under the WMO include drainage and detention, volume control, floodplain management, isolated wetland protection, riparian environment protection, and soil erosion and sediment control The WMO became effective on May 1, 2014. The stormwater management regulations of the WMO serve to prevent the flooding situation in Cook County from worsening through development or redevelopment. Over 1,900 WMO permits have been issued to date. Since the development of the WMO, the District has conducted numerous training events in addition to presenting at various seminars and conferences hosted by professional organizations.

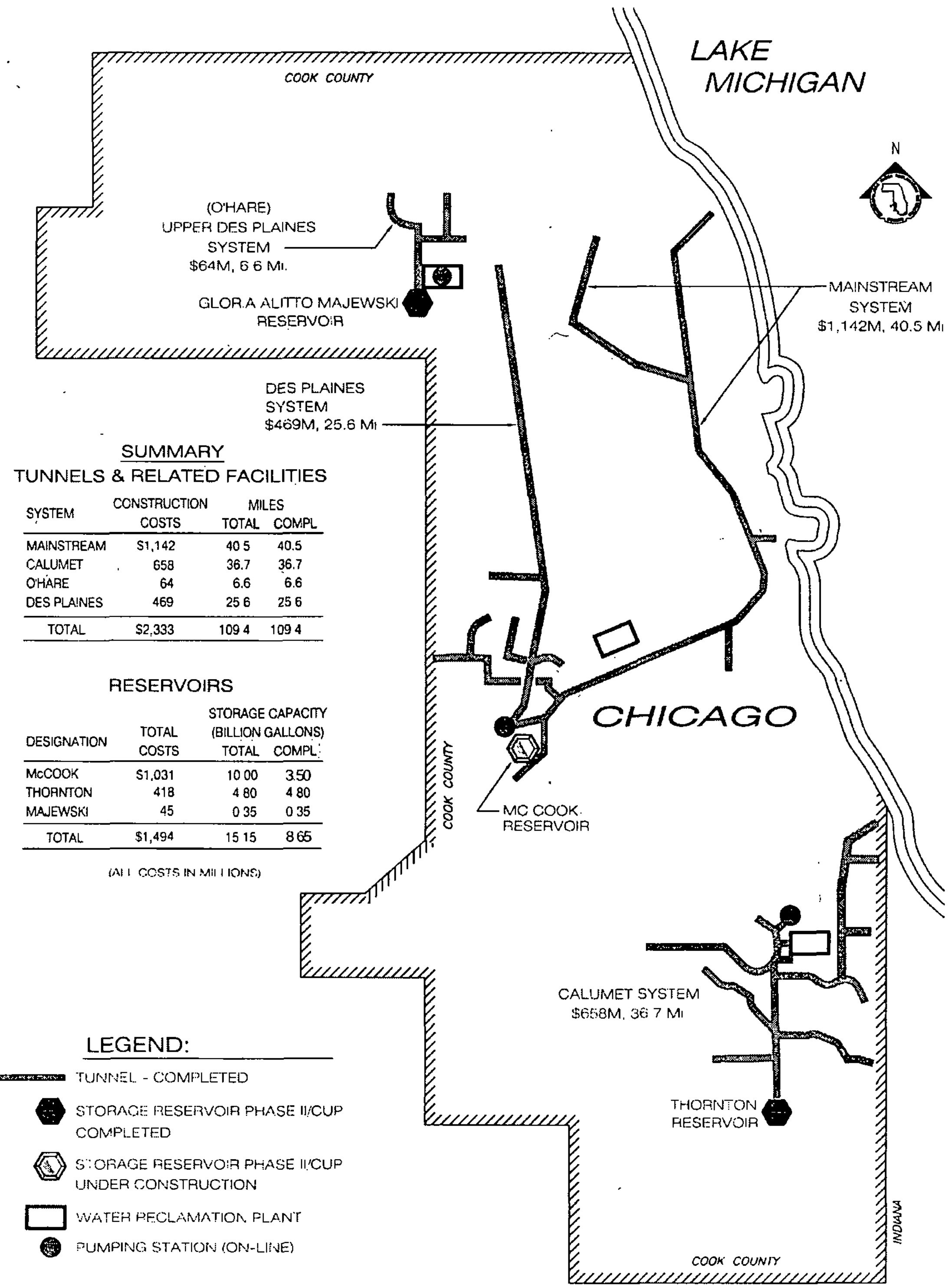
Provide flood protection with Tunnel and Reservoir Plan and Green Infrastructure

The primary goals of TARP are as follows: protect Lake Michigan, the area's primary source of drinking water from polluted backflows; clean up the area's waterways; and provide an outlet for floodwater and rainfall runoff by capturing wastewater before it enters streams and rivers from within the District's service area. TARP consists of 109.4 miles of deep rock tunnels designed to capture 2.3 billion gallons of the first flush of sewage contaminated stormwater from combined sewers which had previously flowed into the area waterways.

The flood control segment of TARP consists of three storage reservoirs to serve as outlets for combined sewer overflows (CSO's). The three reservoirs - Gloria Alitto Majewski, Thornton, and McCook - will provide 15.2 billion combined gallons of storage for CSO's that otherwise would spill into local waterways, degrading the water quality and causing flooding. The Gloria Alitto Majewski Reservoir, the smallest of the three, was completed in 1998 at a cost of $45 million and has prevented over 5.7 billion gallons of combined sewer overflow from entering the waterways and mitigated over $400 million in flood damage. The Thornton Composite Reservoir became operational in 2015 and, through the end of 2018, more than 20.6 billion gallons have been captured during 44 fill events. The first stage of the McCook Reservoir was completed in 2017 and the second stage will be completed in 2029. Through the end of 2018, more than 27.2 billion gallons have been captured by the first stage reservoir during 34 fill events. The McCook Reservoir is projected to bring $143 million per year in flood reduction benefits to its residents when fully completed. The combined engineering, construction and land rights cost for all three reservoirs is estimated at $1.48 billion, with the Corps and the District providing approximately $540 million and $940 million, respectively.



Work continues on construction of the Des Plaines Connecting Tunnel near the MWRD's Mainstream Pumping Station and McCook Reservoir in March



SUMMARY
TUNNELS & RELATED FACILITIES

SYSTEM	CONSTRUCTION COSTS	MILES TOTAL	MILES COMPL
MAINSTREAM	$1,142	40.5	40.5
CALUMET	658	36.7	36.7
O'HARE	64	6.6	6.6
DES PLAINES	469	25.6	25.6
TOTAL	$2,333	109.4	109.4

RESERVOIRS

DESIGNATION	TOTAL COSTS	STORAGE CAPACITY (BILLION GALLONS) TOTAL	COMPL
McCOOK	$1,031	10.00	3.50
THORNTON	418	4.80	4.80
MAJEWSKI	45	0.35	0.35
TOTAL	$1,494	15.15	8.65

(ALL COSTS IN MILLIONS)

LEGEND:

- TUNNEL - COMPLETED
- STORAGE RESERVOIR PHASE II/CUP COMPLETED
- STORAGE RESERVOIR PHASE II/CUP UNDER CONSTRUCTION
- WATER RECLAMATION PLANT
- PUMPING STATION (ON-LINE)

TUNNEL and RESERVOIR PLAN PROJECT STATUS

Students, parents, teachers and community members planted trees in the Space to Grow schoolyard during a spring clean-up event at Morrill Math and Science Elementary School in Chicago to celebrate Earth Day on April 21.

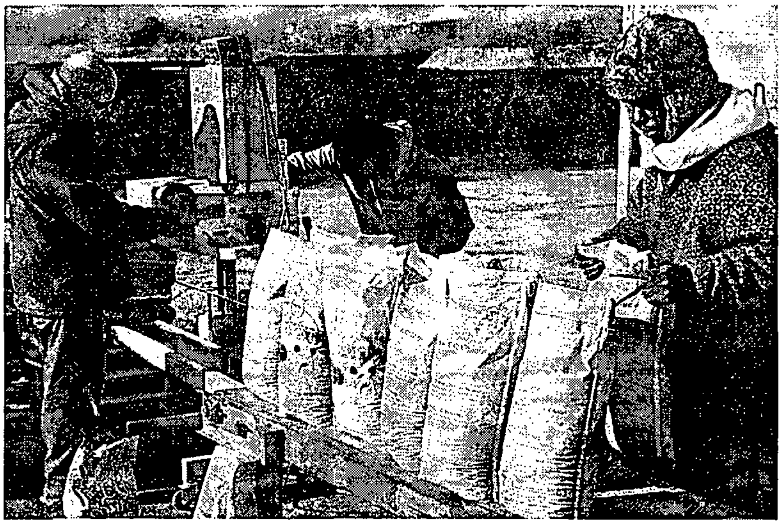
A consent decree between MWRDGC and the U.S. Department of Justice was entered into in 2014. One section of the consent decree is designed to foster the use of green infrastructure controls to reduce the amount of stormwater that flows into the sewer systems during a storm and required MWRDGC to develop a Green Infrastructure Program Plan, which was approved by the Environmental Protection Agency in 2015. In 2014, MWRDGC partnered with Chicago Public Schools System (CPSS) and the Chicago Department of Water Management (CDWM) to incorporate stormwater retention at four elementary schools while reconstructing substandard playgrounds under a program known as Space to Grow. The projects serve to educate the public on the importance of stormwater management and the value of green infrastructure to reduce basement backup flooding. The success of this project led to MWRDGC, CPSS, and CDWM to agree to partner on 30 more schools from 2015 through 2020. Since 2015, eleven more CPSS school playgrounds were completed, and design is underway for five additional schools to be improved in 2019. The District completed construction of a green infrastructure project in the City of Blue Island, where permeable pavement and rain gardens were installed to combat local flooding. In 2015, the District partnered with the City of Evanston to install permeable pavement, swales, and rain gardens at the City's Civic Center, and also partnered with the Village of Wilmette to install four green alleys. In 2016, the District partnered with the Village of Northbrook in its installation of a green stormwater detention system at Wescott Park, and also partnered with the Village of Kenilworth on rain garden installations. In 2017, the District completed the construction of a permeable parking lot at its John E. Egan Water Reclamation Plant.

The District also partnered with the City of Berwyn on a green alley project, and the Village of Niles on a bioswale and permeable parking lot. Also in 2017 and again in 2018, the District solicited information from Cook County communities and other governmental organizations for additional green infrastructure partnership opportunities. Based on the project submittals received, the District intends to partner on an additional 39 green infrastructure projects to be constructed within its service area throughout 2018 and 2019. The consent decree provides an enforceable schedule for implementing MWRDG's Tunnel and Reservoir Plan, which will result in a significant decrease in the volume of water discharged to the waterways from combined sewer overflows in Cook County, along with dramatically reducing the potential for flooding.

Maintenance of Facilities and Infrastructure

The District owns and operates 7 water reclamation plants, 560 miles of intercepting sewers and force mains, 109.4 miles of TARP tunnels, 23 pumping stations, 35 flood control reservoirs, and 3 TARP reservoirs. Through preventative maintenance management, modernization, rehabilitation, and planned replacement, the District will ensure the long-term reliability and cost-effectiveness of operations. To aid planning and prioritize projects for both near term and long term, the District implemented procedures for project vetting and Long-Term Capital Plan evaluation.

Many of the District's plants and interceptor sewers were placed in service over 50 years ago. In order to maintain continuous operations, the District has initiated a Capital Improvements Plan to replace physically deteriorating facilities



EQ Compost bagging operation at Harlem Avenue Solids Management Area in December. The pilot bagging project will put the MWRD's compost into the hands of area gardeners.

through rehabilitation, alteration or expansion. The expected construction cost over the next five years for the replacement and maintenance of facilities is $226 million. As discussed in the MD&A, condition assessments required under the modified approach alert management to the need for maintenance and preservation projects for its infrastructure assets.

RESOURCE RECOVERY

The District understands the obligation to implement sustainable practices and has maintained that focus for the past few years by investing in research and development of resource recovery programs. The current sustainability effort is focused on recovering phosphorous, biosolids, water, and energy.

Phosphorus

The District had voluntarily sought a phosphorus discharge limitation in our National Pollutant Discharge Elimination System (NPDES) permits and had decided we would pursue achieving this through our biological process. With one of the District's objectives of sustainability, at the Stickney WRP, the District is pursuing the recovery of phosphorus. In partnership with Ostara Nutrient Recovery Technologies, startup of the world's largest nutrient recovery facility occurred in May 2016 and is currently in operation utilizing District forces. Phosphorus is recovered from the plant's liquid waste stream and turned into a fertilizer pellet, which is marketed and distributed. Construction of the Waste Activated Sludge Stripping to Remove Internal Phosphorous (WASSTRIP) process was completed in 2018. Operation of this process has been postponed until further modifications can be made to improve the fermenter operation related to this process. Once operational, this process will further increase the recoverable phosphorous by repurposing existing tanks in combination with the Ostara process to remove magnesium ammonium phosphate from wasted active sludge. Phosphorus and nitrogen recovery will provide significant environmental benefits to the Chicago Area Waterway System and downstream through the Mississippi to the Gulf of Mexico. By taking this approach, the District is recovering a non-renewable resource and placing it back into the food cycle, rather than letting it be diluted and lost to the water environment.

In fulfillment of the special provisions of the O'Brien Water Reclamation Plant's (OWRP) NPDES permit, the District has created an Algae Research Facility at the OWRP. This facility carries out research on treatment technologies using algae to recover phosphorus from the wastewater. Algae treatment technology has several advantages over the traditional chemical precipitation approach including the ability to recover and reuse the phosphorus, the ability to generate revenue through sale of the harvested algae as a raw material for sustainable commodity products, sequestration of atmospheric carbon dioxide, and use of natural energy from sunlight. The District's research group completed a one-year study of a technology, called the revolving alga biofilm reactor (RAB), that cultivates algae to recover nutrients. The study showed promising results, so the District proceeded to install a larger RAB unit that would be considered a "full-scale module," with the goal of testing the nutrient uptake performance of the unit on plant effluent. The unit was installed in 2018, but suffered several breakdowns, as it was a protoype design. The manufacturer has revised the RAB design and, when the modified RAB is installed in mid-2019, the District's research group will perform a one-year study to determine the performance of the unit on nutrient uptake, algae biomass production, performance with and without artificial augmentation, and the effects of seasonal variations on performance. Results from these pilot studies will be used to inform the projected performance, life-cycle costs, and design criteria for a full-scale installation at OWRP.

Biosolids

Due to changes in Illinois law, the District can sell Exceptional Quality (EQ) biosolids and EQ biosolids blend that is composted with wood chips to the general public. By taking this approach, the District is recovering a non-renewable resource and placing it back into the food cycle, rather than letting it be diluted and lost to the water environment. Biosolids can be used almost anywhere that chemical fertilizers are used. The District can also reduce its carbon footprint by reducing significant vehicle traffic as organics will no longer need to be hauled to landfills.

Water

Efforts have been focused on reuse applications for the high quality water produced at the plants and the capture and reuse of stormwater. Reuse opportunities are being explored at the Calumet and Stickney industrial corridors. The District is also exploring reuse at parks and golf courses.

The District is also researching technologies using algae as a means to recover nutrients from wastewater. The algae can be used in a sustainable manner such as compost, aquaculture food supplement, bio plastics, and commercial dyes.

Officials from the MWRD, Burbank and Oak Lawn celebrated the beginning of work on a reservoir expansion project designed to provide much-needed flood relief with a groundbreaking ceremony at the Melvina Ditch Reservoir in Burbank on April 2. After a comprehensive public process that relied on input from Burbank and Oak Lawn neighbors and various stakeholders to address flooding concerns, the MWRD agreed to design an improved and expanded reservoir to help mitigate local flooding. The project will increase the reservoir's holding capacity by nearly 64 million gallons. The $20-million project, funded primarily by the MWRD, also received a grant from the state of Illinois through its Build Illinois Bond Fund

Energy

The District's goal is to achieve energy neutrality by 2023. The anaerobic digesters at the Calumet and Stickney Water Reclamation Plants produce biogas as a natural byproduct of the digestion process. The biogas contains methane gas, which is currently used as fuel for the plants' boilers. A significant step towards the District's goal of becoming energy neutral will be the utilization of the biogas to produce renewable energy. The Stickney WRP currently utilizes all of their digester gas. Once the new Primary Settling tanks are fully on-line, the Stickney WRP is projected to double digester gas production. A task force has been created to study the biogas utilization options at both the Stickney and Calumet WRPs. A final report of their recommendations to the Board of Commissioners will be prepared in 2019. Upon direction from the Board, the District may initiate projects related to the utilization of our excess biogas. Options may include boosting biogas production, by accepting liquid organic wastes, such as restaurant grease and industrial food waste, into the anaerobic digesters under the Resource Recovery Ordinance, which was approved by the Board of Commissioners in 2016. Existing initiatives are also being examined for further reduction of energy consumption. The District is looking to maximize use of digester capacity, market electrical capacity at Lockport to maximize return on investment and optimize the aeration processes to further reduce energy consumption by 25%.

BUDGET PROCESS

The Board of Commissioners is required to adopt an annual budget no later than the close of the previous fiscal year. This annual budget serves as the foundation for the Metropolitan Water Reclamation District's financial planning and control. Annual budgets are prepared for the General Corporate, Construction, Capital Improvements Bond, Stormwater Management, and Debt Service Funds.

The District utilizes an enterprise resource planning computer system to provide budget control at the line item level for the General Corporate, Construction, and Stormwater Management Funds, at the fund level for the Debt Service Fund, and at the line item class level for the Capital Improvements Bond Fund. All budget-relevant transactions are tested for the sufficiency of available appropriation before any obligations resulting from purchase requisitions, purchase orders, or contracts are formally recognized, or payments resulting from payroll or other expenditures are released.

ECONOMIC BASE OUTLOOK

The District's service area is sizeable, encompassing 98 percent of the assessed valuation of Cook County. The Equalized Assessed Valuation (EAV) of the District has experienced a .27 percent average reduction rate over the last ten years and the current equalized assessed valuation of $147,945,823,261 is 5.1% higher than the previous year. A strong fund balance, along with an emphasis on controlling expenditures, should allow the District to protect its operations from economically sensitive revenues stemming from fiscal constraints at the federal and state levels. The District operates a fiscally sound organization, maintaining a AAA bond rating with Fitch Ratings and AA+ with Standard and Poor's. Our finances are managed in a prudent manner, as evidenced by our excellent bond ratings, healthy fund balance, and continuing efforts to manage costs. To ensure that the District's finances remain healthy, projects are prioritized to ensure best use of current funding, project base budget targets assure funding above the base are tied to strategic initiatives, and resources are managed to ensure financial stability targets are met.

FINANCIAL POLICIES

In order to protect the strong financial position of the District, ensure uninterrupted services, and stabilize annual tax levies, the Board of Commissioners 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.

To ensure the long-term financial health of the pension program and other post-employment benefits, the Pension Funding Policy and the amended OPEB Advance Funding Policy were adopted on October 2, 2014.

General Corporate Fund

- Corporate Fund undesignated fund balance as of January 1 of each budget year is to be kept 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 the Corporate Fund in the event of the typical and extraordinary 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 EAV, whenever economically feasible. This will be financed through tax levies at the maximum 0.5 cents per $100 of Equalized Assessed Valuation when economically feasible and financially prudent. This level of funding will protect the District in the event that environmental remediation costs cannot be recovered from former industrial tenants of District properties, catastrophic failure of District operational infrastructure or other claims. As the District is partially self-insured, adequate reserves are critical.

The District will appropriate funds from the unassigned fund balance for emergencies as well as for 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 of Commissioners with a plan to bring the fund balances back into compliance with policy within a two-year period. In order to maintain relevance, this policy will be reviewed every three years following adoption or sooner at the discretion of the Executive Director.

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

Capital Improvements Bond Fund Investment Income
Investment earnings from the Capital Improvements Bond Fund 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 (Debt Service Fund)
Fund balances in the Bond Redemption & Interest Funds that might accumulate due to investment income will be identified and used to abate Bond Redemption & Interest property tax levies or for other corporate purposes. These abatements appropriately reduce property tax levies by the amount earned on invested balances above what is necessary for paying principal and interest due over the following 12 months, while still maintaining appropriate fund balances and when not required for other corporate purposes. This policy and the subsequent tax abatements will assist in compliance with the Board of Commissioners' 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 American Bond Issuances
Interest reimbursement payments related to taxes levied for Build America Bond issuances will be presented to the Board of Commissioners 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 of Commissioners for approval prior to any abatement or use of reimbursement funds.

Capital Improvements Bond Fund Accumulated Income

Revenues that have accumulated in the Capital Improvements Bond Fund from investment income, grants, or State Revolving Fund revenues will primarily be used for capital projects. Capital projects are generally in the Capital Improvements Bond Fund; 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 Funds to be used to abate property taxes or may be used for other corporate needs as necessary.

Accounting Policies of Fund Balance

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.

Committed Fund Balance

The District's Board of Commissioners shall establish, modify, or rescind a fund balance commitment by formal action of the Board of Commissioners.

Assigned Fund Balances

The Executive Director may assign amounts of fund balances to a specific purpose.

Retirement Fund

The District's Board of Commissioners adopted a Funding Policy recommended by the Retirement Fund Board of Trustees to ensure the long-term financial health of the pension program while balancing the interests of the employees, retirees, taxpayers, and the District. Progress toward the funding goal is 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 and the funded ratio calculated each year by the Fund actuary will serve as a benchmark to determine the progress toward the funding goal.

OPEB Trust

The OPEB Trust establishes a reserve that will help ensure the financial ability to provide health care coverage for District retirees and their beneficiaries in the future. The Advance Funding Policy for the OPEB Trust Fund, amended in October 2014, reflects a 100 percent funding goal to be achieved by 2027 with no further advance contributions required after 2026. The policy to increase the OPEB liability funding percentage helps to solidify the District's solid financial foundation and makes the retiree healthcare plan sustainable for the long-term.

AWARDS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Metropolitan Water Reclamation District of Greater Chicago for its Comprehensive Annual Financial Report for the fiscal year ended December 31, 2017. This was the 43rd consecutive year that the Metropolitan Water Reclamation District has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

The District has been presented with the award for Distinguished Budget Presentation by the GFOA for the annual budget for the year beginning January 1, 2018. To receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, financial plan, communications medium, and operations guide. The award, which is valid for a one year period only, has been received for 34 consecutive years.

ACKNOWLEDGMENTS

Preparation of this report reflects the combined efforts of the dedicated professional personnel of the operating and support departments. Their expertise, enthusiasm, and unswerving focus on excellence are gratefully acknowledged. The general citizenry, in our opinion, may fully rely on the 2018 Comprehensive Annual Financial Report as a fair and accurate presentation, in all material aspects, of the financial position and operational results of the Metropolitan Water Reclamation District of Greater Chicago.

Respectively submitted,

Jacqueline Torres

Jacqueline Torres
Clerk/Director of Finance

Matt Glavas

Matthew Glavas
Comptroller

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312.751.5600

BOARD OF COMMISSIONERS
Kari K. Steele
President
Barbara J. McGowan
Vice President
Frank Avila
Chairman of Finance
Cameron Davis
Kimberly Du Buclet
Marcelino Garcia
Josina Morita
Debra Shore
Mariyana T. Spyropoulos

May 10, 2019

STATEMENT OF RESPONSIBILITY

To the Citizens of the Metropolitan Water Reclamation District of Greater Chicago and to the Financial Community:

The Board of Commissioners and management of the Metropolitan Water Reclamation District of Greater Chicago assume full responsibility in presenting financial statements that are free from any material misstatements, and are complete and fairly presented in accordance with accounting principles generally accepted in the United States of America. To this end, the undersigned hereby state and attest, having reviewed these financial statements, to the best of their knowledge:

- The statements fairly present the financial position and changes in financial position of the Metropolitan Water Reclamation District of Greater Chicago, and its component units, for the fiscal year ended December 31, 2018, in accordance with accounting principles generally accepted in the United States of America; and

- The statements contain no untrue statement of material facts; and

- There are no omissions of material fact(s).

Kari K. Steele
President

Brian Perkovich
Executive Director

Jacqueline Torres
Clerk/Director of Finance

Matthew Glavas
Comptroller

Page intentionally left blank

II. FINANCIAL SECTION

MWRD Commissioners are joined by Chicago Mayor Rahm Emanuel and 39th Ward Alderman Margaret Laurino in July to unveil the Albany Park Stormwater Diversion Tunnel which will work to mitigate flooding along the banks of the North Branch of the Chicago River. In addition to the diversion tunnel, the project will also add improvements to Eugene Field Park at the western end of the tunnel, including landscaping, new trees, a new walkway, benches and a water fountain, and improvements to River Park at the eastern end of the project with landscaping, new trees, a new soccer field, a new regulation-sized baseball field and batting cage.

RSM

RSM US LLP

Independent Auditor's Report

To the Honorable President and Members of the Board of Commissioners
Metropolitan Water Reclamation District of Greater Chicago

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, each major fund, and the aggregate remaining fund information of Metropolitan Water Reclamation District of Greater Chicago (the District), as of and for the year ended December 31, 2018, and the related notes to the financial statements, the respective changes in financial position thereof and the respective budgetary comparisons for the General Corporate Fund and the Retirement Fund for the year then ended, which collectively comprise the entity's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We did not audit the financial statements of the Metropolitan Water Reclamation District Pension Trust Fund (Pension Fund), which represents 81 percent and 7 percent, respectively, of the assets and revenues/additions of the aggregate remaining fund information. Those statements were audited by other auditors, whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for the Pension Fund, is based solely on the report of the other auditors. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

THE POWER OF BEING UNDERSTOOD
AUDIT | TAX | CONSULTING

Opinions
In our opinion, based on our audit and the report of the other auditor, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, each major fund, and the aggregate remaining fund information of Metropolitan Water Reclamation District of Greater Chicago, as of December 31, 2018, and the respective changes in financial position thereof and the respective budgetary comparisons for the General Corporate Fund and the Retirement Fund for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter
As discussed in Note 16 to the financial statements, during the year ended December 31, 2018, the District implemented the provisions of Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, which required a restatement to opening net position. Our opinions are not modified with respect to this matter.

Other Matters
Prior-Year Comparative Information
The basic financial statements include partial prior-year comparative information. Such information does not include sufficient detail to constitute a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the District's basic financial statements for the year ended December 31, 2017, from which such partial information was derived. Our audit report on the financial statements for the year ended December 31, 2017, dated May 11, 2018, expressed an unmodified opinion.

Required Supplementary Information
Accounting principles generally accepted in the United States of America require that management's discussion and analysis, modified approach information, and pension and other postemployment benefit plans schedules as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information
Our audit for the year ended December 31, 2018, was conducted for the purpose of forming opinions on the financial statements that collectively comprise the District's basic financial statements. The Combining and Individual Fund Statements and Schedules and the Introductory and Statistical and Demographic Section for the year ended December 31, 2018, are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The Combining and Individual Fund Statements and Schedules have been subjected to the auditing procedures applied in the audit of the financial statements for the year ended December 31, 2018, and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements, or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America by us and other auditors. In our opinion, based on our audit and that of the other auditors, the procedures performed as described above, and the report of the other auditors, the Combining and Individual Fund Statements and Schedules are fairly stated in all material respects in relation to the basic financial statements as a whole for the year ended December 31, 2018.

Our audit report on the financial statements for the year ended December 31, 2017, dated May 11, 2018, expressed an unmodified opinion. The report stated that the Combining and Individual Fund Statements and Schedules for the year ended December 31, 2017, were subjected to the auditing procedures applied in the audit of the 2017 basic financial statements and certain additional auditing procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare those basic financial statements or to those basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America and, in our opinion, was fairly stated in all material respects in relation to the basic financial statements as a whole for the year ended December 31, 2017.

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the District's basic financial statements. The Introductory Section and the Statistical and Demographics Section listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated May 10, 2019 on our consideration of the District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the District's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control over financial reporting and compliance.

RSM US LLP

Chicago, Illinois
May 10, 2019

The Metropolitan Water Reclamation District of Greater Chicago ("District") is providing Management's Discussion and Analysis (MD&A) to assist the readers in understanding the financial information presented in this report. The MD&A includes a discussion of the basic financial statements and their relationship to each other. It also offers an analysis of the District's financial activities at both the government-wide and fund levels, based on known facts, and compares the current year's results to the prior year. A budgetary analysis of the District's General Corporate Fund is provided, as well as, an analysis of capital assets and debt activity. Finally, the MD&A concludes with a discussion of issues that are expected to be significant to the District's finances.

The MD&A should be read in conjunction with the Clerk/Director of Finance's letter of transmittal and the basic financial statements.

2018 FINANCIAL HIGHLIGHTS

- The District's government-wide net position is $4,620,380,000. This can be attributed to the District's positive balance of $4,822,532,000 in net investment in capital assets.
- The District's government-wide net position increased by $107,184,000. This is mainly attributable to the $112 million increase in net investment in capital assets.
- The District's combined fund balances for its governmental funds at December 31, 2018 totaled $778,167,000, a decrease of $42,328,000 from the prior year. The decrease is primarily attributable to not issuing general obligation bonds in 2018 and a decrease in bond anticipation notes issued.
- The District's government-wide liabilities decreased by $231,432,000 in 2018 which is largely attributable to a decrease in long-term debt due to timing of conversion of bond anticipation notes to bonds. Over $130 million in bond anticipation notes were converted to bonds in 2018. There was also a decrease in the net pension liability largely due to a $95 million increase in returns on pension plan investments.

DISCUSSION OF THE BASIC FINANCIAL STATEMENTS

The District's basic financial statements include both a short and long-term view of its financial activities. The focus is on both the District as a whole (government-wide) and on major individual funds. The District's basic financial statements include three components. (1) government-wide financial statements; (2) fund financial statements; and (3) notes to the basic financial statements. In addition to the basic financial statements, the financial section of this report includes Required Supplementary Information (RSI) and Combining and Individual Fund Statements and Schedules.

Government-wide financial statements. The government-wide financial statements are provided to give readers a long-term overview of the District's finances, similar to a private-sector business. Government-wide statements consist of the Statements of Net Position and Statements of Activities, and are prepared using the accrual basis of accounting and the economic resources (long-term) measurement focus. They include all the District's governmental activities; there are no business-type activities. The fiduciary funds' resources are restricted for employee pensions and other post-employment benefits and are not available to support the operations of the District. The fiduciary funds are not reported in the government-wide financial statements. Due to the implementation of GASB 68 *Accounting and Financial Reporting For Pensions* and GASB 75 *Accounting and Financial Reporting For Postemployment Benefits other than pensions* (OPEB) the District recognizes the assets and liabilities for Pension and OPEB.

The Statements of Net Position report the financial position of the District as a whole, presenting all the assets and liabilities (including capital assets and long-term obligations) with the difference between the assets and deferred outflows of resources less liabilities and deferred inflows of resources representing net position. The increase or decrease in net position over time can serve as a useful indicator of whether the financial position of the District is improving or declining.

The Statements of Activities report the operating results of the District as a whole, presenting all revenues and expenses of the District and the change in net position. The Statements of Activities include revenues earned in the current fiscal year that will be received in future years, and expenses incurred for the current year that will be paid in future years (i.e. revenue for uncollected taxes and expenses for accumulated, but unused, compensated absences). Revenues are segregated as general revenues and program revenues. General revenues include taxes, interest on investments, and all other revenues not classified as program revenues. Program revenues include charges for services (i.e. user charges, land rentals, fees, forfeitures, and penalties) and capital grants. Depreciation for depreciable capital assets is recorded as an expense in this statement.

Fund financial statements. The District uses fund accounting to demonstrate compliance with finance related legal requirements. For this purpose, a fund is a grouping of related accounts used to maintain control over resources segregated for specific activities or objectives.

The fund financial statements include information segregated between the District's governmental funds and its fiduciary funds. The governmental funds are used to account for the day-to-day activities of the District, while the fiduciary funds account for employee pensions (Pension Trust Fund) and other post-employment benefits (OPEB Trust Fund). The Governmental Funds Balance Sheets and Statements of Governmental Fund Revenues, Expenditures and Changes in Fund Balances focus the reader's attention on the short-term financial position and results of operations, respectively, using the modified accrual basis of accounting. They also include budgetary statements for the General Corporate Fund and the Retirement Fund that compares the original and final budget amounts to actual results. This statement is provided to demonstrate compliance with the budget.

The Statements of Fiduciary Net Position and Statements of Changes in Fiduciary Net Position report the net position available for future pension and OPEB benefits and the change in net position, respectively. The fiduciary financial statements utilize the accrual basis of accounting, similar to that used for the government-wide financial statements.

Reconciliation of governmental fund financial statements to government-wide financial statements. Because the short-term focus of governmental fund financial statements is narrower than the long-term government-wide financial statement focus, reconciliations are required to explain the differences between the fund and government-wide financial statements. As a special purpose government, the District has elected to present the reconciliation by combining the presentation of the governmental fund statements with the government-wide statements. The Governmental Funds Balance Sheets are reconciled to the Statements of Net Position in a combined financial statement presentation (Exhibit A-1). Likewise, the Statements of Governmental Fund Revenues, Expenditures, and Changes in Fund Balances are reconciled to the Statements of Activities in a combined financial statement presentation (Exhibit A-2).

Notes to the basic financial statements. The basic financial statements include notes that provide additional disclosure to better explain the financial data provided in the basic financial statements.

KEY FINANCIAL COMPARISONS

Property taxes. The primary source of revenue for the District is ad valorem property taxes. All District funds, with the exception of the District's Capital Improvements Bond Fund, derive their revenues primarily from property taxes. In 2018, total tax revenues increased by $29,284,000 in the District's Statement of Activities, as shown on page 39. The property tax levies for the Corporate Fund, Debt Service Fund and Stormwater Management Fund all increased from the prior year; however, the majority of the increase in property taxes recorded is due to the change in the deferral of tax revenue affecting the timing of collections.

Program revenue. The other notable changes were in user charge revenue and land rentals. The user charge revenue decrease of $7,098,000, as shown on page 39, was expected due to a significant industrial user who paid two years of user charge revenue in the prior year, and a gradual decrease in user charge rates. The increase of $5,326,000 in land rental revenue is due to new and renewal agreements at higher rental amounts, additional acreage used by Ford Motor Company, and an increase in the Consumer Price Index.

Construction costs. The increase in construction costs of $278,000, shown on page 39, is attributable to a shift in construction projects from fund expenditures to substantially completed projects reclassified as infrastructure under the GASB 34 Modified Approach. These projects include: the Stickney Water Reclamation Plant (SWRP) West Side Settling Tanks, SWRP conversion of old Gravity Concentration Tanks to the Waste Activated Sludge Stripping to Remove Internal Phosphorus Process, SWRP Aeration air valve automation in batteries A, B,C and D, Calumet Water Reclamation Plant (CWRP) Tarp Pumping Station, CWRP Tarp Screens and the McCook Reservoir expanded stage two projects.

Pension costs. The 2018 pension cost decreased $3,821,000 from 2017, as seen on page 39. The decrease can be attributed to changes in GASB 68 additions, and reductions to pension expense. Pension expense is calculated from a variety of items including employee service cost, interest, benefit payments, administrative expenses, and differences between expected and actual experiences. There was an increase in both employee contributions and projected net investment income, which contributed to the decrease in pension costs.

Claims and judgments. The $1,397,000 decrease in the Statement of Activities claims and judgments expense on page 39 is due to fewer claims paid out of the Reserve Claim Fund in 2018.

Employee costs. The District's employee-related expenditures are comprised of employee base salaries and overtime pay, employee benefits, including social security, Medicare, health, dental and life insurances, as well as, tuition, training, mileage and other travel expenses. The District's employee-related expenditures are the largest single cost of the General Corporate Fund, comprising 66.0% of the total outlays for 2018. The 1.8% increase in employee costs of $3,256,000, is largely attributable to the current mandatory annual salary adjustments as agreed upon in the District's various collective bargaining agreements for approximately 775 represented employees effective through June 30, 2020, as well as, promotions and step increases for employees.

Energy costs. In 2018, energy costs in the General Corporate Fund showed an increase of $3,073,000 as seen on page 41. Energy costs are made up of electricity and natural gas. The majority of the increase is for electricity and was due to operational factors at the water reclamation plants, including an increase of gallons of water treated due to heavier rainfall, an increase in biological oxygen demand, and the operation of phase I of the McCook Reservoir.

ANALYSIS OF GOVERNMENT-WIDE FINANCIAL STATEMENTS

A condensed comparison of the Statements of Net Position for December 31, 2018 and 2017, is presented in the following schedule (in thousands of dollars):

	2018	2017	Increase (Decrease)	Percent Increase (Decrease)
Assets:				
Current and other assets	$ 1,342,731	$ 1,405,592	$ (62,861)	(4.5)%
Capital assets	7,652,035	7,594,442	57,593	0.8
Total assets	8,994,766	9,000,034	(5,268)	(0.1)
Deferred Outflows of Resources:				
Loss on prior debt refunding	4,372	4,899	(527)	(10.8)
Deferred amounts related to pension	167,580	200,467	(32,887)	(16.4)
Total deferred outflows of resources	171,952	205,366	(33,414)	(16.3)
Liabilities:				
Current liabilities	327,814	363,413	(35,599)	(9.8)
Long-term liabilities	4,117,855	4,313,689	(195,834)	(4.5)
Total liabilities	4,445,669	4,677,101	(231,432)	(4.9)
Deferred Inflows of Resources:				
Deferred inflows for other pension and OPEB amounts	100,669	15,102	85,567	566.6
Total deferred inflows of resources	100,669	15,102	85,567	
Net Position:				
Net investment in capital assets	4,822,532	4,710,123	112,409	2.4
Restricted	706,425	700,839	5,586	0.8
Unrestricted (Deficit)	(908,577)	(897,766)	(10,811)	1.2
Total net position	$ 4,620,380	$ 4,513,196	$ 107,184	2.4 %

The above schedule reports that the District's net position totaled $4,620,380,000 at December 31, 2018, which represents the amount the District's assets and deferred outflows exceeded its liabilities. The largest portion of the net position, $4,822,532,000, represents the District's capital assets used to provide services to taxpayers, net of the related debt. These assets include land, buildings, equipment, and infrastructure, and they are not available for the District's future spending needs. Restricted net assets totaled $706,425,000 and represent resources that are subject to external or legal restrictions as to how they may be spent, such as federal grants or state loans, capital bond proceeds, tax levies for working cash, and debt service. The remaining portion of the unrestricted net position is a deficit of $908,577,000.

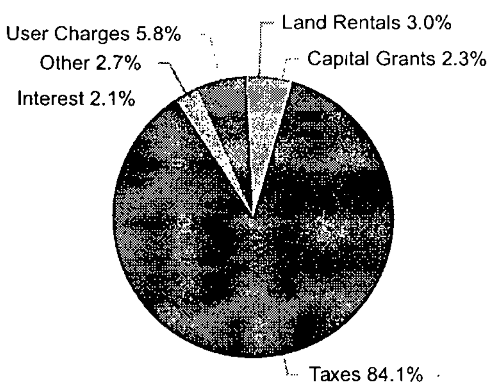
A comparison of the changes in net position resulting from the District's operations for the years ended December 31, 2018 and 2017 is presented in the following schedule (in thousands of dollars):

	2018	2017	Increase (Decrease)	Percent Increase (Decrease)
Revenues				
General Revenues:				
Taxes	$ 636,242	$ 606,958	$ 29,284	4.8%
Interest	15,531	8,784	6,747	76.8
Other	15,263	15,752	(489)	(3.1)
Program Revenues:				
User charges	44,000	51,098	(7,098)	(13.9)
Land rentals	22,678	17,352	5,326	30.7
Fees, forfeits, and penalties	5,116	5,401	(285)	(5.3)
Capital grants	17,086	14,558	2,528	17.4
Total revenues	755,916	719,903	36,013	5.0
Expenses				
Board of Commissioners	4,167	4,094	73	1.8
General Administration	16,063	15,791	272	1.7
Monitoring and Research	30,262	29,591	671	2.3
Procurement and Materials Management	7,102	5,947	1,155	19.4
Human Resources	53,182	54,267	(1,085)	(2.0)
Information Technology	15,173	12,734	2,439	19.2
Law	6,023	5,830	193	3.3
Finance	3,460	3,520	(60)	(1.7)
Engineering	27,800	27,830	(30)	(0.1)
Maintenance and Operations	187,660	178,994	8,666	4.8
Pension costs	102,993	106,814	(3,821)	(3.6)
OPEB Trust Fund costs	(6,955)	1,486	(8,441)	(568.0)
Claims and judgments	(4,059)	(2,662)	(1,397)	52.5
Construction costs	85,813	85,535	278	0.3
Loss on disposal of capital assets	92	202	(110)	(54.5)
Unallocated depreciation	11,849	12,063	(214)	(1.8)
Interest	108,107	109,550	(1,443)	(1.3)
Total expenses	648,732	651,586	(2,854)	(0.4)
Increase in net position	107,184	68,317	38,867	56.9
Total net position, beginning of year, as restated	4,513,196	4,444,879	68,317	1.5
Total net position, end of year	$ 4,620,380	$ 4,513,196	$ 107,184	2.4%

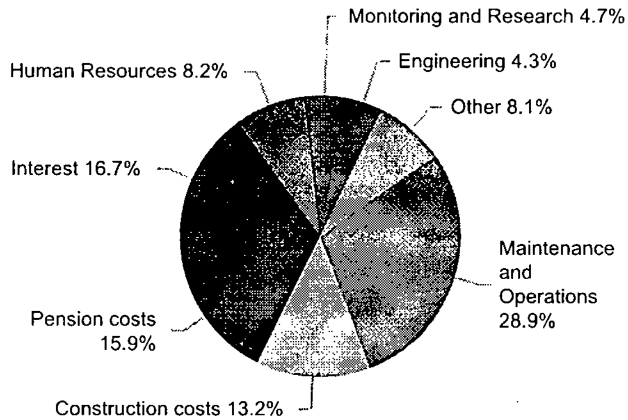
Total revenues increased by $36,013,000 in 2018, or 5.0% from the prior year, and total expenses decreased by $2,854,000 in 2018 or 0.4%. The major reasons for the variances are detailed under Key Financial Comparisons on pages 36-37.

The following charts show the major sources of revenue and expenses for the year ended December 31, 2018:

Revenue by Source



Expenses by Type



ANALYSIS OF DISTRICT'S GOVERNMENTAL FUND FINANCIAL STATEMENTS

As previously discussed, the focus of the District's governmental funds is on short-term inflows, outflows, and currently available resources. The emphasis in the governmental fund financial statements is on major funds. Each major fund is presented as a separate column in the governmental fund financial statements. For 2018, the District reports four major funds and two non-major funds. The four major governmental funds are General Corporate Fund, Retirement Fund, Capital Improvements Bond Fund, and Debt Service Fund. The non-major governmental funds are the Construction Fund and the Stormwater Management Fund.

The District ended the current fiscal year with combined governmental fund balances of $778,167,000, a decrease of $42,328,000 or 5.2% from 2017. A total of $38,713,000 of the fund balances represents non-spendable fund balances. Restricted fund balances totaled $645,983,000, assigned fund balances totaled $158,319,000, and the remaining deficit of $64,848,000 was unassigned.

General Corporate Fund

The General Corporate Fund is the principal operating fund of the District. It includes annual property taxes and other revenues, which are used for the payment of general operating expenditures not chargeable to other funds. The General Corporate Fund's fund balance at the end of the current fiscal year totaled $284,542,000. The fund balance represented 80.3% of the General Corporate Fund expenditures, a good indication of the fund's liquidity. The total fund balance for the General Corporate Fund had a decrease of $7,401,000 from 2017. The District's General Corporate Fund consists of the Corporate, Corporate Working Cash, and Reserve Claim Divisions, which are presented and explained in Note 1b on pages 64-70.

The General Corporate Fund ended the year with an unassigned fund balance deficit of $64,772,000 due to the required reserve claims restriction, non-spendable inventories and restricted working cash.

A detailed comparison of the General Corporate Fund revenues for the years ended December 31, 2018 and 2017 is shown in the following schedule (in thousands of dollars):

General Corporate Fund
Comparative Revenue Schedule

	2018		2017			
	Amount	% of Total	Amount	% of Total	Increase (Decrease)	Percent Increase (Decrease)
Revenues:						
Property taxes	$ 235,471	68.5%	$ 212,679	64.4%	$ 22,792	10.7%
Personal property replacement tax	17,970	5.2	28,715	8.7	(10,745)	(37.4)
Total tax revenue	253,441	73.7	241,394	73.1	12,047	5.0
Interest on investments	5,256	1.5	3,006	0.9	2,250	74.9
Land sales	—	—	50	—	(50)	(100.0)
Tax increment financing distributions	6,153	1.8	9,100	2.8	(2,947)	(32.4)
Claims and damage settlements	1,470	0.4	199	0.1	1,271	638.7
User charges	44,000	12.8	51,098	15.5	(7,098)	(13.9)
Land rentals	22,678	6.6	17,352	5.3	5,326	30.7
Fees, forfeits, and penalties	5,113	1.5	3,915	1.2	1,198	30.6
Miscellaneous	4,724	1.7	3,888	1.2	836	21.5
Total revenues	$ 342,835	100.0%	$ 330,002	100.0%	$ 12,833	3.9%

Revenues for the General Corporate Fund come from various major sources: property taxes, replacement taxes, user charges, interest on investments, rental income and tax increment financing distributions. In 2018, General Corporate Fund revenues totaled $342,835,000, an increase of $12,833,000, or 3.9%, from 2017. The major variances in revenues are explained under Key Financial Comparisons on pages 36-37.

A comparative analysis of the General Corporate Fund expenditures by object class for the years ended December 31, 2018 and 2017, is shown in the following schedule (in thousands of dollars):

General Corporate Fund
Comparative Expenditures Schedule

	2018		2017			
	Amount	% of Total	Amount	% of Total	Increase (Decrease)	Percent Increase (Decrease)
Expenditures:						
Employee Cost	$ 233,902	66.0%	$ 230,646	67.0%	$ 3,256	1.4%
Energy Cost	42,246	11.9	39,173	11.4	3,073	7.8
Chemicals	9,564	2.6	9,137	2.7	427	4.7
Solids & waste disposal	13,451	3.8	13,885	4.1	(434)	(3.1)
Repairs to structures/equipment	15,800	4.5	13,164	3.8	2,636	20.0
Materials, parts, & supplies	13,746	3.9	11,152	3.2	2,594	23.3
Insurance	2,143	0.6	3,080	0.9	(937)	(30.4)
Professional services	4,063	1.1	4,150	1.2	(87)	(2.1)
Claims and judgments	5,497	1.6	6,905	2.0	(1,408)	(20.4)
Other	14,024	4.0	12,758	3.7	1,266	9.9
Total expenditures	$ 354,436	100.0%	$ 344,050	100.0%	$ 10,386	3.0%

In 2018, General Corporate Fund expenditures totaled $354,436,000, an increase of $10,386,000, or 3.0%, from 2017. Employee costs, energy costs, and solids and waste disposal were the three largest expenditure components of the General Corporate Fund in 2018, accounting for 81.7% of total expenditures versus 82.5% in 2017. The major variances in expenses are explained under Key Financial Comparisons on pages 36-37.

Other Major Funds. The District's Debt Service Fund accounts for property tax revenues and interest earnings used for the payment of principal and interest on bonded debt. The Debt Service Fund's fund balance at the end of the current fiscal year totaled $134,450,000. The fund balance represented 52.5% of the total Debt Service Fund expenditures. The fund balance for the Debt Service Fund decreased by $12,550,000 in the current year, as a result of an increase in bond principal and interest payments.

The Capital Improvements Bond Fund is a capital projects fund used by the District for the construction and preservation of capital facilities. The Capital Improvements Bond Fund's resources are bond proceeds, government grants, and state revolving fund loans. The fund balance in the Capital Improvements Bond Fund at the end of the current fiscal year totaled $270,128,000. This amount will provide resources for the 2019 capital construction program. The fund balance represented 212.0% of the fund's expenditures. The fund balance decrease of $41,869,000 in the current year was primarily due to continued construction of capital projects and no issuance of general obligation bonds in 2018.

The Retirement Fund is classified as a major fund because total liabilities in prior years have been greater than 10% of the total governmental funds and the fund is used for collection of the tax levy which is remitted to the Pension Board. This presentation remains for comparative purposes. There is no fund balance for the Retirement Fund at the end of the current fiscal year, as all funds are transferred, or due to, the District's Pension Fund.

GENERAL CORPORATE FUND BUDGET ANALYSIS

The General Corporate Fund budget includes the budgetary accounts of the Corporate Fund and Reserve Claim divisions. A comparison of the 2018 original budget to the final amended budget and actual results for the General Corporate Fund is presented in the basic financial statements (Exhibit A-3). A comparison of the General Corporate Fund's 2018 budget and actual results at the appropriation line item level is presented in Combining and Individual Fund Statements and Schedules (Exhibit C-1).

A condensed summary of the 2018 General Corporate Fund budget and actual amounts is presented in the following schedule (in thousands of dollars):

	Budget Original	Budget Final	Actual Amounts	Actual Variance with Final Budget - Positive (Negative)
Revenues:				
Property and personal property replacement taxes	$ 257,631	$ 257,631	$ 257,575	$ (55)
Adjustment for working cash borrowing	(4,599)	(4,599)	(4,599)	—
Adjustment for estimated tax collections	—	—	(17,734)	(17,734)
Tax revenue available for current operations	253,032	253,032	235,242	(17,789)
User charges	46,000	46,000	41,302	(4,698)
Interest on investments	1,600	1,600	3,500	1,900
Tax increment financing distributions	9,725	9,725	10,937	1,212
Land rentals	21,500	21,500	23,036	1,536
Land sales	—	—	—	—
Claims and damage settlements	—	—	179	179
Equity transfer	4,200	4,200	4,200	—
Other	6,069	6,069	8,981	2,912
Total revenues	342,126	342,126	327,377	(14,749)
Operating expenditures:				
Board of Commissioners	5,145	5,145	4,147	998
General Administration	16,725	16,750	15,919	831
Monitoring and Research	31,889	31,889	29,576	2,313
Procurement and Materials Management	9,467	9,467	8,733	734
Human Resources	59,226	59,226	53,676	5,550
Information Technology	17,053	16,982	15,432	1,550
Law	7,503	7,503	6,137	1,366
Finance	3,744	3,744	3,448	296
Engineering	28,322	28,322	26,024	2,298
Maintenance and Operations	191,136	191,182	185,399	5,783
Claims and judgments	30,290	30,290	5,497	24,793
Total expenditures	400,500	400,500	353,990	46,512
Revenues over (under) expenditures	(58,374)	(58,374)	(26,611)	31,763
Fund balance at beginning of year	161,635	161,635	167,366	5,731
Net assets available for future use	(103,261)	(103,261)	—	103,261
Fund balance at beginning of year	58,374	58,374	167,366	108,992
Fund balance at end of the year	$ —	$ —	$ 140,755	$ 140,755

Actual revenues on a budgetary basis for 2018 in the General Corporate Fund totaled $327,377,000, or $14,749,000 less than budgeted revenues, a (4.3)% variance. Property taxes and personal property replacement taxes were $17,789,310 less than the budget, mostly due to the change in the levy and the delay in collections; although the 2018 property tax levy was higher than prior year, actual collections are based on the 2017 levy. User charge receipts were $4,698,000 less than budgeted due to a decrease in the user charge rates. Interest on investments was $1,900,000 over budget as of result of the steady rise in interest rates from the previous few years. The Federal funds rate has risen from .12% in November 2015 to the current level of 2.2%. Land rentals were $1,536,000 more than the budget due to a continued effort to maximize the District's real estate portfolio.

The 2018 General Corporate Fund final appropriation of $400,500,000 remained equal to the original amount. Actual budgetary expenditures totaled $353,990,000, or 85.8%, of the total appropriation. The $46,512,000 excess of appropriations over actual expenditures was primarily due to claims and judgments costs being $24,793,000 less than appropriations, and positive variances in expenditures from all departments, most noticeably a $5,783,000 positive variance for Maintenance and Operations. Expenditures for the Maintenance and Operations department were below appropriations, for reasons that include salary savings resulting from position vacancies throughout the year, fewer than anticipated expenditures for the biosolids operation, which is highly weather dependent, and fewer than anticipated expenditures for chemicals, especially those related to nutrient recovery at the Stickney Water Reclamation Plant.

The District's Reserve Claim fund actual payments were significantly lower than budgeted, resulting in a large variance between budget and actual, as it is the policy of the District to appropriate the entire Reserve Claim fund balance. This is consistent with the Board of Commissioners' policy to accumulate sufficient reserves for payment of future claims without exposing the District to financial risk that could curtail normal operations.

CAPITAL ASSETS AND MODIFIED APPROACH

Capital Assets. The District's reportable capital assets, net of accumulated depreciation, as of December 31, 2018, amounted to $7,652,035,000. Reportable capital assets, net of accumulated depreciation, for 2018 as compared to 2017 are as follows (in thousands of dollars):

	2018	2017	Increase (Decrease)	Percent Increase (Decrease)
Land	$ 145,533	$ 144,204	$ 1,329	0.9%
Permanent easements	2,076	1,463	613	41.9
Buildings	6,799	6,984	(185)	(2.6)
Machinery and equipment	24,679	24,180	499	2.1
Computer software	1,059	1,449	(390)	(26.9)
Depreciable infrastructure	1,640,144	1,651,454	(11,310)	(0.7)
Modified infrastructure	5,410,700	5,085,766	324,934	6.4
Construction in progress	421,045	678,942	(257,897)	(38.0)
Total	$ 7,652,035	$ 7,594,442	$ 57,593	0.8%

Significant capital asset changes during the current fiscal year included the following:

- Total capital asset additions exceeded retirements and depreciation by $57,593,000 in 2018.
- Construction in progress decreased by $257,897,000 from 2017 to 2018 because several large projects were completed in 2018 and moved to infrastructure. Major projects which remained in progress during 2018 include: the Melvina ditch reservoir expansion, Buffalo Creek reservoir expansion, and Phase II of the McCook reservoir.
- The increase in the Modified Infrastructure is primarily due to the substantial completion of the West side primary settling tanks and aerated grit facility, Calumet TARP pumping station improvements, Calumet TARP screens, and flood control/streambank stabilization on Tinley Creek. The remainder of the increase is due to the residual costs of construction projects completed in the prior year being added directly to infrastructure.

In addition to the above, commitments totaling $199,541,000 remain outstanding for ongoing construction projects. Additional disclosure on construction commitments can be found in Note 9 to the basic financial statements.

Modified approach. The District's infrastructure assets include interceptor sewers, wastewater treatment basins, waterway assets (such as reservoirs and aeration stations) and deep tunnels, drop shafts and regulating elements making up a pollution and flood control program called TARP. The District is using the modified approach to report its infrastructure assets, with the exception of the TARP deep tunnels and drop shafts, which are depreciated. The District elected the modified approach to: a) clearly convey to the taxpayers the District's efforts to maintain infrastructure assets at or above an established condition level; b) provide and codify a process to coordinate construction projects between the Engineering and Maintenance and Operations departments; c) readily highlight infrastructure assets that need significant repair/rehabilitation/replacement under a construction project; and d) provide additional evaluative information to bond rating agencies to insure that the District's bond rating is maintained at the highest level.

The Kirie, Hanover, Egan, Central (Stickney), O'Brien, Calumet, Lemont, and Waterways network assets had their initial condition assessments completed between 2002 and 2006. The Hanover, Calumet and Lemont networks each had its most recent condition assessment completed in 2018. Kirie, Central (Stickney) and Waterways each had its most recent condition assessment completed in 2017. The Egan and O'Brien networks each had its most recent condition assessment completed in 2016. (See further discussion of the modified approach in the Required Supplementary Information Section).

As noted in the Required Supplementary Information, the condition ratings for eligible infrastructure assets compare favorably with the District's target level of acceptable or better. In addition, there are no significant differences between the estimated maintenance and preservation costs and the actual costs. Additional disclosure on the District's capital assets and modified approach can be found in the Notes 1.I. and 6 to the basic financial statements and in the Required Supplementary Information section.

DEBT ACTIVITY

Long-term Debt. The District's long-term liabilities as of December 31, 2018, totaled $4,266,057,000. The breakdown of this debt and changes from 2017 to 2018 are as follows (in thousands of dollars):

	2018	2017	Increase (Decrease)	Percent Increase (Decrease)
Net bonds payable	$ 2,978,999	$ 2,879,915	$ 99,084	3.4 %
Bond anticipation notes	109,866	296,529	(186,663)	(62.9)
Claims payable	21,113	30,669	(9,556)	(31.2)
Compensated absences	21,478	22,811	(1,333)	(5.8)
Capital lease	35,979	38,574	(2,595)	(6.7)
Net Pension liability	985,074	1,079,566	(94,492)	(8.8)
Net OPEB liability	113,548	132,976	(19,428)	(14.6)
Total	$ 4,266,057	$ 4,481,040	$ (214,983)	(4.8)%

Significant changes in long-term liabilities during the current fiscal year included the following:

- Net bonds payable increased by $99,084,000 in 2018 due to the conversion of bond anticipation notes to bonds.
- Bond anticipation notes decreased by $186,663,000 in 2018 also due to the conversion of bond anticipation notes to bonds.
- Claims payable decreased by $9,556,000 due to determining the District is not liable for prior claims and any settlements will be resolved within the budgeted contingency amount.
- A number of items factor into the Net Pension Liability; however, the $94,492,000 decrease is mostly attributable to a $95 million adjustment from actual earnings greater than projected. Other factors that affect

the net pension liability include the net change of increases in interest, service cost, administrative costs, and expected versus actual experience and contributions. See Note 7 for additional details.

The District's general obligation bonds have the following long-term credit ratings:

Standard & Poor's Financial Services, LLC	AA+
Fitch, Inc.	AAA
Moody's Investors Service	Aa2

Additional disclosure on debt can be found in Note 11 to the basic financial statements.

Debt Limits and Borrowing Authority. Various applicable sections of the Illinois Compiled Statutes establish the following limitations relative to the District's debt:

Effective October 1, 1997, the District may fund up to 100% 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, through borrowing from the Corporate Working Cash Fund and issuance of tax anticipation notes or warrants. The policy of the District currently is to fund up to 95%. The provisions also pertain to the Construction, Construction Working Cash, Stormwater Management, and Stormwater Working Cash Funds.

The amount of the District's debt may not exceed 5.75% of the last published equalized assessed valuation of taxable real estate within the District, which was $147,945,824,000 for the 2017 property tax levy. At December 31, 2018, the District's statutory debt limit of $8,506,884,823 exceeded the applicable net debt amount of $2,925,702,000 by $5,581,182,823; therefore, the District is in compliance.

The Illinois Compiled Statutes provide authorization for the funding of the District Capital Improvement Program by the issuance of non-referendum capital improvement bonds. Starting in 2003, bonds may be issued during any budget year in an amount not to exceed $150 million plus the amount of any bonds authorized and unissued during the three preceding budget years. The District has issued various series of bonds since the authorization. This limitation is not applicable to refunding bonds, money received from the Water Pollution Control Revolving Fund, and obligations issued as part of the American Recovery and Reinvestment Act of 2009, issued prior to January 1, 2011, commonly known as "Build America Bonds". Bonds authorized, unissued and carried forward were $450,000,000 for the budget year ended December 31, 2018.

The District has non-referendum bonding authority until the year 2024. When the Property Tax Extension Limitation Law was made applicable to Cook County the legislature recognized that the completion of the Tunnel and Reservoir Plan (TARP) was such a high priority that it exempted TARP bonds from tax cap limits. In 2010, the Local Government Debt Reform Act was amended. The District's debt service extension base for the levy year 2018 is $166,066,000 (the "Debt Service Extension Base"), which can be increased each year by the lesser of 5% or the percentage increase in the Consumer Price Index (as defined in the Limitation Law). The Property Tax Extension Limitation Law has been amended so that the issuance of bonds by the District to construct TARP will not reduce the District's ability to issue limited bonds for other major capital projects. The amount of outstanding non-referendum Capital Improvement Bonds may not exceed 3.35% of the last known equalized assessed valuation of taxable property within the District. At December 31, 2018, the District's outstanding capital improvement and refunding bonds (excluding State Revolving Fund bonds and alternate bonds) of $1,757,715,000 did not exceed the limitation of $4,956,185,000.

Outstanding capital improvement and refunding bonds related to the Clean-up and Flood Control Program and the remaining authorization at December 31, 2018, are indicated in the following schedule (in millions of dollars):

Capital Improvement and Refunding Bonds
Outstanding and Remaining Authorization

Year of Issue	Total	Capital Improvement	Refunding
2007	$ 285	$ —	$ 285
2009	600	600	—
2011	281	281	—
2014	216	163	53
2016	376	54	322
Total bonds outstanding at December 31, 2018	1,758	$ 1,098	$ 660
Remaining bond authorization at December 31, 2018	3,198		
Total bond authorization at December 31, 2018	$ 4,956		

The amount of non-referendum Corporate Working Cash Fund bonds, when added to (a) proceeds from the sale of Working Cash Fund bonds previously issued, (b) any amounts collected from the Corporate Working Cash Fund levy, and (c) amounts transferred from the Construction Working Cash Fund, may not exceed 90% of the amount produced by multiplying the maximum general corporate tax rate permitted by the last known equalized assessed valuation of all property in the District at the time the bonds are issued, plus 90% of the District's last known entitlement of the Personal Property Replacement Tax.

Additional information on the District's debt can be found in Note 11 to the Basic Financial Statements and Exhibits I-10 through I-12 of the Statistical Section.

ECONOMY AND OTHER CONDITIONS IMPACTING THE DISTRICT

The equalized assessed valuation of the District has experienced a 0.84% average growth rate over the last ten years although the 2017 equalized assessed valuation of $147,945,824 is 5% higher than the previous year. The pace of home sales is increasing and home prices continued to climb because there is insufficient inventory to meet the current demand. The median price of homes in the Chicago metro area was up 4.3% compared to the prior year. A strong fund balance, along with an emphasis on controlling expenditures, should allow the District to protect its operations from economically sensitive revenues stemming from fiscal constraints at the federal and state levels. The boundaries of the District encompass 91% of the land area of Cook County. The District is located in one of the strongest and most economically diverse geographical areas of Illinois. Unemployment for the Chicago-Naperville-Joliet Metropolitan Division decreased to a seasonally adjusted rate of 4.1% for 2018, down from 4.8% from 2017. Employment, tourism, manufacturing, and the commercial and residential real estate markets have all been steadily improving in the past few years.

Corporate Fund. The Corporate Fund is the District's general operating fund and includes appropriation requests for all the day-to-day operational costs anticipated for 2019. The total appropriation for the Corporate Fund in 2019 is $377.6 million, an increase of $7.4 million, or 2.0% from the 2018 Adjusted Budget. The 2019 tax levy for the Corporate Fund is $223.9 million, an increase of $16.5 million or 7.4% compared to the 2018 Adjusted Budget.

Property taxes and user charges are the primary funding sources for the District's Corporate Fund. Illinois law limits the tax rate of this fund to 41 cents per $100 of equalized assessed valuation The estimated tax rate for the Corporate Fund in 2019 is 16.22 cents, an increase of 0.1 cent from 2018 as adjusted. User charges 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 major categories of payers: chemical manufacturers, food processors, and government services, are generally expected to maintain their recent level of discharges.

Stormwater Management Fund. The Stormwater Management Fund was established by Public Act 93-1049 on January 1, 2005. This fund accounts for tax levies and other revenue to be used for stormwater management activities throughout all of Cook County, including areas that currently lie outside the District's boundaries. The fund consolidates the stormwater management activities of the Engineering and Maintenance & Operations Departments.

The Stormwater Management Fund appropriation for 2019 totals $91.4 million, an increase of $25.8 million or 39.4% from the 2018 Adjusted Budget. Property taxes are the primary funding source for the District's Stormwater Management Fund. Illinois law limits the tax rate of this fund to 5 cents per $100 of equalized assessed valuation. The estimated tax rate for the Stormwater Management Fund in 2019 is 3.37 cents, which is an increase of 0.2 cents from 2018 as adjusted.

Although the primary funding source for the Fund is the Stormwater Property Tax Levy, the District also issued Alternate Revenue Bonds funded from the Stormwater Levy in both the 2015 and 2016 bond offerings. The "green" projects financed by the bonds involves the development, design, planning and construction of regional and local stormwater facilities provided for in the county wide stormwater management plan and the acquisition of real property.

By means of this program, the District has completed Detailed Watershed Plans (DWP) for all six 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.

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 of projects addresses regional overbank flooding. The selected projects constitute the Stormwater Capital Improvement Program, and will be scheduled according to funding availability.

Through the management of the SSMP, the M&O Department works to reduce flooding in urbanized areas. The streams that flow through the neighborhoods of Cook County are more than just a scenic part of the landscape but also serve the vital function of draining stormwater and preventing flooding. In order to function, the streams must be maintained, which includes removing blockages and preventing future blockages by removing dead and unhealthy trees and invasive species.

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.

Capital Improvement Program: Construction Fund and Capital Improvements Bond Fund. The District's overall Capital Program includes 2019 project awards, land acquisition, support, future projects, and projects under construction, with a total cost of approximately $1.2 billion. 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, and which cannot be removed without, in some way, impairing the facility or structure.

Projects under construction have been presented and authorized in previous District Budgets and are recognized in the Annual Budget as both outstanding liabilities in the Capital Improvements Bond Fund, and as re-appropriations in the Construction Fund. Future projects, not yet appropriated, are included in the Annual Budget to present a comprehensive picture of the District's Capital program. These future projects will be requested for appropriation subject to their priority, design, and available funding.

The District utilizes two funds for its Capital program, the Construction Fund and the Capital Improvements Bond Fund. The Construction Fund is utilized as a "pay as you go" capital rehabilitation and modernization program. Capital projects are financed by a tax levy 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, Construction, or Capital Improvements Bond Fund based on the nature of the project, dollar magnitude, and useful life of the improvement. The Construction Fund is used for operations-related projects, where the useful life of the improvement is less than 20 years.

The Capital Improvements Bond Fund, the District's other capital fund, 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, and State Revolving Fund loans.

The 1995 Tax Extension Limitation Law (Tax Cap), and subsequent amendments to the bill, dramatically impacted the methods of financing the Capital Improvements Bond Fund. The original legislation required, in general, that all new debt be approved by referendum. However, an exemption for projects initiated before October 1, 1991 was granted to the District to enable completion of the Tunnel and Reservoir Plan (TARP). The bill was later amended to establish a "debt extension base," which allowed local governments, with non-referendum authority, to continue to issue non-referendum debt in terms of "limited bonds" as long as their annual debt service levies did not exceed 1994 levels. This law was further amended in 1997 to exclude TARP project debt from this debt service extension base. The passage of legislation in 1997 allowing for expanded authority to issue "limited bonds" by excluding pre-existing TARP projects provides additional financing flexibility to proceed with our Capital program.

The United States Environmental Protection Agency (USEPA) 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 are not used to provide grants, but must be available to provide loans for the construction of publicly owned wastewater treatment works. 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. In 2018, the District received $98,741,900 in cash receipts for SRF projects.

Construction Fund. The Construction fund appropriation for 2019 totals $18,340,300, a decrease of $7,740,300 or 29.7% from the 2018 Adjusted Budget.

Capital projects in the Construction Fund are primarily supported by property taxes and thus subject to the Tax Cap. The 2019 tax levy planned for the Construction Fund is $7,600,000, a decrease of $4.1 million or 35.0% from the 2018 Adjusted Levy.

Capital Improvements Bond Fund. The 2019 appropriation for the Capital Improvements Bond Fund is $378,173,800, an increase of $65,190,900 or 20.8% from the 2018 Adjusted Budget. Capital projects pursued by the District are: mission critical, improve environmental quality, preservation/rehabilitation of existing infrastructure or commitment to the community through process optimization. The appropriation is based on the scheduled award of $275,206,000 in projects. Capital Improvements Bond Fund projects scheduled for award in 2019 with estimated award values include one TARP modification project of $2.5 million; eleven plant expansion and improvement projects at $38.6 million; and fourteen facilities replacement projects at $89.1 million.

The decrease in appropriation for the Capital Improvements Bond Fund of $65,190,900 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 $102,967,800 million appropriation for this fund will provide for studies, services, and supplies to support District design and administration of proposed and ongoing construction activity, including the TARP reservoirs. A comprehensive narrative, and exhibits detailing our entire Capital program, are provided in the Capital Budget (Section V) of the 2019 budget document.

A listing and description of proposed projects, and projects under construction scheduled for 2019, can be found in the Capital Budget (Section V) of the 2019 Budget document.

Other Post-Employment Benefits (OPEB) Trust. The District provides subsidized health care benefits for its retirees. The Governmental Accounting Standards Board (GASB) Pronouncement 75 was implemented in 2018 and replaces the requirements of GASB pronouncement 45, which initially required reporting of the future liability for maintaining these benefits in the Comprehensive Annual Financial Report (CAFR). GASB 75 further addresses accounting and reporting for OPEB including establishing standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures.

In 2006, the District proposed state legislation to give authority to establish an OPEB trust. Public Act 95-394 became effective on August 23, 2007. Since inception, the District has budgeted and transferred a total of $127,400,000 million into the OPEB Trust Fund. The District has continued to contribute $5.0 million per year until the Trust is fully funded. Total net position was $188.3 million as of December 31, 2018. The accumulated unfunded OPEB obligation was estimated at approximately $113.5 million at December 31, 2017.

In 2007, the Board adopted an initial advance funding policy meant to (i) improve the District's financial position by reducing the amount of future contributions and (ii) serve to establish a reserve to help ensure the financial ability to provide healthcare coverage for District retirees and annuitants in the future. On October 2, 2014, the advance funding policy was amended by the Board with the following guidelines:

Target Funding Level:	100% maximum
Funding Period	12 years
Funding Amount	$5 million funding in each of the twelve years 2015 through 2026, with no further advance funding contribution required after 2026

Beginning in 2027, cash to be withdrawn from the Trust to fund claims and insurance premiums will be determined by the Trust's actuary with the target funding level to be maintained at 100% for all future years. There is currently no legal requirement for the District to partially or fully fund the OPEB Trust Fund and any funding is on a voluntary basis.

The policy adopted by the District is cautious by design, and will provide ample opportunity for adjustment as experience is gained. Future direction may also be changed significantly by national health care policies and programs.

Pension and OPEB Reporting Changes. The District implemented GASB 68, Accounting and Financial Reporting for Pensions, beginning with the year ended December 31, 2015. The OPEB Trust Fund implemented GASB 74 (for post-retirement plan) in 2017 and the District implemented GASB 75 (for employer) in 2018.

Organized Labor. The District has seven collective bargaining agreements that cover sixteen unions and include approximately 782 of the District's employees for the purposes of establishing wages and benefits. Three-year successor agreements were negotiated with all bargaining units in 2017 and will expire in 2020.

Retirement Fund. On August 3, 2012, Governor Quinn signed House Bill 4513, now Public Act 97-0894, into law. The tax multiple, which is limited by state statute, was increased in 2013 from 2.19 to the amount sufficient to meet the Fund's actuarially determined contribution requirement, but not to exceed an amount equal to 4.19 times the employee contributions two years prior. The employee contributions for Tier 1 employees (those hired before January 1, 2011) increased 1% each year for 3 years beginning January 1, 2013, increasing the contribution rate from 9% to 12%. The employee contributions will remain at 12% until the funded ratio reaches 90% then the contribution rate will be reduced to 9%.

REQUESTS FOR ADDITIONAL INFORMATION

This financial report is intended to provide a general summary of the District's finances to interested parties, and to demonstrate the District's accountability over the resources it receives. Please contact the Clerk/Director of Finance or Comptroller at the Metropolitan Water Reclamation District of Greater Chicago, 100 E. Erie Street, Chicago, Illinois 60611-2803, (312) 751-6500, if additional information is needed.

Page intentionally left blank

BASIC FINANCIAL STATEMENTS

Exhibit A-1
Governmental Funds Balance Sheets/Statements of Net Position

December 31, 2018
(with comparative amounts for prior year)

(in thousands of dollars)	General Corporate Fund 2018	General Corporate Fund 2017	Debt Service Fund 2018	Debt Service Fund 2017	Capital Improvement Bond Funds 2018	Capital Improvement Bond Funds 2017
Assets and deferred outflows of resources						
Assets						
Cash	$ 7,624	$ 21,162	$ 5,256	$ 11,145	$ 11,717	$ 14,113
Certificates of deposit	63,695	116,881	19,037	10,051	109,514	56,219
Investments (note 4)	149,404	99,282	61,587	88,768	169,738	255,468
Prepaid insurance	5,201	4,101	—	—	—	—
Taxes receivable, net (note 5)	237,839	221,802	230,351	224,578	—	—
Other receivables, net (note 5)	8,588	8,599	—	—	9,263	42,497
Due from other funds (note 12)	132	101	—	—	—	—
Restricted deposits	350	527	—	—	—	—
Inventories	33,436	34,787	—	—	—	—
Capital assets not being depreciated/amortized (note 6)	—	—	—	—	—	—
Capital assets being depreciated/amortized, net (note 6)	—	—	—	—	—	—
Total assets	506,269	507,242	316,231	334,542	300,232	368,297
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	$ 506,269	$ 507,242	$ 316,231	$ 334,542	$ 300,232	$ 368,297
Liabilities, deferred inflows of resources, and fund balances/net position						
Liabilities:						
Accounts payable and other liabilities (note 5)	$ 25,626	$ 21,924	$ —	$ —	$ 29,156	$ 55,356
Due to Pension Trust Fund (note 12)	—	—	—	—	—	—
Due to other funds (note 12)	—	—	—	—	—	—
Accrued interest payable	—	—	—	—	—	—
Unearned Revenue (note 5)	8,427	8,139	—	—	—	—
Long-term liabilities: (note 11)						
Due within one year	—	—	—	—	—	—
Due in more than one year	—	—	—	—	—	—
Total liabilities	34,053	30,063	—	—	29,156	55,356
Deferred inflows of resources:						
Unavailable tax revenue (note 5)	187,674	185,236	181,781	187,542	—	—
Other unavailable revenue (note 5)	—	—	—	—	948	944
Deferred inflows for pension and OPEB related amounts	—	—	—	—	—	—
Total deferred inflows of resources	187,674	185,236	181,781	187,542	948	944
Fund balances						
Nonspendable:						
Prepaid insurance	5,201	4,101	—	—	—	—
Inventories	33,436	34,787	—	—	—	—
Restricted for						
Deposits	350	527	—	—	—	—
Working cash	282,055	280,437	—	—	—	—
Reserve claims	28,272	25,890	—	—	—	—
Debt service	—	—	134,450	147,000	—	—
Capital projects	—	—	—	—	111,809	164,524
Construction	—	—	—	—	—	—
Assigned	—	—	—	—	158,319	147,473
Unassigned (Deficit)	(64,772)	(53,799)	—	—		—
Total fund balances	284,542	291,943	134,450	147,000	270,128	311,997
Total liabilities, deferred inflows, and fund balances	$ 506,269	$ 507,242	$ 316,231	$ 334,542	$ 300,232	$ 368,297
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						

See accompanying notes to the basic financial statements

	Retirement Fund		Other Governmental / Nonmajor Funds		Total Governmental Funds		Adjustments (Note 2a)		Statements of Net Position	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
	$ —	$ —	$ 1,695	$ 2,590	$ 26,292	$ 49,010	$ —	$ —	$ 26,292	$ 49,010
	—	—	45,523	29,069	237,769	212,220	—	—	237,769	212,220
	—	—	40,926	32,958	421,655	476,476	—	—	421,655	476,476
	—	—	76	79	5,277	4,180	—	—	5,277	4,180
	73,515	75,042	57,442	55,128	599,147	576,550	—	—	599,147	576,550
	—	—	954	746	18,805	51,842	—	—	18,805	51,842
	—	—	—	—	132	101	(132)	(101)	—	—
	—	—	—	—	350	527	—	—	350	527
	—	—	—	—	33,436	34,787	—	—	33,436	34,787
	—	—	—	—	—	—	5,979,354	5,910,375	5,979,354	5,910,375
	—	—	—	—	—	—	1,672,681	1,684,067	1,672,681	1,684,067
	73,515	75,042	146,616	120,570	1,342,863	1,405,693	7,651,903	7,594,341	8,994,766	9,000,034
	—	—	—	—	—	—	4,372	4,899	4,372	4,899
	—	—	—	—	—	—	167,580	200,467	167,580	200,467
	—	—	—	—	—	—	171,952	205,366	171,952	205,366
	$ 73,515	$ 75,042	$ 146,616	$ 120,570	$ 1,342,863	$ 1,405,693	$ 7,823,855	$ 7,799,707	$ 9,166,718	$ 9,205,400
	$ —	$ —	$ 12,107	$ 4,886	$ 66,889	$ 82,166	$ —	$ —	$ 66,889	$ 82,166
	19,034	15,868	—	—	19,034	15,868	68,133	73,990	87,167	89,858
	—	—	132	101	132	101	(132)	(101)	—	—
	—	—	—	—	—	—	17,129	15,899	17,129	15,899
	—	—	—	—	8,427	8,139	—	—	8,427	8,139
	—	—	—	—	—	—	148,202	167,351	148,202	167,351
	—	—	—	—	—	—	4,117,855	4,313,689	4,117,855	4,313,689
	19,034	15,868	12,239	4,987	94,482	106,274	4,351,187	4,570,828	4,445,669	4,677,102
	54,481	59,174	45,330	46,028	469,266	477,980	(469,266)	(477,980)	—	—
	—	—	—	—	948	944	(948)	(944)	—	—
	—	—	—	—	—	—	100,669	15,102	100,669	15,102
	54,481	59,174	45,330	46,028	470,214	478,924	(369,545)	(463,822)	100,669	15,102
	—	—	76	79	5,277	4,180	(5,277)	(4,180)		
	—	—	—	—	33,436	34,787	(33,436)	(34,787)		
	—	—	—	—	350	527	(350)	(527)		
	—	—	60,093	59,713	342,148	340,150	(342,148)	(340,150)		
	—	—	—	—	28,272	25,890	(28,272)	(25,890)		
	—	—	—	—	134,450	147,000	(134,450)	(147,000)		
	—	—	21,711	4,146	133,520	168,670	(133,520)	(168,670)		
	—	—	7,243	5,696	7,243	5,696	(7,243)	(5,696)		
	—	—	—	—	158,319	147,473	(158,319)	(147,473)		
	—	—	(76)	(79)	(64,848)	(53,878)	64,848	53,878		
	—	—	89,047	69,555	778,167	820,495	(778,167)	(820,495)		
	$ 73,515	$ 75,042	$ 146,616	$ 120,570	$ 1,342,863	$ 1,405,693				
Net position										
Net investment in capital assets							4,822,532	4,710,123	4,822,532	4,710,123
Restricted for corporate working cash							282,055	280,437	282,055	280,437
Restricted for reserve claim							11,728	9,976	11,728	9,976
Restricted for debt service							299,106	318,646	299,106	318,646
Restricted for capital projects							53,443	32,067	53,443	32,067
Restricted for construction working cash							22,395	22,204	22,395	22,204
Restricted for stormwater working cash							37,698	37,509	37,698	37,509
Unrestricted (Deficit)							(908,577)	(897,766)	(908,577)	(897,766)
Total net position							$ 4,620,380	$ 4,513,196	$ 4,620,380	$ 4,513,196

Exhibit A-2
Statements of Governmental Fund Revenues, Expenditures and Changes in Fund Balances/Statements of Activities

Year ended December 31, 2018
(with comparative amounts for prior year)

(in thousands of dollars)	General Corporate Fund 2018	General Corporate Fund 2017	Debt Service Fund 2018	Debt Service Fund 2017	Capital Improvement Bond Funds 2018	Capital Improvement Bond Funds 2017
Revenues						
General revenues:						
Property taxes	$ 235,471	$ 212,679	$ 235,489	$ 207,606	$ —	$ —
Personal property replacement tax	17,970	28,715	—	—	—	—
Interest on investments	5,256	3,006	2,458	1,433	6,188	3,659
Land sales	—	50	—	—	—	—
Tax increment financing distributions	6,153	9,100	—	—	—	—
Claims and damage settlements	1,470	199	—	—	10	574
Miscellaneous	4,724	3,888	36	10	2,646	1,958
Gain on sale of capital assets	—	—	—	—	—	—
Program revenues						
Charges for services:						
User charges	44,000	51,098	—	—	—	—
Land rentals	22,678	17,352	—	—	—	—
Fees, forfeits, and penalties	5,113	3,915	—	—	—	—
Capital grants and contributions:						
Federal and state grants	—	—	—	—	16,736	14,555
Total revenues	342,835	330,002	237,983	209,049	25,580	20,746
Expenditures/Expenses						
Board of Commissioners	4,148	4,075	—	—	—	—
General Administration	15,816	15,766	—	—	—	—
Monitoring and Research	30,204	29,696	—	—	—	—
Procurement and Materials Management	7,236	5,954	—	—	—	—
Human Resources	53,227	54,225	—	—	—	—
Information Technology	15,125	12,728	—	—	—	—
Law	6,139	5,922	—	—	—	—
Finance	3,450	3,530	—	—	—	—
Engineering	26,031	26,068	—	—	—	—
Maintenance and Operations	187,563	179,181	—	—	—	—
Pension costs	—	—	—	—	—	—
OPEB costs	—	—	—	—	—	—
Claims and judgments	5,497	6,905	—	—	—	—
Construction costs	—	—	—	—	123,029	240,640
Loss on disposal of capital assets	—	—	—	—	—	—
Depreciation and amortization (unallocated)	—	—	—	—	—	—
Debt service:						
Redemption of bonds and capital lease	—	—	141,701	111,222	2,595	2,473
Interest and bond issuance costs	—	—	114,603	117,604	1,795	1,916
Total expenditures/expenses	354,436	344,050	256,304	228,826	127,419	245,029
Revenues over (under) expenditures	(11,601)	(14,048)	(18,321)	(19,777)	(101,839)	(224,283)
Other financing sources (uses)						
Bond anticipation notes issued	—		—	—	64,170	175,245
Bond anticipation notes converted	—	—	—	—	254,211	39,281
Bond anticipation notes refunded	—	—	—	—	(254,211)	(39,281)
Transfers	4,200	6,000	5,771	3,269	(4,200)	(13,000)
Total other financing sources (uses)	4,200	6,000	5,771	3,269	59,970	162,245
Revenues and other financing sources (uses) over (under) expenditures	(7,401)	(8,048)	(12,550)	(16,508)	(41,869)	(62,038)
Change in net position	—		—	—	—	—
Fund balances/net position						
Beginning of the year, as restated (note 16)	291,943	299,991	147,000	163,508	311,997	374,035
End of the year	$ 284,542	$ 291,943	$ 134,450	$ 147,000	$ 270,128	$ 311,997

See accompanying notes to the basic financial statements

Retirement Fund		Other Governmental / Nonmajor Funds		Total Governmental Funds		Adjustments (Note 2b)		Statements of Activities	
2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
$ 73,609	$ 61,097	$ 58,675	$ 45,550	$ 603,244	$ 526,932	$ (4,020)	$ 36,832	$ 599,224	$ 563,764
19,048	14,479	—	—	37,018	43,194	—	—	37,018	43,194
—	—	1,629	686	15,531	8,784	—	—	15,531	8,784
—	—	—	—	—	50	—	(50)	—	—
—	—	—	—	6,153	9,100	—	—	6,153	9,100
—	—	2	10	1,482	783	—	—	1,482	783
11	3	249	19	7,666	5,878	(38)	(59)	7,628	5,819
—	—	—	—	—	—	—	50	—	50
—	—	—	—	44,000	51,098	—	—	44,000	51,098
—	—	—	—	22,678	17,352	—	—	22,678	17,352
—	—	3	1,486	5,116	5,401	—	—	5,116	5,401
—	—	346	—	17,082	14,555	4	3	17,086	14,558
92,668	75,579	60,904	47,751	759,970	683,127	(4,054)	36,776	755,916	719,903
—	—	—	—	4,148	4,075	19	19	4,167	4,094
—	—	—	—	15,816	15,766	247	25	16,063	15,791
—	—	—	—	30,204	29,696	58	(105)	30,262	29,591
—	—	—	—	7,236	5,954	(134)	(7)	7,102	5,947
—	—	—	—	53,227	54,225	(45)	42	53,182	54,267
—	—	—	—	15,125	12,728	48	6	15,173	12,734
—	—	—	—	6,139	5,922	(116)	(92)	6,023	5,830
—	—	—	—	3,450	3,530	10	(10)	3,460	3,520
—	—	—	—	26,031	26,068	1,769	1,762	27,800	27,830
—	—	—	—	187,563	179,181	97	(187)	187,660	178,994
92,668	75,579	—	—	92,668	75,579	10,325	31,235	102,993	106,814
—	—	—	—	—	—	(6,955)	1,486	(6,955)	1,486
—	—	—	—	5,497	6,905	(9,556)	(9,567)	(4,059)	(2,662)
—	—	35,641	27,857	158,670	268,497	(72,857)	(182,962)	85,813	85,535
—	—	—	—	—	—	92	202	92	202
—	—	—	—	—	—	11,849	12,063	11,849	12,063
—	—	—	—	144,296	113,695	(144,296)	(113,695)	—	—
—	—	—	—	116,398	119,520	(8,291)	(9,970)	108,107	109,550
92,668	75,579	35,641	27,857	866,468	921,341	(217,736)	(269,755)	648,732	651,586
—		25,263	19,894	(106,498)	(238,214)	213,682	306,531		
—	—	—	—	64,170	175,245	(64,170)	(175,245)	—	—
—	—	—	—	254,211	39,281	(254,211)	(39,281)	—	—
—	—	—	—	(254,211)	(39,281)	254,211	39,281	—	—
—	—	(5,771)	3,731	—	—	—	—	—	—
—	—	(5,771)	3,731	64,170	175,245	(64,170)	(175,245)	—	—
—	—	19,492	23,625	(42,328)	(62,969)	42,328	62,969	—	—
—	—	—		—	—	107,184	68,317	107,184	68,317
—	—	69,555	45,930	820,495	883,464	—	—	4,513,196	4,444,879
$ —	$ —	$ 89,047	$ 69,555	$ 778,167	$ 820,495	$ —	$ —	$ 4,620,380	$ 4,513,196

Exhibit A-3
General Corporate Fund
Statements of Revenues, Expenditures and Changes in Fund Balance
Budget and Actual on Budgetary Basis

Year ended December 31, 2018

(in thousands of dollars)

	Budget			Actual Variance With Final Budget - Positive (Negative)
	Original	Final	Actual Amounts	
Revenues:				
Property taxes:				
Gross levy	$ 240,466	$ 240,466	$ 240,466	$ —
Allowance for uncollectible taxes	(8,416)	(8,416)	(8,416)	—
Net property tax levy	232,050	232,050	232,050	—
Property tax collections	5,731	5,731	5,676	(55)
Personal property replacement tax:				
Entitlement	19,850	19,850	19,850	—
Total tax revenue	257,631	257,631	257,575	(55)
Adjustment for working cash borrowing	(4,599)	(4,599)	(4,599)	—
Adjustment for estimated tax collections	—	—	(17,734)	(17,734)
Tax revenue available for current operation	253,032	253,032	235,242	(17,789)
Interest on investments	1,600	1,600	3,500	1,900
Tax increment financing distributions	9,725	9,725	10,937	1,212
Miscellaneous	5,277	5,277	7,619	2,342
User charges	46,000	46,000	41,302	(4,698)
Land rentals	21,500	21,500	23,036	1,536
Claims and damage settlements	—	—	179	179
Equity transfer from capital improvement bond fund	4,200	4,200	4,200	—
Fees, forfeits, and penalties	792	792	1,362	570
Total revenues	342,126	342,126	327,377	(14,749)
Expenditures:				
Board of Commissioners	5,145	5,145	4,147	998
General Administration	16,725	16,750	15,919	831
Monitoring and Research	31,889	31,889	29,576	2,313
Procurement and Materials Management	9,467	9,467	8,733	734
Human Resources	59,226	59,226	53,676	5,550
Information Technology	17,053	16,982	15,432	1,550
Law	7,503	7,503	6,137	1,366
Finance	3,744	3,744	3,448	296
Engineering	28,322	28,322	26,024	2,298
Maintenance and Operations	191,136	191,182	185,399	5,783
Claims and judgments	30,290	30,290	5,497	24,793
Total expenditures	400,500	400,500	353,988	46,512
Revenues over (under) expenditures	(58,374)	(58,374)	(26,611)	31,763
Fund balances at beginning of year	161,635	161,635	167,366	5,731
Net assets available for future use	(103,261)	(103,261)	—	103,261
Fund balances at beginning of the year	58,374	58,374	167,366	108,992
Fund balances at end of year	$ —	$ —	$ 140,755	$ 140,755

See accompanying notes to the basic financial statements

Exhibit A-4
Retirement Fund
Statements of Revenues, Expenditures and Changes in Fund Balance
Budget and Actual on Budgetary Basis

Year ended December 31, 2018

(in thousands of dollars)

Retirement Fund	Final Budget	Actual on Budgetary Basis	Actual Variance with Final Budget - Positive (Negative)
Revenues:			
Property taxes	$ 70,868	$ 73,609	$ 2,741
Personal property replacement tax	18,736	19,048	312
Miscellaneous	—	11	11
Total tax revenue	89,604	92,668	3,064
Operating expenditures:			
Pension costs	89,604	92,668	(3,064)
Total expenditures	89,604	92,668	(3,064)
Revenues over (under) expenditures	—	—	—
Fund balances at beginning of the year	—	—	—
Fund balances at end of the year	$ —	$ —	$ —

See accompanying notes to the basic financial statements

Exhibit A-5
Pension and Other Post Employment Benefits Trust Funds
Statements of Fiduciary Net Position

December 31, 2018
(with comparative amounts for prior year)

	(in thousands of dollars) 2018	2017
Assets		
Cash	$ 2,131	$ 1,990
Receivables		
Employer contributions - taxes (net of allowance for uncollectible amounts of $4,203 in 2018 & $3,883 in 2017)	87,281	89,604
Securities sold	—	42,172
Forward foreign exchange contracts	111,905	123,333
Accrued interest and dividends	3,939	3,733
Accounts receivable	53	43
Total receivables	203,178	258,885
Investments at fair value		
Equities	470,320	568,135
U.S. Government and government agency obligations	91,161	96,641
Corporate and foreign government obligations	145,707	143,848
Fixed Income Mutual Funds	69,189	62,805
Mutual and exchange traded funds	203,989	215,611
Pooled funds - equities	215,174	251,104
Pooled funds - fixed income	152,257	193,075
Limited partnerships - real estate	63,898	—
Short-term investment funds	19,214	47,695
Total investments	1,430,909	1,578,914
Securities lending capital	14,166	27,448
Total assets	1,650,384	1,867,237
Liabilities		
Accounts payable	1,224	1,374
Securities purchased	—	17,037
Due to broker	102,681	124,384
Securities lending collateral	14,166	27,448
Total liabilities	118,071	170,243
Net position restricted for pension and OPEB benefits	$ 1,532,313	$ 1,696,994

See accompanying notes to the basic financial statements

Exhibit A-6
Pension and Other Post Employment Benefits Trust Funds
Statements of Changes in Fiduciary Net Position

Year ended December 31, 2018
(with comparative amounts for prior year)

(in thousands of dollars)

	2018	2017
Additions:		
Contributions:		
Employer contributions	$ 104,738	$ 108,289
Employee contributions	21,033	20,840
Total contributions	125,771	129,129
Investment income:		
Net appreciation (depreciation) in fair value of investments	(138,954)	198,551
Interest and dividend income	28,879	25,979
Total investment income (loss)	(110,074)	224,530
Less investment expenses	(5,079)	(4,663)
Investment income (loss) net of expenses	(115,153)	219,867
Security lending activities:		
Security lending income	556	448
Borrower rebates	(164)	(13)
Bank fees	(85)	(89)
Net income from securities lending activities	307	346
Other	15	3
Total additions	10,939	349,345
Deductions:		
Annuities and benefits		
Employee annuitants	133,184	127,099
Retiree health care benefits	12,571	13,431
Surviving spouse annuitants	25,264	24,203
Child annuitants	143	142
Ordinary disability benefits	856	631
Duty disability benefits	113	77
Total annuities and benefits	172,131	165,583
Refunds of employee contributions	1,762	2,560
Administrative expenses	1,727	1,651
Total deductions	175,620	169,794
Net increase (decrease)	(164,681)	179,551
Net position held in trust for pension and OPEB benefits		
Beginning of year	1,696,994	1,517,442
End of year	$ 1,532,313	$ 1,696,994

See accompanying notes to the basic financial statements

NOTES TO THE BASIC FINANCIAL STATEMENTS

Notes to the Basic Financial Statements

Index to Notes

1. Summary of Significant Accounting Policies

The significant accounting policies of the Metropolitan Water Reclamation District of Greater Chicago (District) conform to generally accepted accounting principles (GAAP) in the United States of America as applicable to governmental units and are described below.

a. Financial Reporting Entity - The District is a municipal corporation governed by an elected nine-member Board of Commissioners. As required by GAAP, these financial statements present the District (the primary government) and its component units, the Metropolitan Water Reclamation District Retirement Fund (Pension Trust Fund - Note 7) and the Metropolitan Water Reclamation District Retiree Health Care Trust Fund (OPEB Trust Fund - Note 8). The Board of Trustees for the Pension Trust Fund is composed of seven members. Two of these Trustees are Commissioners appointed by the Board of Commissioners of the District, four are District employees elected by members of the fund and one is a retired employee of the District. Although the Pension Trust Fund and OPEB Trust Fund are legally separate entities, for which the primary government is not financially accountable, they are included in the District's basic financial statements as fiduciary funds. The nature and significance of the Pension Trust Fund and OPEB Trust Fund's relationship with the primary government is such that exclusion would render the District's financial statements incomplete or misleading. Complete financial statements of the Pension Trust Fund can be obtained from their administrative office at 111 East Erie Street, Chicago, Illinois, 60611-2898 or on their website: mwrdrf.org. Complete financial statements of the OPEB Trust Fund can be obtained from the Treasurer of the Metropolitan Water Reclamation District at 100 East Erie Street, Chicago, Illinois 60611-2829 or on the District's website: mwrd.org.

b. Government-wide and Fund Financial Statements - The District's basic financial statements include government-wide financial statements and fund financial statements.

The government-wide financial statements include the Statements of Net Position and the Statements of Activities, and contain information for all the District's governmental activities but exclude the Pension Trust Fund and the OPEB Trust Fund, fiduciary funds whose resources are not available to finance the District's operations. The effect of interfund transactions has been removed from the government-wide statements. The Statements of Net Position report the financial condition of the District. This statement includes all existing resources and obligations, both current and non-current, with the difference between the two reported as net position. The Statements of Activities report the District's operating results for the year with the difference between expenses and revenues representing the changes in net position. Expenses are reported by department while revenues are segregated by program revenues and general revenues. Program revenues contain charges for services including user charges, land rentals, fees, forfeitures, penalties and capital grants. General revenues include taxes, interest on investments, and all other revenues not classified as program revenues.

In government, the basic accounting and reporting entity is a "fund." A fund is defined as an independent fiscal and accounting entity, with a self-balancing set of accounts which record financial resources, together with all related liabilities, obligations, reserves, and equities, which are segregated for the purpose of carrying on specific activities or attaining certain objectives, in accordance with special regulations, restrictions or limitations. Separate fund financial statements are included in the basic financial statements for the major governmental funds. The emphasis of the governmental fund financial statements is on major funds, with each major fund displayed as a separate column. The governmental fund financial statements include a budgetary statement for the General Corporate Fund and the Retirement Fund.

As a special purpose government with only one function, the District has elected to make a combined presentation of the governmental fund statements and the government-wide statements; therefore, the basic financial statements include combined Governmental Funds Balance Sheets/Statements of Net Position (Exhibit A-1) and combined Statements of Governmental Fund Revenues, Expenditures, and Changes in Fund Balances/Statements of Activities (Exhibit A-2). Individual line items of the governmental fund financials are reconciled to government-wide financials in a separate column on the combined presentations, with in-depth explanations offered in Note 2.

The District reports the following major governmental funds:

General Corporate Fund

The fund was established to account for an annual property tax levy, and certain other revenues, which are to be used for the payments of general expenditures of the District not specifically chargeable to other funds. Included in this fund are accounts maintained by the District restricted to making temporary loans to the Corporate Fund. These accounts were established under Chapter 70, ILCS 2605/9b of the Illinois Compiled Statutes, which refers to these accounts as a "Working Cash Fund." Amounts borrowed from the Working Cash Fund in one year are generally repaid by the Corporate Fund from tax collections received during the subsequent year. Also included in this fund are accounts of the "Reserve Claim Fund," established under Chapter 70, ILCS 2605/12 of the Illinois Compiled Statutes, which is restricted for the payment of claims, awards, losses, judgments or liabilities which might be imposed against the District, and for the repair or replacement of certain property maintained by the District. The assets, liabilities, deferred inflows of resources and fund balances of the General Corporate Fund, detailed as to the Corporate, Working Cash, and Reserve Claim account divisions at December 31, 2018 are as follows (in thousands of dollars):

	Total General Corporate Fund	Corporate Division	Corporate Working Cash Division	Reserve Claim Division
Assets				
Cash	$ 7,624	$ 6,988	$ 127	$ 509
Certificates of deposit	63,695	7,624	36,499	19,572
Investments	149,404	88,074	55,430	5,900
Prepaid insurance	5,201	5,201	—	—
Receivables:				
Property taxes receivable	251,805	245,668	—	6,137
Allowance for uncollectible taxes	(13,966)	(13,619)	—	(347)
Taxes receivable, net	237,839	232,049	—	5,790
User charges	5,482	5,482	—	—
Miscellaneous	3,106	1,393	—	1,713
Due from Stormwater Management Fund	132	132	—	—
Restricted deposits	350	350	—	—
Inventories	33,436	33,436	—	—
Total assets	$ 506,269	$ 380,729	$ 92,056	$ 33,484
Liabilities, Deferred Inflows and Fund Balances				
Liabilities:				
Accounts payable and other liabilities	$ 25,626	$ 24,983	$ —	$ 643
Unearned revenue	8,427	8,427	—	—
Due to corporate fund from corporate working cash	—	190,000	(190,000)	—
Total liabilities	34,053	223,410	(190,000)	643
Deferred inflows of resources				
Unavailable tax revenue	187,674	183,105	—	4,569
Total deferred inflows of resources	187,674	183,105	—	4,569
Fund balances				
Nonspendable				
Prepaid insurance	5,201	5,201	—	—
Inventories	33,436	33,436	—	—
Restricted for				
Deposits	350	350	—	—
Working cash	282,055	—	282,055	—
Reserve claims	28,272	—	—	28,272
Unassigned (Deficit)	(64,772)	(64,773)	1	—
Total fund balances	284,542	(25,786)	282,056	28,272
Total liabilities, deferred inflows and fund balances	$ 506,269	$ 380,729	$ 92,056	$ 33,484

The revenues, expenditures, and changes in fund balances of the General Corporate Fund, detailed as to the Corporate, Working Cash, and Reserve Claim account divisions for the year ended December 31, 2018, are as follows (in thousands of dollars):

	Total General Corporate Fund	Corporate Division	Corporate Working Cash Division	Reserve Claim Division
Revenues:				
Property taxes	$ 235,471	$ 229,513	$ —	$ 5,958
Personal property replacement tax	17,970	17,970	—	—
Total tax revenue	253,441	247,483	—	5,958
Interest on investments	5,256	3,150	1,619	487
Tax increment financing distributions	6,153	6,153	—	—
Claims and damage settlements	1,470	37	—	1,433
Miscellaneous	4,724	4,723	—	1
User charges	44,000	44,000	—	—
Land rentals	22,678	22,678	—	—
Fees, forfeits and penalties	5,113	5,113	—	—
Total revenues	342,835	333,337	1,619	7,879
Operations:				
Board of Commissioners	4,148	4,148	—	—
General Administration	15,816	15,816	—	—
Monitoring and Research	30,204	30,204	—	—
Procurement and Materials Management	7,236	7,236	—	—
Human Resources	53,227	53,227	—	—
Information Technology	15,125	15,125	—	—
Law	6,139	6,139	—	—
Finance	3,450	3,450	—	—
Engineering	26,031	26,031	—	—
Maintenance and Operations	187,563	187,563	—	—
Claims and judgments	5,497	—	—	5,497
Total expenditures	354,436	348,939	—	5,497
Revenues over (under) expenditures	(11,601)	(15,602)	1,619	2,382
Other financing sources/(uses):				
Equity transfer in/(out)	4,200	4,200	—	—
Net Change in Fund balance	(7,401)	(11,402)	1,619	2,382
Fund balance at the beginning of year	291,943	(14,383)	280,436	25,890
Fund balance at the end of year	$ 284,542	$ (25,785)	$ 282,055	$ 28,272

Debt Service Fund

A sinking fund established to account for annual property tax levies and certain other revenues, principally interest on investments, which are restricted to be used for the payment of interest and redemption of principal on bonded debt.

Capital Improvements Bond Fund

A capital projects fund established to account for the proceeds of bonds authorized by the Illinois General Assembly, bond anticipation notes net of redemptions, government grants, and certain other revenues, which are all restricted to be used in connection with improvements, replacements, and additions to designated environmental improvement projects

Retirement Fund
A special revenue fund established in accordance with statutory requirements to account for the annual property taxes and personal property replacement tax (PPRT), which are specifically levied to finance pension costs. These taxes are collected and paid to the Pension Trust Fund (see Note 7).

The District reports the following non-major governmental funds:

Construction Fund
A capital projects fund established to finance smaller construction projects on a pay-as-you-go basis. The Fund is primarily financed with an annual property tax levy and certain other revenues to be used to finance modernization and rehabilitation projects. Included in this fund are accounts maintained by the District restricted to making temporary loans to the Construction Fund. These accounts were established under Chapter 70, ILCS 2605/9(c) of the Illinois Compiled Statutes, which refers to these accounts as a "Construction Working Cash Fund." Amounts borrowed in one year are generally repaid by the Construction Fund from tax collections received during the subsequent year. The assets, liabilities, deferred inflows of resources and fund balances of the Construction Fund, detailed as to the Working Cash and Construction account divisions at December 31, 2018, are as follows (in thousands of dollars):

	Total Construction Fund	Construction Division	Construction Working Cash Division
Assets			
Cash	$ 152	$ 144	$ 8
Certificates of deposit	22,453	16,045	6,408
Investments	8,887	4,008	4,879
Receivables:			
Property taxes receivable	12,093	12,093	—
Allowance for uncollectible taxes	(803)	(803)	—
Taxes receivable, net	11,290	11,290	—
Miscellaneous	792	792	—
Total assets	$ 43,574	$ 32,279	$ 11,295
Liabilities, Deferred Inflows of Resources, and Fund Balances			
Liabilities:			
Accounts payable and other liabilities	$ 5,017	$ 5,017	$ —
Due to Construction Fund from Construction Working Cash	-	11,100	(11,100)
Total liabilities	5,017	16,117	(11,100)
Deferred inflows of resources:			
Unavailable tax revenue	8,919	8,919	—
Total deferred inflows of resources	8,919	8,919	—
Fund balances:			
Restricted for:			
Working cash	22,395	-	22,395
Construction	7,243	7,243	
Total fund balances	29,638	7,243	22,395
Total liabilities, deferred inflows, and fund balances	$ 43,574	$ 32,279	$ 11,295

The revenues, expenditures, and changes in fund balances of the Construction Fund, detailed as to the Construction and Working Cash account divisions for the year ended December 31, 2018, are as follows (in thousands of dollars):

	Total Construction Fund	Construction Division	Construction Working Cash Division
Revenues:			
Property taxes	$ 16,049	$ 16,049	$ —
Total tax revenue	16,049	16,049	—
Interest on investments	632	441	191
Claims and damage settlements	2	2	—
Miscellaneous	80	80	—
Fees, forfeits and penalties	3	3	—
Total revenues	16,766	16,575	191
Construction Costs:			
Contractual services	2,432	2,432	—
Machinery and equipment	5,772	5,772	—
Capital projects	6,824	6,824	—
Total expenditures	15,028	15,028	—
Revenues over (under) expenditures	1,738	1,547	191
Other financing sources (uses):			
Equity transfer in/(out)	—	—	—
Net Change in Fund balance	1,738	1,547	191
Fund balance at the beginning of year	27,900	5,696	22,204
Fund balance at the end of year	$ 29,638	$ 7,243	$ 22,395

Stormwater Management Fund

A capital projects fund established to account for the annual property taxes which are specifically levied to finance all activities associated with stormwater management, including construction projects. Included in this fund are accounts maintained by the District restricted to making temporary loans to the Stormwater Management Fund. These accounts were established under Chapter 70, ILCS 2605/9(e) of the Illinois Compiled Statutes, which refers to these accounts as a "Stormwater Working Cash Fund." Amounts borrowed in one year are generally repaid by the Stormwater Management Fund from tax collections received during the subsequent year.

The assets, liabilities, deferred inflows of resources and fund balances of the Stormwater Management Fund, detailed as to the Working Cash and Stormwater Management account divisions at December 31, 2018, are as follows (in thousands of dollars):

	Total Stormwater Management Fund	Stormwater Management Division	Stormwater Working Cash Division
Assets			
Cash	$ 1,543	$ 1,392	$ 151
Certificates of deposit	23,070	22,070	1,000
Investments	32,039	21,992	10,047
Prepaid Insurance	76	76	—
Receivables:			
Property taxes receivable	48,771	48,771	—
Allowance for uncollectible taxes	(2,619)	(2,619)	—
Taxes receivable, net	46,152	46,152	—
Other receivables	162	162	—
Total assets	$ 103,042	$ 91,844	$ 11,198
Liabilities, Deferred Inflows, and Fund Balances			
Liabilities:			
Accounts payable and other liabilities	$ 7,090	$ 7,090	$ —
Due to Stormwater Management Fund from Stormwater Working Cash	132	26,632	(26,500)
Total liabilities	7,222	33,722	(26,500)
Deferred inflows of resources			
Unavailable tax revenue	36,411	36,411	
Total deferred inflows of resources	36,411	36,411	—
Fund balances:			
Nonspendable:			
Prepaid Insurance	76	76	—
Restricted for			
Working Cash	37,698	—	37,698
Capital projects	21,711	21,711	—
Unassigned	(76)	(76)	—
Total fund balances	59,409	21,711	37,698
Total liabilities, deferred inflows, and fund balances	$ 103,042	$ 91,844	$ 11,198

The revenues, expenditures, and changes in fund balances of the Stormwater Management Fund, detailed as to the Stormwater Management and Working Cash account divisions for the year ended December 31, 2018, are as follows (in thousands of dollars):

	Total Stormwater Management Fund	Stormwater Management Division	Stormwater Working Cash Division
Revenues:			
Property taxes	$ 42,626	$ 42,626	$ —
Total tax revenue	42,626	42,626	—
Interest on investments	997	807	190
Grant Revenue	346	346	—
Miscellaneous	169	169	—
Total revenues	44,138	43,948	190
Construction Costs:			
Personal services	6,437	6,437	—
Contractual services	2,348	2,348	—
Material and supplies	39	39	—
Capital projects	11,789	11,789	—
Total expenditures	20,613	20,613	—
Revenues over expenditures	23,525	23,335	190
Other financing (uses):			
Equity transfer in/(out)	(5,771)	(5,771)	—
Net Change in Fund balance	17,754	17,564	190
Fund balance at the beginning of year	41,655	4,147	37,508
Fund balance at end of year	$ 59,409	$ 21,711	$ 37,698

In addition, the District reports the following fiduciary funds:

Pension Trust Fund
A fiduciary fund established to account for employer/employee contributions, investment earnings, and expenses for employee pensions. The balance reflected as employer contributions receivable represents amounts due to the plan pursuant to legal requirements.

OPEB Trust Fund
A fund established (pursuant to 70 ILCS 2605/9.6(d)) to administer the defined benefit, post-employment health care plan. The intention of the District is that the Fund satisfies the requirements of Section 115 of the Internal Revenue Code of 1986, as amended. A private letter ruling regarding the exclusion of the Trust's income from gross income under Section 115 has been received from the IRS.

c. **Basis of Accounting and Measurement Focus**

Government-wide and Fiduciary Fund Financial Statements
The government-wide and fiduciary fund financial statements are reported using the economic resources 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.

Governmental Fund Financial Statements
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 they become 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 susceptible to accrual. In general, the revenue recognition period is limited to amounts collected during the period or within sixty days following year-end. Revenues that are unavailable are reported as deferred inflows of resources.

Grants from Federal and State agencies are recorded as revenues in the 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. The annual ordinance for the levy of taxes contains a reserve for loss in collection of taxes. The District reviews the reserve annually.

d. **Budgeting (Appropriations)** - The District's fiscal year begins January 1 and ends on December 31 The District's procedure for adopting the annual budget consists of the following stages:

(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) The public budget process begins with Board of Commissioners Study Sessions providing a budget overview in June.

(3) 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.

(4) 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.

(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 re-appropriated 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.

e. **Deposits with Escrow Agent** in the amount of $280,000 are currently held with the District's workman's compensation third party provider, all others (if any) represent cash with the escrow agent for the subsequent payment of interest on debt.

f. **Certificates of Deposit** are stated at cost plus accrued interest.

g. **Investments** of the Governmental Funds are reported at fair value plus accrued interest. The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability (exit price) in an orderly transaction between market participants at the measurement date. Changes in the carrying value of investments, resulting in realized and unrealized gains or losses, are reported as a component of investment income in the statement of revenues, expenses and changes in fund balances.

   Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term that could materially affect the amounts reported in the statement of net position and in the statement of revenues, expenses and changes in fund balances.

   The investment with the State Treasurer's Illinois Funds is measured at the net asset value per share provided by the pool. The Illinois Funds are not registered with the SEC. State statute requires the State Treasurer's Illinois Funds to comply with the Illinois Public Funds Investment Act (30 ILCS 235). Oversight is provided by the State Treasurer. Investments of the Pension and OPEB Trust Funds, other than short-term investments, are also stated at fair value.

h. **Inventory**, consisting mainly of materials, supplies, and repair parts which maintain and extend the life of the District's treatment facilities, is reported on the Balance Sheet of the General Corporate Fund and the government-wide Statements of Net Position. The District maintains a perpetual record-keeping system and uses a moving-average method, based on cost, for pricing its storeroom inventories. Materials, supplies, and repair parts are recorded as expenditures/expenses when consumed.

i. **Prepaid Assets** represent services the District has paid for but has not received the full benefit. Prepaids are recorded as expenditures/expenses when consumed.

   Inventory balances and prepaid insurance at year-end are reported as nonspendable fund balance in the governmental funds.

j. **Restricted Deposits** represent cash and investments set aside pursuant to real estate escrow and intergovernmental agreements.

k. **Interfund Transactions** represent governmental fund transactions for the following: a) loans between funds reported as due to /due from other funds; b) reimbursements between funds reported in the fund financials as expenditures in the reimbursing fund and a corresponding reduction in expenditures in the reimbursed fund; and c) transfers between funds. All interfund transactions are eliminated in the government-wide financial statements. See Note 12 for further disclosure of interfund transactions.

l. **Capital Assets** including land (and land improvements), buildings, equipment, computer software, infrastructure, acquired easements, and construction in progress are recorded at historical cost or estimated historical cost in the government-wide financial statements. Interest costs are not capitalized. Infrastructure assets include the District's sewers, water reclamation plants (WRP), waterway assets, TARP deep tunnels, and drop shafts. The thresholds for reporting capital assets are as follows:

Land and buildings	$100,000 and over
Infrastructure	$500,000 and over
Equipment	$20,000 and over
Computer software	$100,000 and over

Depreciation and amortization of capital assets is provided on the straight-line method (using a ten percent salvage value for equipment) over the following estimated useful lives:

Buildings and land improvements	80 years
Infrastructure (TARP deep tunnels and drop shafts only)	200 years
Equipment	6-50 years
Computer software	5 years

The District is using the modified approach as an alternative to depreciation to report its eligible infrastructure assets, with the exception of the TARP deep tunnels and drop shafts, which are depreciated. The modified infrastructure assets are categorized into networks, systems, and subsystems. Each of the District's seven WRPs represents a separate network and the waterway assets are an eighth network. The systems within the networks are categorized by the process flow through the network (i.e., collection system, treatment processes system, solids processing system, flood & pollution control system, or drying solids/utilization system). The subsystems represent the major processes of each system (e.g., fine screens and grit chambers are subsystems of the treatment processes system). Condition assessments at each network are performed at the subsystem level and these assessments are compiled into a single assessment for each system. The rating scales used in the condition assessments are explained in the Required Supplementary Information immediately following the notes. Infrastructure assets reported under the modified approach are not depreciated, since the District manages these assets using an asset management system, and documents that the assets are being preserved at a level of acceptable or better, as evidenced by a condition assessment.

In compliance with Governmental Accounting Standards Board (GASB) Statement 34, existing infrastructure assets accounted for with the modified approach are not reported in the government-wide financial statements until an initial condition assessment is completed for the assets' network. Currently, all the District's WRPs infrastructure assets are reported as infrastructure under the modified approach in the government-wide financial statements. Condition assessments of eligible infrastructure assets must be completed at least every three years following the initial assessments. The Kirie, Central (Stickney), Hanover, O'Brien, Egan, Calumet, Lemont WRPs, and Waterways had their initial condition assessments completed between 2002 and 2006 The Hanover, Calumet and Lemont networks each had its most recent condition assessment completed in 2018. The Kirie, Central (Stickney) and Waterways networks each had its most recent condition assessment completed in 2017. The Egan and O'Brien networks each had its most recent condition assessment completed in 2016. (See further discussion of the modified approach in the Required Supplementary Information Section).

Modified infrastructure assets under construction are reported in the government-wide financial statements as construction in progress and are reclassified to infrastructure assets when construction is substantially complete.

m. **Compensated Absences** for accumulated unpaid vacation, holiday, overtime, severance and sick leave are paid to employees upon retirement or termination An employee is eligible to receive 100 percent of earned vacation, holiday and overtime pay. Depending upon the date of hire and/or collective bargaining agreements, employees may also be eligible to receive severance pay and 50% of accumulated sick pay up to a maximum of sixty days. Compensated absences are accrued as they are earned in the government-wide financial statements. Expenditures and liabilities for compensated absences are recorded in the fund financial statements when due and payable. Included in the long-term liabilities of the Statements of Net Position at December 31, 2018, are liabilities for compensated absences of $2,335,000, due within one year, and $19,143,000 due in more than one year.

n. **Deferred Outflows/Inflows of Resources** - Deferred inflow of resources is an acquisition of net position by the government that is applicable to a future period. Deferred outflow of resources is a consumption of net position by the government that is applicable to a future reporting period.

o. **Unearned Revenue** - Unearned revenue arises when resources are received by the District before it has legal claim to them. In subsequent periods, when revenue recognition criteria are met or when the District has legal claim to the resources, the liability for unearned revenue is removed and revenue is recognized.

p. **Long-Term Obligations** – Long-term debt and other long-term obligations are reported in the government-wide Statements of Net Position. Bond premiums are reported with bonds payable and amortized over the life of the bonds, using a method which approximates the effective interest method, in the government-wide financial statements. In addition, the refunding transaction cost, representing the excess of the amount required to refund debt over the book value of the old debt, is reported as a deferred outflow of resources and amortized over the shorter of the life of the old debt or new debt in the government-wide financial statements.

The face amounts of the debt and bond premiums are recognized as other financing sources during the issuance period in the fund financial statements, while bond discounts are reported as other financing uses. Issuance costs, whether or not withheld from the actual debt proceeds received, and issuance costs are recognized as debt service expenditures in the fund financial statements.

q. **Pensions** - For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Pension Trust Fund and additions to/deductions from the Pension Trust Fund's fiduciary net position have been determined on the same basis as they are reported by the Pension Trust Fund. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

r. **Postemployment Benefits Other Than Pensions (OPEB)** - For purposes of measuring the net OPEB Liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the District's Retiree Health Care Plan (Plan) and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, the Plan recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value, except for money market investments and participating interest-earning investment contracts that have a maturity at the time of purchase of one year or less, which are reported at cost.

s. **Fund Balances** - The Board of Commissioners, on December 9, 2010, adopted a new fund balance classification policy in accordance with GASB Statement No. 54, Fund Balance Reporting and Governmental Fund Type Definitions. The policy categorizes the balances of governmental funds into the following categories: nonspendable, restricted, committed, assigned and unassigned fund balances

- Nonspendable Fund Balance – This consists of amounts that cannot be spent because they are either not in spendable form, or are legally or contractually required to be maintained intact.

- Restricted Fund Balance – Reported when constraints placed on the use of resources are either externally imposed by creditors, grantors, contributors, or laws or regulations of other governments; or imposed by law through constitutional provisions or enabling legislation.

- Committed Fund Balance – This consists of amounts that can only be used for specific purposes pursuant to constraints imposed by a board motion. The District's commissioners shall establish, modify, or rescind a fund balance commitment by vote of a motion presented to the Board.

- Assigned Fund Balances – This consists of amounts that are constrained by the District's intent to be used for specific purposes, but are neither restricted nor committed. The District's Board of Commissioners approved a motion authorizing the Executive Director to assign amounts of fund balances to a specific purpose. The District has an assigned fund balance of $158,319,000 in the Capital Improvement Bond Fund, for future capital projects.

- Unassigned Fund Balances – This classification represents fund balance that has not been restricted, committed, or assigned to specific purposes within the general fund.

In the General Corporate Fund, the District considers restricted amounts to have been spent first when an expenditure is incurred for purposes for which restricted 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 restricted fund balance is available, the District will first utilize assigned amounts, followed by committed amounts, and then restricted amounts.

t. **Net Position** – The government-wide Statements of Net Position display three components of net position, as follows:

- Net investment in capital assets - This consists of capital assets, net of accumulated depreciation, less the outstanding balances of any debt attributable to capital assets (net of unspent bond proceeds).

- Restricted Net Position - This consists of net position that is legally restricted by outside parties, or by law through constitutional provisions or enabling legislation. Net position restricted for working cash and reserve claims is based on legal restrictions, while net position restricted for debt service and capital projects is based on legal restrictions and/or outside parties. The government-wide statement of net position reports $706,425,000 of restricted net position.

- Unrestricted Net Position - This consists of net position that does not meet the definition of "restricted" or "net investment in capital assets."

u. **User Charge** – The Environmental Protection Agency requires grant recipients to charge certain users of waste water treatment services a proportionate share of the cost of operations and maintenance. The District has utilized a User Charge System since January 1, 1980. The system was developed in accordance with 70 ILCS 2305/7 1.

v. **Comparative Data** – The basic financial statements present comparative data for the prior year to provide an understanding of the changes in financial position and results of operations, but not at the level of detail required for presentation in accordance with accounting principles generally accepted in the United States of America.

w. **Use of Estimates** – The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, deferred outflows, liabilities and deferred inflows, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenditures/ expenses during the reported period. Actual results could differ from those estimates.

x. **New Accounting Pronouncement** - The District implemented GASB 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions.* See Note 16 for further details.

2. Reconciliation of Fund and Government-wide Financial Statements

a. **Reconciliation of Total Fund Balances to Total Net Position** - The following explanations are provided for the reconciling adjustments shown in the Governmental Funds Balance Sheets/Statements of Net Position at December 31, 2018 (in thousands of dollars):

Total fund balances of governmental funds	$ 778,167
Amounts reported for governmental activities in the Statements of Net Position are different because:	
Capital assets are not current financial resources and therefore are not reported as assets in governmental funds. However, capital assets are reported in the Statements of Net Position. The cost of capital assets and accumulated depreciation is as follows:	
Capital assets	7,963,446
Accumulated depreciation/amortization	(311,411)
Capital assets, net	7,652,035
Long-term liabilities are not due and payable in the current period and accordingly are not reported as liabilities in governmental funds. However, long-term liabilities are reported in the Statements of Net Position. The long-term liabilities consist of:	
Compensated absences	(21,478)
Claims and judgments	(21,113)
Capital lease	(35,979)
Bond anticipation notes	(109,866)
General obligation debt	(2,810,177)
Net OPEB liability	(113,548)
Net Pension liability	(985,074)
Due to Pension Trust Fund	(68,133)
Total long-term liabilities	(4,165,368)
Bond refunding transactions are recorded as deferred outflows of resources in the governmental funds while bond premiums and discounts are recorded as other financing sources and uses, respectively. Bond premiums are amortized over the life of the bonds for the Statements of Net Position. They consist of:	
Bond premium	(168,822)
Bond refunding transactions	4,372
Total bond premium and refunding transactions	(164,450)
Interest on debt is not accrued in governmental funds, but rather is recognized as a liability and an expenditure when due. Interest is recorded as a liability as it is incurred in the Statements of Net Position. The 2018 amount is:	
Accrued interest	(17,129)
Some assets reported in governmental funds do not increase fund balance because the assets are not "available" to pay for current-period expenditures. These assets are offset by deferred inflow of resources in the governmental funds. However, these assets increase net position in the Statements of Net Position. They consist of:	
Deferred property taxes and personal property replacement tax	469,266
Grants and rents	948
Deferred inflows for pension and OPEB related amounts	(100,669)
Adjustment to deferred inflows of resources	369,545
Deferred outflows of resources represent items related to pension, which will be recognized as a pension expense in future reporting periods. Deferred outflows consist of employer contributions and "other" which includes differences between expected and actual experience, changes of assumptions, and net differences between projected and actual earnings on pension plan investments. However, these items are reported in the Statement of Net Position. They consist of:	
Deferred outflows for employer contributions subsequent to measurement date	87,167
Deferred outflows for pension and OPEB related amounts	80,413
Adjustment to deferred outflows of resources	167,580
Interfund transactions are eliminated for Government-wide reporting. These transactions consist of:	
Due from other funds	132
Due to other funds	(132)
Total interfund	—
Total net position of governmental activities	$ 4,620,380

b. Reconciliation of the Change in Fund Balances to the Change in Net Position - The following explanations are provided for the adjustments shown in the Statements of Governmental Fund Revenues, Expenditures, and Changes in Fund Balances/Statements of Activities for the year ended December 31, 2018 (in thousands of dollars):

Net change in fund balances of governmental funds	$ (42,328)
Amounts reported for governmental activities in the Statements of Activities are different because:	
Construction costs for capital outlays are reported as expenditures in governmental funds. However, in the Statements of Activities, the cost of capital assets is allocated over their estimated useful lives as depreciation expense except for those assets under the modified approach In the current period, these amounts are:	
Construction costs and other capital outlays	72,857
Depreciation expense-allocated to various departments	(3,286)
Depreciation/amortization expense-unallocated	(11,849)
Excess of construction and capital outlay costs over depreciation expense	57,722
Debt proceeds provide current financial resources to governmental funds. However, issuing debt increases long-term liabilities in the Statements of Net Position. In the current period, debt proceeds and related items were:	
Bond anticipation notes proceeds	(64,170)
Debt proceeds total	(64,170)
Repayment of long-term debt is reported as an expenditure in the governmental funds, or as an other financing use in the case of refunding, but the repayment reduces the long-term liabilities in the Statements of Net Position. In the current year, the repayments consist of:	
Debt service principal retirement	144,296
Debt service principal retirement total	144,296
Some expenses reported in the Statements of Activities do not require the use of current financial resources and therefore are not reported as expenditures in governmental funds. These activities consist of:	
Change in compensated absences-allocated to various departments	1,333
Change in claims and judgments	9,556
Change in bond interest	(1,230)
Change in bond anticipation notes interest	(3,378)
Amortization of bond issuance/refunding costs	(527)
Amortization of bond premium	13,426
Change in net pension liability	(10,325)
Change in net OPEB liability	6,955
Total additional expenses	15,810
The proceeds from the sale of land and equipment are reported as revenue in the governmental funds. However, the cost of the land and equipment is removed from the capital assets account in the Statements of Net Position and offset against sale proceeds resulting in gain or (loss) in the Statements of Activities The net effect of miscellaneous transactions involving capital asset sales	
Total land and equipment sales	(130)
Unavailable tax revenues and certain other revenues that are earned but "unavailable" for the current period are not recognized in governmental funds. These revenues consist of:	
Property tax - net	(4,020)
Grant and rent adjustment	4
Total adjustments	(4,016)
Change in net position of governmental activities	$ 107,184

3. Reconciliation of Budgetary Basis Accounting to GAAP Basis Accounting

The District prepares its budget in conformity with practices prescribed or permitted by the applicable statutes of the State of Illinois, which differ from GAAP. To reconcile the budgetary cash basis financials to the GAAP fund basis financials, the following schedule was prepared (in thousands of dollars):

		General Corporate Fund
Revenues and other sources (uses) over (under) expenditures on a budgetary basis	$	(26,611)
Adjustment from Budget to GAAP for:		
Tax revenues		18,199
Cash basis other revenues		1,459
GAAP versus budgetary expenditure differences		(448)
Revenues and other sources (uses) over (under) expenditures on GAAP basis	$	(7,401)

4. Deposits and Investments

Deposits
As of December 31, 2018, the District, the Pension Trust Fund and OPEB Trust Fund deposits were fully insured and collateralized.

Investments (excluding Trust Funds)
The investments which the District may purchase are limited by Illinois law 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 funds; (8) money market mutual funds and certain other instruments; and (9) municipal bonds of the State of Illinois, 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. District policies require that repurchase agreements be collateralized only with direct U.S. Treasury securities that are maintained at a value of at least 102% of the investment amount (at market).

The following schedule reports the fair values and maturities (using the segmented time distribution method) for the District's investments at December 31, 2018 (in thousands of dollars):

			Investment Maturities			
Investment Type		Fair Value		Less Than 1 Year		1- 5 Years
U.S Agencies	$	267,818	$	156,878	$	110,940
Municipal Bonds		40,675		15,570		25,105
Commercial Paper		112,255		112,255		—
State Treasurer's Illinois Funds		1		1		—
Total Investments	$	420,749	$	284,704	$	136,045

The Illinois Funds invests a minimum of 75% of its assets in authorized investments of less than one year and no investment shall exceed two years maturity. The above fair value amount excludes accrued interest receivable of $906,000.

Interest Rate Risk

The District's investment policy protects against fair value losses resulting from rising interest rates by structuring its investments so that sufficient securities mature to meet cash requirements, thereby avoiding the need to sell securities on the open market prior to maturity, except when such a sale is required by state statute. In addition, the District's policy limits direct investments to securities maturing in five (5) years or less. Written notification is required to be made to the Board of Commissioners of the intent to invest in securities maturing more than five (5) years from the date of purchase.

Credit Risk

The District's investment policy applies the "prudent person" standard in managing its investment portfolio. As such, investments are made with such judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived. The District's investment policy limits investments in commercial paper to the highest rating classifications, as established by at least two of the four major rating services, and which mature not later than 270 days from the purchase date. Such purchases may not exceed 10% of the issuer corporation's outstanding obligations.

Credit ratings for the District's investments in debt securities as described by Standard & Poor's, Moody's and Fitch at December 31, 2018 (excluding investments in U.S. Treasuries, if any, which are not considered to have credit risk), are as follows:

Investment Type	Credit Ratings at 12/31/2018 S&P/Moody's/Fitch	% of Investment Type	% of Total Investments in Debt Securities
U.S. Agencies			
Federal Home Loan Banks (FHLB)	AA+/Aaa/NR	60.5%	
Federal Home Loan Mortgage Corporation (FHLMC)	AA+/Aaa/AAA	39.5%	
Total U.S Agencies		100.0%	63.6%
Commercial Paper	A-1/P-1/F1	100.0%	26.6%
State Treasurer's Illinois Funds	AAAm/NR/NR	100.0%	0.0%
Illinois State Regional Transportation Authority *	AA/NR/AA	36.8%	3.5%
New York State Dormitory Authority*	NR/Aa1/AA+	19.1%	1.9%
Cook County, Illinois*	AA-/A2/A+	9.8%	0.9%
Illinois State Sales Tax*	BBB/NR/A-	8.6%	0.8%
Mississippi Development Bank, Jackson Public School District*	A+/NR/NR	7.1%	0.7%
Marin California Community College District 1*	AAA/Aaa/NR	3.8%	0.4%
New York State Urban Development Corporate*	AA+/Aa1/AA+	3.8%	0.4%
Maryland State Housing and Community Development*	NR/Aa2/AA	3.7%	0.4%
Milwaukee County, Wisconsin*	AA/Aa2/AA+	3.1%	0.3%
Chicago Illinois Wastewater Transmission*	A/NR/AA-	2.0%	0.2%
Chicago Park District, Illinois*	AA+/NR/AA-	1.6%	0.2%
Denver City and County, Colorado*	AA-/Aa3/AA	0.6%	0.1%
			100.0%

* Municipal Bond
NR - Not Rated

Concentration of Credit Risk
The District's goal is to limit the amount that can be invested in commercial paper to one-third of the District's total investments, and no more than 20% of the amount invested in commercial paper can be invested in any one entity. In 2018, the fair value of commercial paper represented 17.1% of the District's total investments, including certificates of deposit. None of the District's commercial paper in any one entity exceeded the 20% goal.

As of December 31, 2018, the following investments were greater than 5% of total investments (in thousands of dollars):

Investment	Fair Value
Federal Home Loan Bank (FHLB)	$ 161,953
Federal Home Loan Mortgage Corporation (FHLMC)	105,865
	$ 267,818

There are no investments that represent 5% or more of the Pension Trust Fund's net position restricted for pension benefits identified.

There are no individual investments held by the OPEB Trust that represent 5% or more of the Trust's fiduciary net position or the investment portfolio at year-end.

Custodial Credit Risk
The District's investments are not exposed to custodial credit risk since its investment policy requires all investments and investment collateral to be held in safekeeping by a third party custodial institution, as designated by the Treasurer, in the District's name. Custodial credit risk is the risk that, in the event of the failure of the counterparty, the District will not be able to recover the value of its investments or collateral securities which are in the possession of the outside party.

As of December 31, 2018, the Pension Trust Fund had minimal exposure to custodial credit risk since all investments were insured, registered, and/or held in the Fund's name.

The OPEB Trust's Investment Policy requires that all investments and investment collateral be held in safekeeping by a third party custodial institution, as designated by the Treasurer, in the Trust's name. All cash balances maintained at banks are required to be collateralized with permitted U.S. Government Securities in an amount equal to 105% (at market) of the monies on deposit. Cash awaiting reinvestment in the Trust's investment account is protected up to $250,000 under coverage by the Securities Investor Protection Corporation (SIPC). As of December 31, 2018, the Trust had no exposure to custodial credit risk since all investments were registered or held in the Trust's name.

Trust Fund Investments
The Pension Trust Fund uses the "prudent person rule" as the Fund's investment authority as set forth in the Illinois Compiled Statutes. The Fund's asset allocation policy allows investments in domestic equities, international equities and fixed income securities.

The OPEB Trust Fund is authorized under State Statute 70 ILCS 2605/9.6(d). In accordance with the Statute, the Trust Fund shall be managed by the District Treasurer in any manner deemed appropriate subject only to the prudent person standard. The Trust adopted its investment policy on November 19, 2009, and revised it on December 19, 2013 Investments shall be limited to publicly traded securities and mutual funds, adequately diversified among various market segments and sectors as well as other developed countries and emerging markets.

At December 31, 2018, the OPEB Trust's assets were invested in mutual funds traded on national securities exchanges. Investments are stated at fair value. The fair value of mutual fund units traded on national securities exchanges is the last reported sales price on the last business day of the fiscal year of the Trust. Purchases and sales of mutual fund units are accounted for on the trade dates.

Interest Rate Risk
Interest rate risk is defined as the risk that the fair value of an investment will be adversely affected by changes in market interest rates. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates becomes. One strategy to manage exposure to interest rate risk is to purchase a combination of short-term and long-term investments, while considering cash flow needs of the Pension Trust Fund. The Pension Trust Fund does not maintain an investment policy relative to interest rate risk; however, the Board of Trustees recognizes that its investments are subject to short-term volatility and their goal is to maximize total return within prudent risk parameters.

The following table categorizes the Pension Trust Fund's interest bearing investments and presents the fair value and segmented time distribution of debt securities held by the Pension Trust Fund as of December 31, 2018 (in thousands of dollars):

Type of Investment	Maturity		Fair Value	Percentage
U.S. Government and government agency obligations	<1 year	$	2,895	3.2%
	1-5 years		13,820	15.1
	5-10 years		15,386	16.9
	Over 10 years		59,060	64.8
		$	91,161	100.0%
Corporate and foreign government obligations	<1 year		7,611	5.2
	1-5 years		54,962	37.7
	5-10 years		46,319	31.8
	Over 10 years		36,815	25.3
		$	145,707	100.0%
Pooled funds - fixed income	5-10 years	$	152,257	100.0%
Short-term investment fund	<1 year	$	14,814	100.0%

The Fund's benefit liabilities extend many years into the future; therefore, the Pension Trust Fund's policy is to maintain a long-term focus on its investment decision-making process. The Fund's fixed income performance objective is the Barclays Capital Aggregate Bond Index.

The OPEB Trust's benefit liabilities extend many years into the future, and the Trust's policy is to maintain a long-term focus on its investment decision-making process. Fixed income investments susceptible to interest rate risk are monitored to prevent such investments from exceeding established allocation targets.

The following illustrates the terms of investments that are highly sensitive to interest rate fluctuations and reports the fair values and maturities for the OPEB Trust Fund's investments at December 31, 2018 (in thousands of dollars):

Investment Type	Fair Value	Percentage	Average Maturities (years)
Fixed Income Funds:			
Dodge & Cox Income Fund	$ 29,425	42.5%	8.3
Payden Core Bond Fund	9,837	14.2%	9.0
Western Asset Core Plus Institutional	29,927	43.3%	10.8
Total Fixed Income Funds	69,189		
Domestic Equity Funds:			
Fidelity Contrafund	12,728		
Fidelity 500 Index Institutional Class	17,874		
Fidelity Mid Cap Index Institutional	17,780		
LSV Value Equity Institutional	12,275		
Vanguard Global Minimum Volatility	8,854		
Vanguard Small Cap Index Institutional	17,892		
Total Domestic Equity Funds	87,403		
International Equity Funds:			
Fidelity International Index Institutional	27,245		
Total International Equity Funds	27,245		
Money Market Funds	4,400		
Total Fair Value	$ 188,237		

Credit Risk

Credit risk is defined as the risk that the issuer of a debt security will not pay its par value upon maturity. The Illinois Statutes prescribe the "prudent person rule" as the Pension Trust Fund's investment authority and within the "prudent person" framework, the Board of Trustees adopts investment guidelines that consider credit risk for the Pension Trust Fund's investment managers which are included within their respective investment Management Agreements.

The following table presents a summarization of the Pension Trust Fund's credit quality ratings of the holdings within the investments at December 31, 2018 (in thousands of dollars):

Disclosure Ratings for Debt Securities (1)
(As a percentage of total fair value for debt securities)

Credit Rating	Investment Type	Fair Value	%
AA	U.S. Government and Government Agency	$ 84,037	92.2%
Not Rated	U.S. Government and Government Agency	7,124	7.8
		$ 91,161	100.0%
AAA	Corporate and Foreign Government	12,451	8.5
AA	Corporate and Foreign Government	13,326	9.1
A	Corporate and Foreign Government	33,933	23.3
BBB	Corporate and Foreign Government	35,272	24.2
BB	Corporate and Foreign Government	3,373	2.3
B	Corporate and Foreign Government	3,020	2.1
CC	Corporate and Foreign Government	53	0.1
Not Rated	Corporate and Foreign Government	44,279	30.4
		$ 145,707	100.0%
AAA	Pooled Funds - Fixed Income (2)	141,441	92.9
BB	Pooled Funds - Fixed Income	10,816	7.1
		$ 152,257	100.0%
Not Rated	Short-Term Investment Fund	$ 14,814	100.0%

(1) Quality ratings are provided by Standard & Poor's.
(2) For pooled funds, an average credit quality rating is provided by Bank of America Merrill Lynch and Bloomberg Barclays.

The OPEB Trust's Investment Policy requires a minimum of 85% of the fixed income holdings of an actively managed fixed income mutual fund be of investment grade quality or higher at purchase; rated no lower than "Baa" by Moody's and no lower than "BBB" by Standard and Poor's. The Trustee, at its discretion, may impose a higher standard on an individual investment's circumstances or as investment objectives dictate. Fixed income purchases shall be limited to obligations issued or guaranteed as to principal and interest by the U.S. Government, Canadian Government, or any agency or instrumentality thereof, or to corporate and municipal issues.

The following are the percentages of fixed income investment portfolio securities within each credit-quality rating as of December 31, 2018:

Disclosure Ratings for Debt Securities
(As a percentage of total fair value for debt securities)

Credit Rating	Dodge & Cox Income Fund	Payden Core Bond Fund	Western Asset Core Plus Fund
AAA	48.9%	5.0%	57.1%
AA	6.7	43.0	3.7
A	6.0	8.0	15.6
BBB	31.9	27.0	12.9
BB	6.5	7.0	5.7
B	0 0	4.0	2.3
Below B	0.0	0.0	2.7
Not Rated	0 0	6.0	0.0
Total	100.0%	100.0%	100.0%

Morningstar Inc. provided the percentage of fixed-income securities that fall within each credit-quality rating as assigned by Standard & Poor's or Moody's credit rating agencies.

The Trust's investment in a money market fund was not individually rated by a nationally recognized statistical rating organization.

Foreign Currency Risk
Foreign currency risk is the risk of loss arising from changes in currency exchange rates. All foreign currency denominated investments are in equities, fixed income and foreign cash. The Pension Trust Fund's exposure to foreign currency risk at December 31, 2018 was as follows:

Equities	Fair Value	%
Australian Dollar	$ 8,214,710	1.7
British Pound Sterling	18,314,935	3 9
Canadian Dollar	3,998,872	0.9
Danish Krone	2,059,631	0.4
European Euro	32,455,113	6.9
Hong Kong Dollar	2,878,732	0.6
Israeli Shekel	780,186	0 2
Japanese Yen	30,068,048	6.4
New Zealand Dollar	1,483,603	0.3
Norwegian Krone	1,869,080	0.4
Singapore Dollar	1,551,176	0 3
Swedish Krona	4,492,769	1 0
Swiss Franc	8,554,910	1.8
U S Dollar	353,597,907	75 2
Total	$ 470,319,672	100 0 %

Corporate and Foreign Government Obligations	Fair Value	%
Argentina Peso	$ 483,347	0.3
Australian Dollar	734,443	0.5
British Pound Sterling	1,977,328	1.4
Canadian Dollar	3,280,446	2.3
Chilean Peso	432,869	0.3
European Euro	14,780,930	10.1
Indian Rupee	364,813	0.3
Israeli Shekel	114,668	0.1
Japanese Yen	16,882,122	11.6
New Zealand Dollar	3,736,803	2.6
Thailand Baht	238,863	0.2
U.S. Dollar	102,680,451	70.5
Total	$ 145,707,083	100.0 %

Short-Term Investment Funds	Fair Value	%
Argentina Peso	$ 54,540	0.4
Australian Dollar	91,202	0.6
British Pound Sterling	324,152	2.2
Canadian Dollar	61,169	0.4
Danish Krone	13,063	0.1
European Euro	420,143	2.8
Hong Kong Dollar	99,014	0.7
Israeli Shekel	12,843	0.1
Japanese Yen	244,299	1.6
New Zealand Dollar	75,552	0.5
Norwegian Krone	21,742	0.1
Russian Ruble	15,684	0.1
Singapore Dollar	96,931	0.7
South African Rand	8,067	0.1
Swedish Krona	63,062	0.4
Swiss Franc	132,705	0.9
U.S. Dollar	13,080,118	88.3
Total	$ 14,814,286	100.0 %

The OPEB Trust Fund's policy is to disclose any investment denomination in a foreign currency. Exposure to foreign currency risk is limited to the international investment allocation target maximum of 20% of the fair value of the investment portfolio.

As of December 31, 2018, the OPEB Trust's investments in international equity mutual funds stated at fair market value are as follows (in thousands of dollars):

Fund Name	Fair Value
Fidelity International Index Institutional	$ 27,245
Vanguard Global Minimum Volatility	8,854
	$ 36,099

Securities Lending

The Pension Trust Fund lends its securities to broker-dealers and other entities with a simultaneous agreement to return the collateral for the same securities in the future. The Bank of New York Mellon, the Fund's master custodian, lends for collateral in the form of cash, irrevocable letters of credit or other securities worth at least 102% of the lent securities' market value, and international securities for collateral worth at least 105%. The contract with the Fund's master custodian requires it to indemnify the Fund if the borrowers fail to return the securities (and if the collateral is inadequate to replace the securities lent) or fail to pay the Fund for income distributions by the securities issuers while the securities are out on loan.

The relationship between the maturities of the investment pool and the Pension Trust Fund's loans is affected by the maturities of the securities loans made by other entities that use the agent's pool, which the Fund cannot determine. The Pension Trust Fund cannot pledge or sell collateral securities without borrower default; as such, the collateral security or non-cash collateral is not reported in the financial statements. The average term of securities loaned was 88 days for 2018; however, all securities loans can be terminated on demand by either the Pension Trust Fund or the borrower. Cash collateral is invested in the lending agent's short-term investment pool, which at year-end has a weighted average maturity of 1 day.

Although the Fund's securities lending activities are collateralized as described above, they involve both market and credit risk. In this context, market risk refers to the possibility that the borrower of securities will be unable to collateralize the loan upon a sudden material change in the fair value of the loaned securities or the collateral. Credit risk refers to the possibility that counterparties involved in the securities lending program may fail to perform in accordance with the terms of their contracts.

Indemnification deals with the situation in which a client's securities are not returned due to the insolvency of a borrower. The contract with the lending agent requires it to indemnify the Fund if borrowers fail to return the securities or fail to pay the Fund for income distributions by the issuers of securities while the securities are on loan.

During 2018, there were no losses due to default of a borrower of the lending agent

A summary of securities loaned at fair value as of December 31, 2018 is as follows:

Securities loaned - backed by cash collateral	
U.S. and international equities	$ 8,742,607
Exchange traded funds	3,227,329
U.S. Government and government agency obligations	1,326,229
Corporate bonds	326,278
Total securities loaned - backed by cash collateral	13,622,443
Securities loaned - backed by non-cash collateral	
U.S. and international equities	56,840,301
Exchange traded funds	1,182,262
Corporate bonds	55,321
Total securities loaned - backed by non-cash collateral	58,077,884
Total	$ 71,700,327

The value of the cash collateral held and a corresponding liability to return the collateral have been reported in the accompanying statement of fiduciary net position.

The fund also participates in the securities lending programs offered by State Street Global Advisors (SSGA) with regards to their commingled index funds. Securities lending income earned by SSGA serves as a credit to quarterly management fees, and any remainder is used for purchasing additional units in the bond index fund.

Fair Market Value Measurements

The District, the Pension Trust Fund and the OPEB Trust Fund have adopted GASB Statement No. 72, *Fair Value Measurement and Application*, which provides guidance for determining a fair value measurement for reporting purposes and applying fair value to certain investments and disclosures related to all fair value measurements.

The District and its fiduciary funds categorize its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation input used to measure the fair value of the asset.

Level 1 Unadjusted quoted prices in active markets that are accessible at the measurement date for identical assets. Includes common stock, mutual and commingled equity funds, and U.S. Government and government agency obligations and Non-U.S. Government obligations that are traded in active markets and are valued at closing prices on the measurement date.

Level 2 Quoted prices for similar assets or liabilities in active markets, inactive markets, or using other significant inputs which are observable either directly or indirectly. Includes U.S. Government and government agency obligations, non-U.S. Government obligations, mortgage-backed securities, asset backed securities, and corporate bonds and notes that are generally valued by benchmarking model-derived prices to quoted market prices and trade data for identical or comparable securities. To the extent that quoted prices are not available, fair value is determined based on a valuation model that includes inputs such as interest rates and yield curves at commonly quoted intervals, implied volatilities and credit spreads, or market corroborated inputs.

Level 3 Prices or valuations that require inputs that are both significant to the fair value measurement and are unobservable. Includes corporate bonds and notes that are valued using a discounted cash flow technique or consensus pricing.

The carrying amount of investments and fair value hierarchy at December 31, 2018 is shown in the following schedule (in thousands of dollars):

The District		**Fair Value Measurements Using**		
Investments Measured at Fair Value	**12/31/2018**	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
Debt Securities				
U.S. Agencies	$ 267,818	$ —	$ 267,818	$ —
Municipal Bonds	40,675	—	40,675	—
Commercial Paper	112,255	—	112,255	—
Total Investments at Fair Value	$ 420,748	$ —	$ 420,748	$ —
Investments Not Measured at Fair Value				
State Treasurer's Illinois Funds	1			
Total Investments	$ 420,749			

The District does not have Level 1 investments. Debt securities classified in Level 2 are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. The District does not have Level 3 investments.

The Pension Trust fund categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The following table sets forth, by level, within the fair value hierarchy, the investments at fair value as of December 31, 2018 (in thousands of dollars):

Pension Trust Fund		**Fair Value Measurements Using**		
	12/31/2018	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
Investments by Fair Value Level				
Equities	$ 470,320	$ 470,320	$ —	$ —
U.S. Govt and Govt Agency Obligations	91,161	36,716	54,445	—
Corporate and Foreign Govt Obligations	145,707	—	145,707	—
Mutual and Exchange Traded Funds	89,341	89,341	—	—
Total investments by Fair Value Level	796,529	$ 596,377	$ 200,152	$ —
Investments Measured at NAV	446,143			
Total Investments at Fair Value	$ 1,242,672			

Pension Trust Fund

Investments Measured at NAV	Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Pooled funds - equity (1)				
SSGA S&P 500 Flagship Fund	$ 101,496	—	Daily	N/A
SSGA S&P Midcap Index Fund	47,389	—	Daily	N/A
SSGA MSCI ACWI Fund	66,289	—	2 times monthly	N/A
Pooled funds - fixed income (2)				
SSGA U.S. Aggregate Bond Index	141,441	—	Daily	N/A
Neuberger Berman High Income Fund	10,817	—	Monthly	N/A
Limited partnership - real estate (3)				
Trumbull Property Fund	37,119	—	Quarterly	60 days
Real estate investment trust (4)				
PREEF America REIT II	26,778	8,750	Quarterly	45 days
Short-term investment fund (5)				
BNY Melon EB Temporary Investment Fund	14,814	—	Daily	N/A
Total investments measured at NAV	$ 446,143			

(1) Pooled funds - equity - The investment objective of these investments is to track the performance of the S&P 500, S&P MidCap 500 and MSCI ACWI ex USA indexes over the long term. The fair value of the investments in these funds has been determined using the NAV per share of the investments.

(2) Pooled funds - fixed income - The investment objective of the U S. Aggregate Bond Index is to track the performance of the Barclays U.S. Aggregate Bond Index over the long term. The investment objective of the High Income Fund is to achieve an attractive total return of income and capital appreciation by investing primarily in high yield fixed income securities and bank loan interests, including secured and unsecured bank loans. The fair value of the investments in these funds has been determined using the NAV per share of the investments.

(3) Limited partnership - real estate - The partnership's investment objective is to actively manage a core portfolio of primarily equity real estate investments located in the United States. The fair value of the investments in these funds has been determined using the NAV per share of the investments.

(4) Real estate investment trust - The Fund's investment objective is to generate attractive, predictable investment returns from a target portfolio of low-risk equity investments in income-producing real estate while maximizing the total return The fair value of the investments in these funds has been determined using the NAV per share of the investments.

(5) Short-term investment - This investment's objective is to invest in short-term investments of high quality and low risk to protect capital while achieving investment returns. The fair value of the investments in these funds has been determined using the NAV per share of the investments.

The carrying amount of investments and fair value hierarchy of the OPEB Trust is shown in the following schedule as of December 31, 2018:

OPEB Trust		Fair Value Measurements Using		
Fair Value of Investments	**12/31/2018**	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
Domestic Equity Funds	$ 78,548	$ 78,548	$ —	$ —
International Equity Funds	36,100	36,100	—	—
Domestic Fixed Income Funds	69,189	69,189	—	—
Money Market Funds	4,400	4,400	—	—
Total Fair Value of Investments	$ 188,237	$ 188,237	$ —	$ —

Investments classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. The OPEB Trust does not have Level 2 or Level 3 investments.

5. Receivables, Deferred Inflows of Resources and Payables

Certain receivables and payables reported in the financial statements represent aggregations of different components, such as balances due from/to taxpayers, users, other governments, vendors, and employees. The following information is provided to detail significant balances which make up the components.

Receivables

Receivables as of December 31, 2018 in the District's governmental funds and government-wide financial statements, net of uncollectible accounts, are detailed as follows (in thousands of dollars):

	General Corporate	Debt Service	Capital Improvements Bond	Retirement	Other Governmental	Total Governmental	Statement of Net Position
Receivables at December 31, 2018							
Property taxes	$ 251.805	$ 244.093	$ —	$ 73,233	$ 60.864	$ 629,995	$ 629.995
Allowance for uncollectible taxes	(13,966)	(13,742)	—	(4,203)	(3,422)	(35,333)	(35,333)
Net property taxes	237.839	230,351	—	69.030	57,442	594.662	594,662
Personal property replacement tax	—	—	—	4,485	—	4.485	4,485
Total taxes receivable, net	237.839	230.351	—	73.515	57.442	599.147	599.147
Other receivables:							
User charges	5.482	—	—	—	—	5.482	5.482
State revolving fund loans	—	—	8.483	—	—	8.483	8,483
Miscellaneous	3,106	—	780	—	954	4,840	4.840
Total other receivables, net	8.588	—	9,263	—	954	18.805	18.805
Total net receivables at December 31, 2018	$ 246,427	$ 230.351	$ 9.263	$ 73,515	$ 58.396	$ 617.952	$ 617.952

The property tax receivable includes a nominal amount that is not expected to be collected within one year of the financial statement date.

Deferred Inflows of Resources

Unavailable tax revenue is reported in the Governmental Funds Balance Sheets in connection with receivables for property taxes that are not considered to be available to liquidate liabilities of the current period. Other unavailable revenue is reported in the Governmental Funds Balance Sheets and the government-wide Statements of Net Position for rental resources that have been received, but not earned. Other unavailable revenue is reported in the Governmental Funds Balance Sheets for the federal subsidy accrual relating to the direct reimbursement for the District's Build America Bonds. A summary of unavailable revenue as of December 31, 2018 is as follows (in thousands of dollars):

	General Corporate	Debt Service	Capital Improve-ments Bond	Retirement	Other Govern-mental	Total Govern-mental	Adjust-ments	Statement of Net Position
Deferred inflows of resources at December 31, 2018:								
Property tax revenue	$ 187,674	$ 181,781	$ —	$ 54,481	$ 45,330	$ 469,266	$ (469,266)	$ —
Other amounts								
Grant revenue	—	—	948	—	—	948	(948)	—
Total deferred revenue at December 31, 2018	$ 187,674	$ 181,781	$ 948	$ 54,481	$ 45,330	$ 470,214	$ (470,214)	$ —

Payables

Payables reported as "Accounts payable and other liabilities" at December 31, 2018 in the District's governmental funds and government-wide financial statements are detailed as follows (in thousands of dollars):

	General Corporate	Debt Service	Capital Improve ments Bond	Retirement	Other Govern mental	Total Govern mental	Statement of Net Position
Accounts payable and other liabilities at December 31, 2018:							
Vouchers payable and other liabilities	$ 20,192	$ —	$ 29,156	$ —	$ 12,107	$ 61,455	$ 61,455
Accrued payroll and withholdings	4,870	—	—	—	—	4,870	4,870
Bid deposits	564	—	—	—	—	564	564
Total accounts payable and other liabilities as of December 31, 2018	$ 25,626	$ —	$ 29,156	$ —	$ 12,107	$ 66,889	$ 66,889

6. Capital Assets

A summary of the changes in capital assets for the year ended December 31, 2018, are as follows (in thousands of dollars):

	Balances January 1, 2018	Additions	Retirements	Balances December 31, 2018
Governmental activities:				
Capital assets not depreciated/amortized:				
Land	$ 144,204	$ 1,329	$ —	$ 145,533
Permanent easements	1,463	613	—	2,076
Construction in progress	678,942	88,281	346,178	421,045
Infrastructure under modified approach	5,085,766	343,081	18,147	5,410,700
Total capital assets not depreciated/amortized	5,910,375	433,304	364,325	5,979,354
Capital assets depreciated/amortized:				
Buildings	13,226	—	—	13,226
Equipment	61,657	3,729	725	64,661
Computer software	7,483	146	—	7,629
Infrastructure and easements	1,898,573	3	—	1,898,576
Total capital assets being depreciated/amortized	1,980,939	3,878	725	1,984,092
Less accumulated depreciation/amortization:				
Buildings	6,242	185	—	6,427
Equipment	37,477	3,101	596	39,982
Computer software	6,034	536	—	6,570
Infrastructure and easements	247,119	11,313	—	258,432
Total accumulated depreciation/amortization	296,872	15,135	596	311,411
Total capital assets depreciated/amortized, net	1,684,067	(11,257)	129	1,672,681
Governmental activities capital assets, net	$ 7,594,442	$ 422,047	$ 364,454	$ 7,652,035

Depreciation and amortization expense in the government-wide Statements of Activities, for the year ended December 31, 2018, was charged to the District's governmental functions as follows (in thousands of dollars):

Department	Amount
Board of Commissioners	$ 15
General Administration	117
Monitoring and Research	266
Procurement and Materials Management	12
Human Resources	18
Information Technology	79
Law	10
Finance	8
Engineering	2,039
Maintenance and Operations	722
Total allocated depreciation	3,286
Unallocated infrastructure depreciation	11,849
Total depreciation	$ 15,135

During the year ended December 31, 2018, the governmental activities recorded a $7.7 million impairment loss for the portion of the Calumet Concentration Building that was destroyed in an explosion and no longer used in operations as originally intended.

7. Pension Plan

Plan Description

The Metropolitan Water Reclamation District Retirement Fund (Pension Trust Fund) is the administrator of a single employer defined benefit pension plan (Plan) in accordance with 40 ILCS 5 of the Illinois Compiled Statutes. Article 13 of the Illinois Pension code grants the authority to establish the defined benefits of the Plan, as well as the employer and employee contribution levels of the Plan and may be amended only by the Illinois Legislature. The District contribution is currently calculated in accordance with state statute as to the amount sufficient to meet the Fund's actuarially determined contribution requirement, but not to exceed an amount equal to 4.19 times the employee contributions two years prior. For the year ended December 31, 2018, the District's average contribution rate was 40% of annual payroll. The District's actual contribution to the Retirement Fund was $87,167,000.

The Pension Trust Fund issues a financial report that includes financial statements and required supplementary information establishing the financial position of the Plan. That report may be obtained by writing to the Metropolitan Water Reclamation District Retirement Fund, 111 E. Erie, Chicago, IL, 60611-2898 or electronically on their website: www. mwrdrf.org.

The Pension Trust Fund provides retirement, death, and disability benefits to plan members and beneficiaries. Pension legislation (Public Act 96-0889) was approved in 2010 and established two tiers of members with different eligibility conditions and benefit provisions:

Tier 1 – Employees hired before January 1, 2011 are required to contribute 12% of their salary to the Fund.
Tier 2 – Employees hired on or after January 1, 2011 are required to contribute 9% of their salary to the Fund.

The District is required to contribute the remaining amounts necessary to finance the requirements of the Plan on an actuarially funded basis.

Retirement Eligibility and Benefits

All full time employees of the District are eligible to participate in the retirement plan.

Tier 1 employees must have at least five years of service at age 60 and include service of 120 days or more per year to receive an undiscounted retirement benefit. Employees in this tier who reach age 55 (or 50 if hired on or before June 13, 1997) with at least ten years of service are entitled to receive a minimum retirement benefit; however, if the employee is less than age 60 or service less than 30 years, the normal retirement benefit is reduced by .5% for each full month the member is less than age 60 or service is less than 30 years, whichever is less. Upon withdrawal from service a Tier 1 employee age 55 or under (50 if hired on or before June 13, 1997) and less than age 60 with less than 20 years of service, or age 60 or over with less than 5 years of service, is eligible for a refund of accumulated employee contributions, without interest, upon request. The retirement benefit is calculated as 2.2% of the final average salary for each of the first 20 years of service and 2 4% for each year of service in excess of 20 years. The benefit shall not exceed 80% of final average salary. Tier 1 employees receive a 3% cost of living adjustment annually.

Tier 2 employees must have at least 10 years of service at age 67 to be eligible to receive an undiscounted retirement benefit Employees in this tier who reach age 62 with at least ten years of service are entitled to receive a minimum retirement benefit; however, if the employee is less than age 67, the normal retirement benefit is reduced by .5% for each full month the member is less than age 67. A Tier 2 employee is eligible for a refund of accumulated employee contributions without interest if under age 62 regardless of service, or if less than 10 years of service regardless of age on withdrawal. The retirement benefit is calculated as 2.2% of the final average salary for each of the first 20 years of service and 2.4% for each year of service in excess of 20 years. The benefit shall not exceed 80% of final average salary. Pensionable salary is limited to $113,645 in 2018 for Tier 2 employees. Tier 2 employees receive a cost of living adjustment as the lesser of 3% or half of the CPI-u for the 12 months ending the September 30th prior to the increase date.

If a covered employee leaves employment before the age of 55, accumulated employee contributions are refundable without interest. Upon receipt of a refund, the employee forfeits rights to benefits from the fund.

There are two other types of annuities available to family members of the plan: Surviving Spouse Annuity and Children's Annuity. The spouses of employees hired before June 13, 1997 are immediately eligible to receive a surviving spouse annuity; spouses of employees hired on or after June 13, 1997 are eligible after three years of member's service. For all Tier 1 employees hired before January 1, 2011, the surviving spouse annuity is equal to 60% of the employee's retirement benefit at the time of death plus 1% for each year of total service to a maximum of 85%. For Tier 2 employees, an eligible surviving spouse will be entitled to an annuity equal to 66 2/3% of the employee's retirement benefit at time of death. Each unmarried child, until the age of 18 (23 if full time student) of an employee that dies in service or of a former member that dies with at least ten years of service, is eligible for a monthly annuity of $500 per month (if one parent is living) and $1,000 per month (if neither parent is living) to a maximum total benefit of $5,000 per month.

Employees covered
At December 31, 2018, the following employees were covered by the benefit terms:

Inactive Employees	
Employees or beneficiaries currently receiving benefits	2,443
Entitled but not yet receiving benefits	127
Active Employees	1,832
Total Members	4,402

Basis of Accounting
The Pension Plan's financial statements are prepared using the accrual basis of accounting. For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Pension Plan and additions to/ deductions from the Pension Plan's fiduciary net position have been determined on the same basis as they are reported by the Pension Plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value. Detailed information about the pension plan's fiduciary net position is available in the separately issued Retirement Fund financial report. Page 94 has the information for obtaining those statements.

Net Pension Liability and the Changes in the Net Pension Liability

The District's measurement date for GASB 68 is December 31, 2017. The Pension Plan has a measurement date of December 31, 2018. A copy of the Pension Plan CAFR for 2018 may be obtained by accessing the Metropolitan Water Reclamation District Retirement Fund's website at www.mwrdrf.org. The net pension liability at December 31, 2018 is $985,074,000, which is a decrease from the December 31, 2017 balance of $1,079,566,000.

	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balances at December 31, 2017	$ (2,432,163)	$ 1,352,597	$ (1,079,566)
Service Cost	(32,370)	—	(32,370)
Interest	(179,038)	—	(179,038)
Difference between expected and actual experiences	1,991	—	1,991
Benefit payments	154,713	(154,713)	—
Contributions-employer	—	89,858	89,858
Contributions-employee	—	20,840	20,840
Net investment income	—	194,822	194,822
Administrative expenses	—	(1,614)	(1,614)
Other	—	3	3
Balances at December 31, 2018	$ (2,486,867)	$ 1,501,793	$ (985,074)

Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At December 31, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to pensions. Employer contributions made subsequent to the measurement date in the amount of $87,167,000, will be recognized as a reduction of the net pension liability in the year ended December 31, 2018. Differences between expected and actual experience, changes in assumptions and net differences between projected and actual experience amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (in thousands of dollars):

	Deferred Outflows of Resources	Deferred Inflows of Resources
Balance as of December 31, 2017	$ 182,035	$ 15,102
Changes in Employer contribution subsequent to measurement date	(2,691)	—
Differences between expected and actual experience	(6,516)	(22,793)
Changes in assumptions	—	1,659
Net difference between projected and actual earnings on pension plan investments	(22,820)	95,088
Balance as of December 31, 2018	$ 150,008	$ 89,056

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (in thousands of dollars):

Year ended December 31:	
2019	$ 93,379
2020	3,371
2021	(18,419)
2022	(17,047)
2023	(332)
	$ 60,952

Actuarial Methods and Assumptions

The District's net pension liability was measured as of December 31, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2017. The District chose to use a measurement date one year in arrears. The total pension liability in the December 31, 2017 actuarial valuation was determined using the Entry Age Normal actuarial cost method and using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.5%
Salary increases	Varies by service
Investment rate of return	7.50%
Cost of living adjustment	Tier 1: 3% Tier 2: 1.25%

Mortality rates were based on the RP-2000 Combined Healthy Mortality Tables with generational mortality improvements based on Scale AA. Pre-retirement mortality rates are the same as post-retirement rates.

The actuarial assumptions used in the December 31, 2017 valuation were based on the results of an actuarial experience study for a five year period ending December 31, 2013.

Annual Money-Weighted Rate of Return

The annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was -7.44% for the year ended December 31, 2018. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Investment Allocation and Rate of Return

The long-term expected rate of return on pension plan investments was determined using a building-block method which best estimates ranges of expected future real rates of return. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The Pension Board's adopted target asset allocation and best estimates of real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Expected Real Rate of Return
Domestic equity	42%	5.8%
International equity	23%	6.7%
Fixed income	30%	1.3%
Private real estate	5%	5.3%

The discount rate used to measure the total pension liability was 7.5%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members; therefore, the long-term expected rate of return of 7.5% was applied to all periods of projected benefit payments to determine the pension liability.

A sensitivity analysis is also completed to show the effect on the net pension liability if the discount rate was plus or minus one percentage point from the current rate (in thousands of dollars):

	1% Decrease 6.5%	Current Discount Rate of 7.5%	1% Increase 8.5%
Net Pension Liability	$ 1,269,994	$ 985,074	$ 745,012

Payable to the Pension Plan and Pension Expense
At December 31, 2018, the District reported a payable of $87,167,000 for the outstanding amount of contributions to the pension plan required for the year ended December 31, 2018. The pension expense for the year ended December 31, 2018 was $98,656,000.

8. OPEB - Other Post-Employment Benefits

Plan Description
The Metropolitan Water Reclamation District of Chicago Retiree Health Care Benefit Plan (Plan) is a single-employer defined benefit postemployment health care plan that covers eligible retired employees of the District. The Plan, which is administered by the District, allows employees who retire and meet retirement eligibility requirements under the District's retirement plan to continue health coverage as a participant in the District's plan.

Employees Covered by Benefit Terms
December 31, 2017, the following employees were covered by the benefit terms:

Inactive Employees	
Inactive plan members currently receiving benefits	1,505
Beneficiaries of deceased plan members currently receiving benefits	438
Inactive plan members entitled to but not yet receiving benefits	41
Active Plan Members	1,835
Total Members	3,819

Benefits Provided
The benefits provided are the same as those provided for active employees. Spouses and dependents of eligible retirees are also eligible for medical coverage All full-time employees of the District are eligible to receive postemployment benefits Coverage for retirees and their spouses and dependents is provided for life. The Trust was established to advance fund benefits provided under the Plan.

Eligibility for Insurance Coverage
Employees must have at least ten years of service with the District, and coverage does not commence until the member starts receiving payments from the District's Retirement Fund. Eligibility is based on the employee's hire date as follows, age 50 for those hired before June 13, 1997, age 55 for those hired between June 13, 1997 and January 1, 2011 and age 63 for those hired after January 1, 2011.

Health Care Insurance

Retirees and their dependents who meet the age and service requirements above are eligible for medical and prescription drug benefits payable for life.

Contributions

Under the terms of the Plan, the Retired plan members and beneficiaries currently receiving benefits are required to contribute specified amounts monthly toward the cost of health insurance premiums.

The retiree contribution rates are set based on prior year claims incurred and become effective July lst each year. The retiree contribution rate utilized is based on the contribution rate policy established by the Board of Commissioners. This policy calls for a 2.5% increase in the contribution rate on January 1st of each year until the contribution rate reaches 50.0%, projected to be in 2021. The contribution rate for 2018 will be 42.5%.

In future years, contributions are assumed to increase at the same rate as premiums.

Investment Policy

The Long-Term Expected Rate of Return on OPEB Plan investments is determined using a building-block method in which best-estimate rates of expected future real rates of return (expected returns, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of December 31, 2017 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Broad Fixed Income	22.5%	1.10%
Core Plus Fixed Income	17.5	1.50
Large-Cap Core Equity	9.0	5.30
Large-Cap Value Equity	9.0	5.30
Large-Cap Growth Equity	9.0	5.20
Mid-Cap Core Equity	4.0	5.70
Small-Cap Core Equity	4.0	6.20
Non-US Large-Cap Core Equity	15.0	5 40
Global Tactical Asset Allocation	10.0	2.50
Total	100.0%	

The Long-Term Expected Rate of Return calculated using the method described above was 6.5% (assuming 3% inflation).

Concentrations

The Plan did not hold investments in any one organization that represent 5 percent or more of the Fund's Fiduciary Net Position.

Rate of Return

For the year ended December 31, 2017 the annual money-weighted rate of return on investments, net of investment expense, was 15.06 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts invested

Net OPEB Liability

- The measurement date is December 31, 2017.
- The measurement period for the OPEB expense is January 1 , 2017 to December 31, 2017.
- The reporting period is January 1, 2018 through December 31, 2018.
- The Sponsor's Net OPEB Liability was measured as of December 31, 2017.

Actuarial Assumptions

The Net OPEB Liability was determined by an actuarial valuation as of December 31, 2017 using the following actuarial assumptions:

Inflation	3.00%
Salary Increases	4.25% - 7%
Discount rate	6.50%
Investment Rate of Return	6.50%
Initial Healthcare trend rate	8.00%
Ultimate Healthcare trend rate	4.50%
Years to ultimate Healthcare rate	6

For all employees, mortality rates were based on the RP-200 combined health mortality tables with fully generational mortality improvements using scale AA.

Discount Rate

The projection of cash flows used to determine the Discount Rate assumed that current Plan Member and Sponsor contributions will be made at the current contribution rate (i.e. funding policy). The expected rate of return on trust investments is 6.50%. The Sponsor has adopted a funding policy as of October 2, 2014 with the intention of fully funding the plan by 2026 and maintaining 100% funding thereafter. The sponsor has shown that they are following the funding policy completely and will continue to do so. Therefore, the expected return on investments was used to discount projected benefit payments for all future benefit payments, and the single equivalent rate was 6.50%.

Change in OPEB Liability

(in thousands of dollars)	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a)-(b)
Reporting Period Ending December 31, 2017	$ 297,820	$ 164,844	$ 132,976
Changes for the Year:			
Service cost	5,098	—	5,098
Interest	19,260	—	19,260
Differences between expected and actual	—	—	—
Changes of assumptions	—	—	—
Changes of benefit terms	—	—	—
Contributions - Employer Trust	—	5,000	(5,000)
Contributions - Pay-as-you-go	—	13,431	(13,431)
Net Investment Income	—	25,392	(25,392)
Benefit payments	(13,431)	(13,431)	—
Administrative expense	—	(37)	37
Other changes	—	—	—
Net Changes	10,927	30,355	(19,428)
Reporting Period Ending December 31, 2018	$ 308,747	$ 195,199	$ 113,548

Sensitivity of the Net OPEB Liability to changes in the Discount Rate

The following presents the Net OPEB Liability of the Sponsor, as well as what the Sponsor's Net OPEB Liability would be if it were calculated using a discount rate that is one percentage-point lower or one percentage-point higher than the current discount rate (in thousands of dollars):

	1% Decrease 5.5%	Current Discount Rate 6.5%	1% Increase 7.5%
Net OPEB Liability	$ 156,327	$ 113,548	$ 79,182

Sensitivity of the Total OPEB Liability to changes in the Healthcare Cost Trend Rates

The following presents the Net OPEB Liability of the Sponsor, as well as what the Sponsor's Net OPEB Liability would be if it were calculated using healthcare cost trend rates that are one percentage-point lower or one percentage-point higher than the current healthcare cost trend rates (in thousands of dollars):

	1% Decrease 3.00% - 7.50%	Healthcare Cost Trend Rates 4.00% - 8.50%	1% Increase 5.00%-9.50%
Net OPEB Liability	$ 74,829	$ 113,548	$ 161,870

OPEB Plan Fiduciary Net Position

Detailed information about the OPEB Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB
For the year ended December 31, 2018, the Sponsor recognized OPEB Expense of $10,615,312. On December 31, 2018, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources (in thousands of dollars):

	Deferred Outflows of Resources	Deferred Inflows of Resource
Differences between expected and actual experience	$ —	$ —
Changes of assumptions	—	—
Net difference between projected and actual earnings on OPEB	—	11,613
Plan investments	—	—
Employer contributions subsequent to the measurement date	17,571	—
Total	$ 17,571	$ 11,613

Note- Employer Contributions Subsequent to the Measurement Date is an estimation of the total contributions for the fiscal year ending December 31, 2018.

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB will be recognized in OPEB Expense as follows (in thousands of dollars):

Year Ended December 31:	
2019	$ (2,903)
2020	(2,903)
2021	(2,903)
2022	(2,903)
2023	—
Thereafter	—

9. Commitments and Rebatable Arbitrage Earnings

The General Corporate Fund has existing purchase order encumbrances of $1,160,841 at December 31, 2018. Construction, Stormwater Management, and Capital Improvements Bond Funds' contract commitments (encumbrances) were $199,541,000 at December 31, 2018. State Revolving Fund Loan commitments of $50,343,000 at December 31, 2018, are also collectible as contract expenditures are incurred.

The Internal Revenue Code requires that an issuer of tax-exempt bonds rebate to the United States any excess investment earnings made with the gross proceeds of an issue over the amount which would have been earned had such proceeds been invested at a rate equal to the yield on the issue. The Internal Revenue Code offers certain "safe harbors" permitting qualified governments to keep extra earnings that result from arbitrage. The District has made a determination of their probable liability for amounts potentially due to the United States government. As of December 31, 2018, the District has no arbitrage rebate liability.

National Pollutant Discharge Elimination System

NPDES Permits. The District operates its water reclamation plants (the "WRPs") in accordance with National Pollutant Discharge Elimination System ("NPDES") permits issued by the Illinos Environmental Protection Agency (IEPA). After several years and substantial litigation, the NPDES Permits for the District's Stickney, Calumet and O'Brien WRPs contain three new special conditions. Under these additional conditions, the District will fund a super-gauge to monitor nutrients in the lower Des Plaines River, hire a consultant to prepare an implementation plan to address phosphorus in area waterways, and potentially implement that plan. The District was also required to conduct a feasibility study to determine the cost of reducing phosphorus in the WRPs' effluent to certain levels. If required to reduce the phosphorus in the District's effluent to very low levels, the costs could be substantial.

The District recently received draft NPDES permits for the Kirie and Lemont WRPs. These draft permits also require the District to prepare or assist in preparing an implementation plan to address phosphorus in the receiving waters of these plants, implement that plan, and to conduct a feasibility study to determine the cost of reducing phosphorus in the WRP's effluent to certain levels. The District anticipates that its permits for the Hanover Park and Egan WRPs will contain similar provisions.

NPDES Consent Decree. The District's NPDES permits, in addition to controlling discharges from the WRPs, also impose conditions upon combined sewer system overflows (the "CSOs"). In compliance with the NPDES permits, the District's TARP was developed as a long-term control plan to control CSOs. The United States Environmental Protection Agency (USEPA) alleged that discharges from the District's CSOs have and continue to violate certain permit requirements, including the prohibition on discharging pollutants into waters that cause or contribute to violations of applicable water quality standards for dissolved oxygen, solids, and floatables. The IEPA joined the USEPA in alleging the stated water quality violations. Entities with combined sewer systems that allegedly are in violation of applicable water quality standards are subject to an enforceable schedule for the implementation of a long-term control plan, with "enforceable" requiring a judgment or a consent decree entered in a federal district court.

In December 2011, the USEPA and IEPA filed a lawsuit against the District for the alleged violations, and lodged a consent decree negotiated between the USEPA, IEPA and the District. The case is captioned United States of America and State of Illinois v. Metropolitan Water Reclamation District of Greater Chicago, 11 CV 08859. Without an admission of liability, the consent decree resolved the federal and state claims associated with the District's CSOs. The consent decree, among other things: (a) establishes a construction schedule with interim milestones for completion and operation of portions of the District's TARP plan; (b) obligates the District to advance funds to the U.S. Army Corps of Engineers (the "Corps") for portions of the District's TARP for which the Corps is responsible should federal funds be unavailable to the Corps by the stated deadlines; (c) establishes performance criteria and develops post-construction monitoring for portions of the TARP system; (d) requires the District to continue seasonal operation of debris boats and pontoon boats to control floatables in the CAWS; (e) requires the District to submit annual reports on its compliance with the terms of the consent decree; (f) imposes stipulated penalties for violations of the decree; (g) imposes a total civil penalty of $675,000, which the District has already paid; (h) requires the District to implement one or more green infrastructure projects within one year for a minimum of $325,000, which the District has done; and (i) to implement additional green infrastructure projects staggered over the next 15 years that provide a minimum of 10 million gallons of design retention capacity in an individual storm, which the District continues to do.

Class Action Flooding Claims. The District has previously been and is presently a party to several proposed class action lawsuits pending in the Circuit Court of Cook County arising out of local sewer back-ups and overland flooding resulting in basement flooding. The District is also in receipt of flooding claims in which lawsuits have not yet been filed. These lawsuits and claims are generally brought in tort, or for constitutional or statutory violations. As of the date of this CAFR, the Circuit Court of Cook County and the Illinois Appellate Court for the First District have ruled in the District's favor in every fully-adjudicated matter. A constitutional question was appealed to the Illinois Supreme Court, was answered, and remanded back to the Circuit Court for further proceedings. Other cases are currently on appeal to the Illinois Appellate Court for the First District.

10. Risk Management and Claims

The District is primarily self-insured for the "working layer" of losses and purchases excess insurance to assist in the response to catastrophic claims. Under the Reserve Claim Fund the District may levy an annual property tax not to exceed .005% of the equalized assessed valuation of taxable property within the District's territorial limits. The Reserve Claim Fund can be used 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. The aggregate amount that may accumulate in the Reserve Claim Fund cannot exceed .05% of the equalized assessed valuation. The Reserve Claim Fund accounts are included in the General Corporate Fund as described in Note 1.b to the financial statements.

From time to time, the District may be involved in various litigation relating to claims arising from general liability, property damage, automobile liability, personal injury, employment practices, marine liability, and public officials liability. The majority of these claims and judgments would be covered by insurance or paid from the Reserve Claim Fund accounts.

The District may be involved in various litigation relating to claims arising from construction contracts. Construction-related liability claims can typically be tendered to the Contractor for defense and indemnification. Most other claims and judgments involving disputed construction contracts would be paid by the Capital Improvements Bond or Construction Funds.

The District may also be involved in various litigation for claims relating to environmental regulations. Under current environmental protection laws, the District may be ultimately responsible for the environmental remediation of some of its leased-out properties. The District has developed a preliminary estimate of environmental remediation costs for major lease sites. The range of such estimated costs at December 31, 2018, is between $26.0 million and $37.4 million. The District is of the opinion that the tenants (except for those who are bankrupt, out of business, or otherwise financially unable to perform) would ultimately be liable for the bulk, if not all, of these site clean-up costs. Negotiations are ongoing between the District's lawyers and the tenants to resolve remedial activity and cost liability issues. The current estimated cost was determined to be $30,700,000 with an estimated cost recoverable amount of $22,150,000, resulting in $8,550,000 being recognized at December 31, 2018 in the liabilities of the government-wide financial statements. Of this amount, none of the current liability is classified as short-term and $8,550,000 is considered a long-term liability These estimates are subject to changes as a result of price increases, changes in technology and new laws and regulations. These estimates were generated using the expected cash flows technique. GASB Statement No. 49 addresses accounting and financial reporting standards for pollution (including contamination) remediation obligations, which are obligations to address the current or potential detrimental effects of existing pollution by participating in pollution remediation activities such as site assessments and cleanups. The scope of the document excludes pollution prevention or control obligations with respect to current operations, and future pollution remediation activities that are required upon retirement of an asset.

The District provides health insurance benefits to employees through a fully insured health maintenance organization and a self-insured comprehensive indemnity/PPO plan. The District provides dental insurance benefits through a fully insured dental maintenance organization and a self-insured dental indemnity plan. The District does not purchase stop-loss insurance for its self-insured comprehensive indemnity/PPO plan. The District provides life insurance benefits for active employees through an insured life insurance program.

Additional insurance policies in effect at December 31, 2018, are listed below. There were no reductions in insurance coverage from the prior year. Settled claims have not exceeded this coverage in any of the past three fiscal years. The current insurance coverage and risk retention related to these policies is as follows:

Marine Liability	
Aggregate	$10,000,000
Deductible	$10,000
Excess Liability	
Aggregate	$50,000,000
Deductible	$1,250,000
Deductible - Flood Class Action	$5,000,000
Deductible - Employers Liability	$1,250,000
Government Crime	
Forgery or Alteration	
Per Occurrence	$750,000
Deductible	$50,000
Employee Theft (including Faithful Performance)	
Per Occurrence	$6,000,000
Deductible	$100,000
Computer Fraud	
Per Occurrence	$6,000,000
Deductible	$100,000
Funds Transfer Fraud	
Per Occurrence	$6,000,000
Deductible	$100,000
Property Insurance	
Per Occurrence	$1,000,000,000
Deductible	$10,000,000
Earth Movement	
Per Occurrence	$250,000,000
Deductible	$10,000,000
Flood and Water Damage	
Per Occurrence	$250,000,000
Deductible	$10,000,000
Flood and Water Damage - Lockport Powerhouse	
Per Occurrence	$200,000,000
Deductible	$10,000,000
Group Travel Accident	
Aggregate Limit	$10,000,000
Accidental Death	
Per Employee (5 times salary up to this maximum)	$500,000
Accidental Dismemberment, Paralysis and other Coverages	
Per Loss	% per Schedule
Pension & Welfare Fiduciary Liability	
Aggregate	$5,000,000
Self-Insured Retention	$10,000
Group Term Life (basic)	
Per Employee	$20,000

The following changes in claims liabilities for the past two years have been calculated and include claims reported but not settled as well as those incurred but not reported in the government-wide financial statements (in thousands of dollars):

	2018	2017
Claims Payable at January 1	$ 30,669	$ 40,236
Claims incurred	5,497	6,905
Changes in prior years' claims estimate	(9,556)	(9,567)
Claim payments	(5,497)	(6,905)
Claims Payable at December 31	$ 21,113	$ 30,669

11. Long-Term Debt

The following is a summary of general long-term liability activity of the District for the year ended December 31, 2018 (in thousands of dollars):

	Balance January 1, 2018	Additions	Reductions	Balance December 31, 2018	Due Within One Year
Governmental long-term liabilities:					
Bonds and notes payable:					
General obligation debt	$ 1,910,355	$ —	$ (55,450)	$ 1,854,905	$ 55,480
Converted bond anticipation notes	787,312	254,211	(86,251)	955,272	67,827
Bond anticipation notes	296,529	67,548	(254,211)	109,866	—
Total bonds & notes payable	2,994,196	321,759	(395,912)	2,920,043	123,307
Other Bond Cost:					
Premium	182,248	—	(13,426)	168,822	13,426
Net bonds and notes payable	3,176,444	321,759	(409,338)	3,088,865	136,733
Other liabilities:					
Claims and judgments	30,669	—	(9,556)	21,113	6,412
Compensated absences	22,811	135	(1,468)	21,478	2,335
Capital lease (note 14)	38,574	—	(2,595)	35,979	2,722
OPEB liability (note 8)	132,976	—	(19,428)	113,548	—
Net pension liability. (note 7)	1,079,566	367,735	(462,227)	985,074	—
Total governmental long-term liabilities	$ 4,481,040	$ 689,629	$ (904,612)	$ 4,266,057	$ 148,202

Liabilities for the Bonds and Bond Anticipation Notes are paid from the Debt Service Fund. Liabilities for Compensated Absences are primarily paid from the General Corporate and Stormwater Management Funds. Most claims resulting from construction projects are paid from either the Capital Improvements Bond or the Construction Funds, while all other claims are paid from the Reserve Claim Fund accounts in the General Corporate Fund.

As of December 31, 2018, the annual debt service requirements for general obligation bonds are shown below (in thousands of dollars):

Bonds Payable Maturity Table

Maturing	Capital Improvement & Alternate Revenue Bond Series (2.000-5.720%) (Issued 08/09 to 7/16)	Refunding (2.00-5.00%) (Issued 03/07 to 7/16)	State Revolving Funds Series (0.0-2.905%) (Issued 06/96 to 07/16)	Total Principal	Total Interest
2019	$ 22,410	$ 33,070	$ 67,827	$ 123,307	$ 115,017
2020	13,740	35,530	65,894	115,164	110,950
2021	15,065	35,500	66,533	117,098	107,220
2022	11,605	40,350	66,652	118,607	103,473
2023	22,515	29,670	66,755	118,940	99,604
2024-2027	111,285	176,055	303,079	590,419	438,860
2028-2032	249,595	218,395	214,802	682,792	325,911
2033-2037	580,715	91,845	103,730	776,290	156,314
2038-2042	108,945	—	—	108,945	31,527
2043-2046	58,615	—	—	58,615	4,328
	$ 1,194,490	$ 660,415	$ 955,272	$ 2,810,177	$ 1,493,204

Alternate Revenue Bonds

Bond proceeds of $50.0 million 2016 Tax Series E bonds and $50.0 million 2014 Tax Series B bonds are used to fund a portion of the Stormwater Management Program projects. The pledge of the Stormwater Management Fund tax levy will remain until their final maturities in December 2045. The District has covenanted in the Series 2016E and 2014B Bond Ordinances to provide for, collect, and apply such Stormwater Management Tax Receipts to the payment of the 2016E and 2014B Bonds, and the provision of not less than an additional .25 times the annual debt service on the 2016E and 2014B bonds. The amount of pledges remaining at December 31, 2018 is $179,494,000 as shown below (in thousands of dollars).

Issue	Pledged Revenue Collected	Debt Service Principal	Expenditures Interest	Total Remaining
2016 Tax Series E	$ 2,500	$ 50,000	$ 44,462	$ 94,462
2014 Tax Series B	11,936	47,190	37,842	85,032
Total	$ 14,436	$ 97,190	$ 82,304	$ 179,494

2016 Bond Issues

In June 2016, the District issued $280,930,000 in General Obligation Refunding Bonds, Unlimited Tax Series A, with maturity dates from 2023 to 2031. The bonds were issued at a premium of $68,206,452. Interest accrues on the bonds at a rate of 5.0%, payable on December 1 and June 1. The bonds were issued to refund $346,600,000 of outstanding principal amount, plus accrued interest, of May 2006 Unlimited Tax Series.

In June 2016, the District issued $41,330,000 in General Obligation Refunding Bonds, Limited Tax Series B, with maturity dates from 2023 to 2031. The bonds were issued at a premium of $9,835,301. Interest accrues on the bonds at a rate of 5.0%, payable on December 1 and June 1. The bonds were issued to refund $50,790,000 of outstanding principal amount, plus accrued interest, of May 2006 Limited Tax Series.

In June 2016, the District issued $30,000,000 of Taxable General Obligation Capital Improvement Bonds, Unlimited Tax Series C (Green Bonds), with maturity dates from 2044 to 2045. The bonds were issued at a premium of $5,739,300. Interest accrues on the bonds at a rate of 5.0%, payable on December 1 and June 1.

In June 2016, the District issued $20,000,000 of Taxable General Obligation Capital Improvement Bonds, Limited Tax Series D (Green Bonds), with maturity dates from 2022 to 2030. The bonds were issued at a premium of $4,718,891. Interest accrues on the bonds at a rate of 5.0%, payable on December 1 and June 1.

In June 2016, the District issued $50,000,000 of Taxable General Obligation Bonds, (Alternate Revenue Source), Unlimited Tax Series E (Green Bonds), with maturity dates from 2022 to 2045. The bonds were issued at a premium of $10,545,322. Interest accrues on the bonds at a rate of 5.0%, payable on December 1 and June 1.

In June 2016, the District issued $4,000,000 of Taxable General Obligation Capital Improvement Bonds, Limited Tax Series F (Qualified Energy Conservation Green Bonds), with a maturity date of December 1, 2036. Interest accrues on the bonds at a rate of 4.0%, payable on December 1 and June 1.

2015 Bond Issues

In January 2015, the District issued $100,000,000 of Taxable General Obligation Capital Improvement Bonds, Unlimited Tax Series A (Green Bonds), with maturity dates from 2039 to 2044. The bonds were issued at a premium of $14,440,000. Interest accrues on the bonds at a rate of 5.0%, payable on December 1 and June 1.

In January 2015, the District issued $50,000,000 of Taxable General Obligation Bonds, (Alternate Revenue Source), Unlimited Tax Series B (Green Bonds), with maturity dates from 2016 to 2044. The bonds were issued at a premium of $7,720,129. Interest accrues on the bonds at rates ranging from 2.0% to 5.0%, payable on December 1 and June 1.

In January 2015, the District issued $75,000,000 of Taxable General Obligation Capital Improvement Bonds, Limited Tax Series C (Green Bonds), with maturity dates from 2016 to 2028. The bonds were issued at a premium of $14,022,875. Interest accrues on the bonds at rates ranging from 2.0% to 5.0%, payable on December 1 and June 1.

In January 2015, the District issued $70,805,000 in General Obligation Refunding Bonds, Limited Tax Series D, with maturity dates from 2016 to 2022. The bonds were issued at a premium of $12,346,220. Interest accrues on the bonds at rates ranging from 2.0% to 5.0%, payable on December 1 and June 1. The bonds were issued to refund $76,050,000 of outstanding principal amount, plus accrued interest, of July 2006 Limited Tax Series.

2011 Bond Issues

In July 2011, the District issued $270,000,000 of General Obligation Capital Improvement Bonds, Limited Tax Series B, with maturity dates from 2017 to 2032. The bonds were issued at a premium of $27,686,556. Interest accrues on the bonds at rates ranging from 3.0% to 5.0%, payable December 1 and June 1.

In July 2011, the District issued $100,000,000 of General Obligation Capital Improvement Bonds, Unlimited Tax Series C, with maturity dates from 2013 to 2031. The bonds were issued at a premium of $9,657,071. Interest accrues on the bonds at rates ranging from 3.0% to 5.0%, payable December 1 and June 1

2009 Bond Issues

In August 2009, the District issued $600,000,000 in taxable General Obligation Capital Improvement Bonds, Limited Tax Series of August 2009 (Build America Bonds – Direct Payment) The bonds have an interest rate of 5.72%, payable on December 1 and June 1, and mature on December 1, 2038. The bonds are subject to mandatory sinking fund redemption on December 1 in years 2033 through 2038. The Build America Bonds (BAB) program was authorized as part of the American Recovery and Reinvestment Act of 2009 and includes a subsidy of 35% of interest cost to be paid to the District by the U.S Treasury for the life of the bonds. The federal subsidy reduces the effective interest rate on the bonds to 3.72%. Sequestration may reduce the subsidy received from the U.S. Treasury in future years.

2007 Bond Issues
In March 2007, the District issued $188,315,000 in General Obligation Refunding Bonds, Unlimited Tax Series A, at a premium of $16,775,789. The bonds have interest rates from 4.00 to 5.00%, payable on December 1 and June 1, and maturity dates from 2014 to 2022. The bonds were issued to refund $146,000,000 of outstanding principal amount, plus accrued interest, of 2002 Limited Tax Series E and $57,900,000 of outstanding principal amount, plus accrued interest, of 2002 Unlimited Tax Series C.

In March 2007, the District issued $91,845,000 in General Obligation Refunding Bonds, Unlimited Tax Series B, at a premium of $17,462,417. The bonds have an interest rate of 5.25%, payable on December 1 and June 1, and maturity dates from 2034 to 2035. The bonds were issued to refund $100,000,000 of outstanding principal, plus accrued interest, of 2006 Unlimited Tax Series.

In March 2007, the District issued $101,860,000 in General Obligation Refunding Bonds, Limited Tax Series C, at a premium of $18,859,718. The bonds have an interest rate of 5.25%, payable on December 1 and June 1, and maturity dates from 2025 to 2033. The bonds were issued to refund $110,435,000 of outstanding principal, plus accrued interest, of 2006 Unlimited Tax Series.

Capital Improvement Bonds, IEPA Series
The District has adopted bond ordinances authorizing issuance of its general obligation bonds to the Illinois Environmental Protection Agency (IEPA). The most recent such authorization was pursuant to a bond ordinance adopted in calendar year 2016 in the amount of $500,000,000 for Capital Improvement Bonds, 2016 IEPA Series. The IEPA approves various capital improvements related to sewage treatment works and flood control facilities for funding from the State Water Pollution Control Revolving Loan Fund (SRF). Once a project has been approved, the State offers the District a loan from the State's Revolving Loan Fund, which the District incorporates into the form of the bond which is issued to the IEPA (the Loan/Bond). When work on the project begins, the District pays the contractor. The District receives a corresponding amount of advance on the Loan/Bond from the IEPA. This form of loan is commonly referred to as a drawdown loan. The advances continue on the Loan/Bond until the project is completed or the amount of the loan fully advances, whichever occurs first. In general, within two years of the first advance on a Loan/Bond, the IEPA promulgates a repayment schedule on such Loan/Bond. The repayment schedules call for level payments of principal and interest, collectively, over a 20 year period beginning within six months of the date the repayment schedule is promulgated. Under this authority, the IEPA has approved the following loan amounts:

2019	$	4,400,000
2018	$	34,600,000
2017	$	7,900,000
2016	$	155,900,000

In 2014, the District authorized the issuance of $425,000,000 of Capital Improvement Bonds, 2014 IEPA Series, for capital improvements related to sewage treatment works and flood control facilities. The terms and conditions are similar to the 2016 IEPA Series. Under this authority, the IEPA has subsequently approved the following loan amounts:

2019	$	67,500,000
2018	$	4,900,000
2017	$	4,200,000
2016	$	151,200,000
2015	$	54,600,000
2014	$	83,600,000
2012	$	17,400,000

In 2012, the District authorized the issuance of $300,000,000 of Capital Improvement Bonds, 2012 IEPA Series, for capital improvements related to sewage treatment works and flood control facilities. The terms and conditions are similar to the 2014 IEPA Series. Under this authority, the IEPA has subsequently approved the following loan amounts:

2015	$	13,700,000
2014	$	66,100,000
2013	$	194,900,000
2012	$	15,000,000

State Revolving Fund (SRF) Loan proceeds of $64,170,000 are recognized as "other financing sources" in the Capital Improvements Bond Fund. The amount recognized is based upon reimbursable expenditures incurred during the fiscal year. The amount recognized as SRF proceeds is also recognized as a long-term liability in the government-wide Statements of Net Position.

The District refinances bond anticipation notes through the issuance of its Capital Improvement Bonds in the amount of the bond anticipation notes, plus accrued interest. As a result, there is no debt service required until these notes are converted into bonds. The District has accrued principal of $64,170,000 and interest of $3,378,000 through the balance sheet date on bond anticipation notes resulting in the total increase to long-term debt of $67,548,000.

The converted bond anticipation notes, a reduction of long-term debt, of $254,211,000 in 2018 represented the sum of converted bond anticipation note principal of $249,322,000 and interest in the amount of $4,889,000.

2018 Bond Issues and adjustments to existing issues under the IEPA 2012, 2014 and 2016 authority included:

- July 2018 – The District issued $550,000 of Capital Improvement Bonds - IEPA Series 12C, through the conversion of the sum of bond anticipation note principal of $544,000 and interest of $6,000 with maturity dates from January 1, 2019 to January 1, 2036. Interest on the bonds accrues at a rate of 1.995%, payable January 1 and July 1.

- July 2018 – The District issued $122,000 of Capital Improvement Bonds - IEPA Series 12F, through the conversion of the sum of bond anticipation note principal of $120,000 and interest of $2,000 with maturity dates from January 1, 2019 to July 1, 2032. Interest on the bonds accrues at a rate of 1.93%, payable January 1 and July 1.

- July 2018 – The District issued $32,840,000 of Capital Improvement Bonds - IEPA Series 12G, through the conversion of the sum of bond anticipation note principal of $31,580,000 and interest of $1,260,000 with maturity dates from January 1, 2019 to January 1, 2038. Interest on the bonds accrues at a rate of 1.93%, payable January 1 and July 1.

- July 2018 – The District issued $287,000 of Capital Improvement Bonds - IEPA Series 12I, through the conversion of the sum of bond anticipation note principal of $284,000 and interest of $3,000 with maturity dates from January 1, 2019 to July 1, 2036. Interest on the bonds accrues at a rate of 2.21%, payable January 1 and July 1.

- July 2018 –The District issued $401,000 of Capital Improvement Bonds - IEPA Series 12K, through the conversion of the sum of bond anticipation note principal of $395,000 and interest of $6,000 with maturity dates from January 1, 2019 to July 1, 2035. Interest on the bonds accrues at a rate of 1.995%, payable January 1 and July 1.

- July 2018 – The District issued $2,882,000 of Capital Improvement Bonds - IEPA Series 12L, through the conversion of the sum of bond anticipation note principal of $2,845,000 and interest of $37,000 with maturity dates from January 1, 2019 to July 1, 2036. Interest on the bonds accrues at a rate of 2.21%, payable January 1 and July 1.

- July 2018 – The District issued $1,818,000 of Capital Improvement Bonds - IEPA Series 12M, through the conversion of the sum of bond anticipation note principal of $1,795,000 and interest of $23,000 with maturity dates from January 1, 2019 to July 1, 2037. Interest on the bonds accrues at a rate of 2.21%, payable January 1 and July 1.

- July 2018 – The District issued $116,000 of Capital Improvement Bonds - IEPA Series 12N, through the conversion of the sum of bond anticipation note principal of $114,000 and interest of $2,000 with maturity dates from January 1, 2019 to January 1, 2036. Interest on the bonds accrues at a rate of 1.995%, payable January 1 and July 1.

- July 2018 – The District issued $16,000 of Capital Improvement Bonds - IEPA Series 14B, through the conversion of the sum of bond anticipation note principal of $16,000 with maturity dates from January 1, 2019 to January 1, 2036. Interest on the bonds accrues at a rate of 2.21%, payable January 1 and July 1.

- July 2018 – The District issued $11,224,000 of Capital Improvement Bonds - IEPA Series 14D, through the conversion of the sum of bond anticipation note principal of $11,124,000 and interest of $100,000 with maturity dates from January 1, 2019 to January 1, 2038. Interest on the bonds accrues at a rate of 1.86%, payable January 1 and July 1.

- July 2018 – The District issued $34,623,000 of Capital Improvement Bonds - IEPA Series 14E, through the conversion of the sum of bond anticipation note principal of $33,913,000 and interest of $710,000 with maturity dates from January 1, 2019 to July 1, 2038. Interest on the bonds accrues at a rate of 1.86%, payable January 1 and July 1.

- July 2018 – The District issued $15,370,000 of Capital Improvement Bonds - IEPA Series 14G, through the conversion of the sum of bond anticipation note principal of $15,140,000 and interest of $230,000 with maturity dates from January 1, 2019 to July 1, 2038 Interest on the bonds accrues at a rate of 1.86%, payable January 1 and July 1

- July 2018 – The District issued $50,000 of Capital Improvement Bonds - IEPA Series 14H, through the conversion of the sum of bond anticipation note principal of $50,000 with maturity dates from January 1, 2019 to July 1, 2036. Interest on the bonds accrues at a rate of 1.86%, payable January 1 and July 1.

- July 2018 – The District issued $5,918,000 of Capital Improvement Bonds - IEPA Series 14I, through the conversion of the sum of bond anticipation note principal of $5,846,000 and interest of $72,000 with maturity dates from January 1, 2019 to July 1, 2038. Interest on the bonds accrues at a rate of 1.86%, payable January 1 and July 1.

- July 2018 – The District issued $370,000 of Capital Improvement Bonds - IEPA Series 14J, through the conversion of the sum of bond anticipation note principal of $365,000 and interest of $5,000 with maturity dates from January 1, 2019 to January 1, 2036. Interest on the bonds accrues at a rate of 2.21%, payable January 1 and July 1.

- July 2018 – The District issued $4,872,000 of Capital Improvement Bonds - IEPA Series 14K, through the conversion of the sum of bond anticipation note principal of $4,813,000 and interest of $59,000 with maturity dates from January 1, 2019 to January 1, 2038. Interest on the bonds accrues at a rate of 1.86%, payable January 1 and July 1.

- July 2018 – The District issued $5,452,000 of Capital Improvement Bonds - IEPA Series 14L, through the conversion of the sum of bond anticipation note principal of $5,371,000 and interest of $81,000 with maturity dates from January 1, 2019 to January 1, 2038. Interest on the bonds accrues at a rate of 1.75%, payable January 1 and July 1.

- July 2018 – The District issued $1,442,000 of Capital Improvement Bonds - IEPA Series 14M, through the conversion of the sum of bond anticipation note principal of $1,423,000 and interest of $19,000 with maturity dates from January 1, 2019 to January 1, 2038. Interest on the bonds accrues at a rate of 1.75%, payable January 1 and July 1.

- July 2018 – The District issued $1,321,000 of Capital Improvement Bonds - IEPA Series 14N, through the conversion of the sum of bond anticipation note principal of $1,307,000 and interest of $14,000 with maturity dates from January 1, 2019 to January 1, 2038. Interest on the bonds accrues at a rate of 1.75%, payable January 1 and July 1.

- July 2018 – The District issued $129,664,000 of Capital Improvement Bonds - IEPA Series 16A, through the conversion of the sum of bond anticipation note principal of $127,439,000 and interest of $2,225,000 with maturity dates from January 1, 2019 to July 1, 2038. Interest on the bonds accrues at a rate of 1.75%, payable January 1 and July 1.

- July 2018 – The District issued $4,873,000 of Capital Improvement Bonds - IEPA Series 16D, through the conversion of the sum of bond anticipation note principal of $4,838,000 and interest of $35,000 with maturity dates from January 1, 2019 to January 1, 2038. Interest on the bonds accrues at a rate of 1.75%, payable January 1 and July 1

Beginning in 1991, the District's Board of Commissioners adopted ordinances providing for the issuance of bond anticipation notes. The bond anticipation notes are issued exclusively to cover interim project loan advances from the Illinois Environmental Protection Agency. Principal and interest liabilities related to the bond anticipation notes were $109,866,000 at December 31, 2018. Of the bond anticipation notes outstanding at December 31, 2018, $2,886,000 will be financed through IEPA Series 2012 bonds, $99,146,000 will be financed through IEPA Series 2014 bonds, and the remaining $7,834,000 will be financed through IEPA series 2016 bonds. None of these outstanding bond anticipation notes are expected to be repaid within the next calendar year; therefore, the notes are reported as part of long-term debt.

Refunding Transactions
The District had no outstanding defeased obligations at December 31, 2018.

12. Interfund Transactions

The interfund receivable and payable balances at the end of the year are reported as "due from/to other funds" in the Governmental Funds Balance Sheets and are eliminated in the government-wide Statements of Net Position. The balances represent payroll transactions paid from the General Corporate Fund that are later reimbursed by other funds. Also, any temporary cash overdrafts are reclassified as interfund receivable/payable balances at the end of the year in the fund balance sheet. Interfund balances are generally repaid within a year of the fiscal year end.

Individual interfund receivable and payable balances at December 31, 2018 are as follows (in thousands of dollars):

	Interfund	
	Receivables	Payables
General Corporate Fund	$ 132	$ —
Capital Projects Funds:		
Stormwater Management Fund (Nonmajor Fund)	—	132
	$ 132	$ 132

In addition to the previous table, amounts were due from the Primary Government to the Pension Trust Fund of $19,034,000 at December 31, 2018 that represented earned but uncollected property taxes in the Retirement Fund and the Government-wide Statements of Net Position.

Transfers between funds as authorized in the budget are recorded as "other financing sources (uses)" in the fund operating statements. In 2018, the Treasurer of the District transferred $5,771,000 for principal and interest payments on the 2014 Alternate Bond Debt service from the Stormwater Management Fund to the Debt Service Fund. There was also a transfer of $4,200,000 made from the Capital Improvement Bond fund to the General Corporate Fund. The transfer of funds into the Construction Fund and out of the Stormwater Fund resulted in a net transfer of $5,771,000 as presented on Exhibit A-2 in the Other Governmental/Nonmajor funds. Transfers are eliminated in the Government-wide Statements of Activities.

13. Property Tax Extension Limitation Law

Effective March 1, 1995, the Property Tax Extension Limitation Law limits the amount of property taxes the District can extend for years subsequent to 1993. The law limits the District's increase in aggregate tax levy extension to 5% of the previous year or to the percentage increase in the consumer price index, whichever is less. The aggregate limitation does not apply to the District's Debt Service and Stormwater Management Fund levies.

As part of the District's Property Tax Levy subject to the Illinois Property Tax Extension Limitation Law, the Construction Fund Property Tax Levy is adjusted downward if the estimated increase in the aggregate is more than the allowable extension under the law.

In Section 18-195 of the Law, the County Clerk is instructed to proportionally reduce all the levies subject to the limitation unless the taxing district requests otherwise. Through the Levy ordinances, MWRD requests the County

Clerk to reduce the entire reduction to the aggregate levy by reducing the Construction Fund as required by Section 18-195 of the law.

In addition, the individual tax levies of the Corporate, Construction, Reserve Claim, Stormwater Management, Corporate Working Cash, and Construction Working Cash Funds have statutory limitations. The Corporate levy cannot exceed .41% of the equalized assessed valuation, while the Construction levy cannot exceed .10% of the equalized assessed valuation and the Corporate Working Cash and Construction Working Cash levies individually cannot exceed .005% of the equalized assessed valuation. The Reserve Claim levy cannot exceed .005% of the equalized assessed valuation and the aggregate amount which may accumulate in the Reserve Claim Fund shall not exceed .05% of the equalized assessed valuation. The Stormwater Management Fund levy cannot exceed .05% of the equalized assessed valuation as a result of statutory changes. The Debt Service Fund is limited through debt service extension limitations under the Property Tax Extension Limitation Law.

14. Leases

Capital Lease

In December 2000, the Board of Commissioners authorized the District to enter into a long-term contract with an engineering firm to design, build, finance, own, operate, and maintain a 150 dry ton per day biosolids processing facility at the District's Central (Stickney) Water Reclamation Plant, and beneficially use the final product for a period of twenty years.

The cost of the biosolids processing facility is considered a capital lease since it will become the property of the District at the end of the contract. The District also has an option to purchase the facility at the end of the fifth, tenth, and fifteenth year of operation for the remaining principal portion of the debt. Total payments for the capital lease are estimated at $83,123,000 for the full term of the contract, which will be paid from the Capital Improvements Bond Fund. The gross amount of assets acquired under the capital lease is $54,535,000. During 2018, the District incurred expenses of approximately $2,595,000 for principal and $1,795,000 for interest. The contract expires twenty years from the date of commercial operation, which was declared in July 2010.

As of December 31, 2018, the future minimum lease payments for the biosolids facility are shown below (in thousands of dollars):

Capital Lease Payable Maturity Table

Maturing	Total Principal	Total Interest	Total Payments
2019	$ 2,722	$ 1,667	$ 4,389
2020	2,855	1,534	4,389
2021	2,996	1,394	4,390
2022	3,143	1,247	4,390
2023	3,297	1,093	4,390
2024-2027	19,077	2,872	21,949
2028-2029	1,889	24	1,913
Total Minimum Lease Payments	$ 35,979	$ 9,831	$ 45,810

Lease Rentals
The District leases land to governmental and commercial tenants under operating lease agreements for periods of up to 99 years. There were no contingent lease rentals for the period. The commercial leases are considered non-cancellable and the following is a summary of the minimum future rentals for these leases at December 31, 2018 (in thousands of dollars):

2019	$ 17,380
2020	17,380
2021	17,380
2022	17,261
2023	17,157
Later Years	390,792
Total Minimum Future Rental Income	$ 477,350

The cost of the land associated with the commercial leases is $5,831,090. The District does not lease any depreciable assets.

15. Tax Abatements

The District has one tax abatement agreement with the Boeing Company with regard to the Corporate Headquarters Relocation Act in which property taxes are being abated. The agreement was entered into at the authority of the Metropolitan Water Reclamation District (as a taxing district) and the District's Board authorization. Eligibility began with the Boeing Project whereby Boeing moved its corporate headquarters to the City of Chicago and qualified as an eligible business under the Relocation Act. This includes $25,000,000 annual world-wide revenues, satisfaction of the MBE/WBE requirements, compliance with the resident hiring and prevailing wage requirements, and employing at least 500 full time employees within the City of Chicago, and lease and occupy not less than 150,000 rentable square feet in the 100 North Riverside building.

The District's taxes are reduced by way of a reimbursement to Boeing in an amount equal to the allocable share of the real estate taxes, or 5.682%. The District is entitled to terminate the agreement or recover all payments if Boeing defaults on their commitments. The 2018 taxes abated totaled $128,960.

Cook County granted special assessments for the development or redevelopment of commercial and industrial properties. The properties receive a real estate tax incentive as a reduction in the assessment rate. The total estimated impact of these incentives to the District is approximately $10,900,000 in reduced property taxes.

16. Restatement for Implementation of New Accounting Standard

The District's net position has been restated as of December 31, 2017. The restatement is a result of the implementation of GASB Statement No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions" - an amendment of GASB Statement No. 45 "Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions". The restatement is to record the effect of the net OPEB liability and deferred outflows of resources as of the measurement date for the previous year.

The effect of the restatement on fiscal year 2017 and the effect of the restatement on the partial summarized information for fiscal year 2016 included with this report is shown below (in thousands of dollars):

	Governmental Activities 2017	Governmental Activities 2016
Net position end of year, as previously stated	$ 4,616,429	$ 4,539,945
Implementation of GASB Statement No. 75:		
Net OPEB liability	(132,976)	(132,976)
Write-off the net OPEB obligation	11,312	17,993
Deferred outflow of resources - OPEB contributions subsequent to the measurement date	18,431	19,917
Net position end of year, as restated	$ 4,513,196	$ 4,444,879

The restatement of beginning net position adjusts the beginning deferred outflow of resources for pension contributions made subsequent to the measurement date of the beginning net OPEB liability. Restatement of the beginning balances for other deferred outflows of resources and deferred inflows of resources related to pensions was not done because it was not practical to determine all such amounts.

Page intentionally left blank

REQUIRED SUPPLEMENTARY INFORMATION (RSI) OTHER THAN MD&A - Unaudited

Modified Approach for Eligible Infrastructure Assets

The District has elected to use the modified approach to report eligible infrastructure and ancillary assets at its seven water reclamation plants (WRP) and its waterway assets. Each of the seven plants represents a separate network, while the waterway assets represent an eighth network. The eight networks are as follows:

1. Central (Stickney) WRP Basin	All systems, subsystems, and components associated with the Central (Stickney) WRP service area (excluding Waterways Network assets).
2. O'Brien WRP Basin	All systems, subsystems, and components associated with the O'Brien WRP service area (excluding Waterways Network assets).
3. Calumet WRP Basin	All systems, subsystems, and components associated with the Calumet WRP service area (excluding Waterways Network assets and Lemont Network).
4. Egan WRP Basin	All systems, subsystems, and components associated with the Egan WRP service area (excluding Waterways Network assets).
5. Kirie WRP Basin	All systems, subsystems, and components associated with the Kirie WRP service area (excluding Waterways Network assets).
6. Hanover Park WRP Basin	All systems, subsystems, and components associated with the Hanover Park WRP service area (excluding Waterways Network assets).
7. Lemont WRP Basin	All systems, subsystems, and components associated with the Lemont WRP service area (excluding Waterways Network assets).
8. Waterways	All waterways under the jurisdiction of the District including the Waterways Control System, Lockport Powerhouse and Controlling Works, Chicago River Controlling Works, Wilmette Pumping Station, all District flood control reservoirs and pump stations, sidestream elevated pool aeration stations, instream aeration stations, Melas Park, and Centennial Fountain.

Each of the above networks is further segregated into systems, subsystems, and components. The network systems are classified by the process flow through the network (i.e., collection processes, treatment processes, solids processing, flood and pollution control, and solids drying/utilization). The subsystems of each system represent the major processes (e.g., the treatment processes system includes fine screens, grit tanks, and aeration tanks as subsystems). Components of subsystems comprise the working unit or assembly (e.g., the fine screens subsystem includes conveyors, rakes, and gates as components). Ratings are determined by District civil, mechanical, and electrical engineers, who review the subsystem/component maintenance records and physically inspect the assets.

Ratings are assessed at the subsystem level and are compiled for reporting purposes into one rating for each system of a network. The assessment scale used to rate the networks' systems is as follows:

Asset Condition	**Assessment Description**
(1) Excellent	Relatively new asset or recently rehabilitated or otherwise restored to a like-new asset condition.
(2) Very Good	Performance successful, operation reliable, no significant maintenance required beyond routine preventative maintenance or minor repair in foreseeable future.
(3) Good	Performance successful, operation reliable, significant maintenance required in foreseeable future.
(4) Acceptable	Performance successful, operation reliable, significant rehabilitation/ replacement planned in near future.
(5) Fair	Performance marginal, operation not reliable without immediate repair/ replacement.
(6) Poor	Inoperable or operation significantly impaired.

It is the District's policy to maintain eligible infrastructure assets reported under the modified approach at a level of acceptable or better.

Initial condition assessments of the Kirie, Hanover, Egan, O'Brien, Central (Stickney), Calumet, Lemont and Waterways WRP networks were completed between 2002 and 2006.

Condition assessments of each network will continue at least every three years following the initial assessment. The Hanover, Calumet and Lemont networks were re-assessed in 2018, the Kirie, Central (Stickney) and Waterways networks were re-assessed in 2017, and the Egan and O'Brien networks were re-assessed in 2016.

The condition assessment ratings and the estimated and actual maintenance and preservation costs for the Kirie, Hanover, Egan, O'Brien, Central (Stickney), Calumet, Lemont, and Waterways WRP networks are as follows:

	Collection Processes System	Treatment Processes System	Solids Processing System	Flood and Pollution Control System	Solids Drying/ Utilization System
Condition Assessment Ratings					
Kirie WRP Network					
Subsequent assessment - 2011	3	3	3	NA	NA
Subsequent assessment - 2014	3	3	3	NA	NA
Subsequent assessment - 2017	3	3	3	NA	NA
Hanover WRP Network					
Subsequent assessment - 2012	3	2	3	NA	2
Subsequent assessment - 2015	2	3	3	NA	3
Subsequent assessment - 2018	3	3	3	NA	3
Egan WRP Network					
Subsequent assessment - 2010	3	3	3	NA	NA
Subsequent assessment - 2013	3	3	3	NA	NA
Subsequent assessment - 2016	3	3	2	NA	NA
O'Brien WRP Network					
Subsequent assessment - 2010	3	3	3	NA	NA
Subsequent assessment - 2013	3	2	2	NA	NA
Subsequent assessment - 2016	3	3	3	NA	NA
Central (Stickney) WRP Network					
Subsequent assessment - 2011	3	3	3	NA	2
Subsequent assessment - 2014	3	3	3	NA	3
Subsequent assessment - 2017	3	3	3	NA	3
Waterways WRP Network					
Subsequent assessment - 2011	NA	NA	NA	3	NA
Subsequent assessment - 2014	NA	NA	NA	3	NA
Subsequent assessment - 2017	NA	NA	NA	3	NA
Calumet WRP Network					
Subsequent assessment - 2012	3	2	2	NA	2
Subsequent assessment - 2015	3	2	3	NA	2
Subsequent assessment - 2018	3	3	3	NA	2
Lemont WRP Network					
Subsequent assessment - 2012	3	3	3	NA	NA
Subsequent assessment - 2015	3	3	3	NA	NA
Subsequent assessment - 2018	3	3	3	2	NA
Maintenance/Preservation Costs					
Kirie WRP Network					
Estimated 2018	$ 3,779,701	$ 400,101	$ —	$ —	$ —
Actual 2018	807,689	452,100	494	129	—
Estimated 2017	3,304,900	1,065,433	1,139	517,500	—
Actual 2017	540,658	1,014,160	11,007	12,066	—
Estimated 2016	5,176,151	4,410,046	465	786,000	—
Actual 2016	2,015,494	4,454,223	12,067	267,794	—
Estimated 2015	1,073,222	670,865	533,408	—	528,008
Actual 2015	2,405,430	3,475,534	763,968	223,105	
Estimated 2014	6,929,813	3,360,179	40,621	—	402,000
Actual 2014	8,799,253	3,344,290	35,258	—	142,921

		Collection Processes System		Treatment Processes System		Solids Processing System		Flood and Pollution Control System		Solids Drying/ Utilization System
Hanover WRP Network										
Estimated 2018	$	94,100	$	443,113	$	212,500	$	—	$	33,700
Actual 2018		102,473		307,110		206,225		—		34,262
Estimated 2017		123,300		647,312		221,947		—		33,200
Actual 2017		162,368		684,767		210,660		—		33,476
Estimated 2016		484,028		3,119,591		676,096		200,000		214,300
Actual 2016		646,796		2,424,545		720,040		—		377,701
Estimated 2015		1,054,822		696,765		519,408		—		517,408
Actual 2015		1,703,347		2,534,283		1,213,150		—		33,479
Estimated 2014		142,317		732,151		674,596		—		65,800
Actual 2014		243,960		855,994		543,204		—		—
Egan WRP Network										
Estimated 2018	$	392,053	$	1,539,717	$	891,011	$	37,075	$	—
Actual 2018		333,327		542,917		467,280		20,227		—
Estimated 2017		568,170		2,457,544		1,612,479		28,150		—
Actual 2017		547,567		1,602,807		991,795		15,584		—
Estimated 2016		1,831,349		6,066,015		5,202,317		77,905		14,400
Actual 2016		1,889,009		8,092,469		7,057,944		87,156		253,655
Estimated 2015		1,513,197		4,403,940		3,821,483		610,475		—
Actual 2015		2,261,452		3,590,430		4,257,420		14,735		—
Estimated 2014		626,241		2,885,084		8,833,464		—		—
Actual 2014		862,655		3,026,570		5,957,431		—		—
O'Brien WRP Network										
Estimated 2018	$	1,598,100	$	12,148,400	$	15,337,600	$	670,037	$	—
Actual 2018		1,700,911		1,637,026		298,797		640,049		—
Estimated 2017		4,005,365		5,503,337		371,200		2,621,400		—
Actual 2017		2,494,728		5,309,118		389,566		2,136,685		—
Estimated 2016		9,572,949		13,372,590		690,100		1,383,300		41,100
Actual 2016		10,162,949		14,791,414		891,486		792,719		42,768
Estimated 2015		2,771,072		6,201,615		1,501,758		2,740,624		
Actual 2015		6,890,505		8,135,664		1,260,479		3,840,355		—
Estimated 2014		5,355,115		7,256,184		537,919		3,061,000		—
Actual 2014		5,618,267		8,380,776		432,517		2,732,851		
Central (Stickney) WRP Network										
Estimated 2018	$	36,068,365	$	15,186,927	$	5,006,400	$	1,775,374	$	508,100
Actual 2018		9,850,199		14,761,309		1,272,868		945,043		396,154
Estimated 2017		9,704,500		11,806,700		7,004,600		742,000		1,521,700
Actual 2017		23,677,548		18,501,753		6,361,137		1,237,008		1,705,427
Estimated 2016		22,316,620		48,806,200		24,028,680		412,700		7,274,800
Actual 2016		72,698,955		32,685,410		33,364,380		6,012,677		21,228,946
Estimated 2015		51,338,722		19,534,565		8,059,908		4,725,000		4,528,808
Actual 2015		14,497,119		11,535,580		3,029,722		781,105		964,557
Estimated 2014		15,875,228		17,334,819		10,565,977		—		1,377,507
Actual 2014		10,557,770		20,427,807		10,398,973		121,615		2,444,671

	Collection Processes System	Treatment Processes System	Solids Processing System	Flood and Pollution Control System	Solids Drying/ Utilization System
Waterways WRP Network					
Estimated 2018	$ —	$ —	$ —	$ 17,406,595	$ —
Actual 2018	—	—	—	2,763,017	—
Estimated 2017	246,100	—	—	11,957,187	—
Actual 2017	10,953,571	10,240	—	1,151,151	—
Estimated 2016	115,525	—	—	27,544,100	—
Actual 2016	1,149,455	—	—	3,178,612	—
Estimated 2015	—	—	—	9,534,574	—
Actual 2015	—	—	—	6,365,775	—
Estimated 2014	—	—	—	1,314,200	—
Actual 2014	1,437	—	—	831,265	—
Calumet WRP Network					
Estimated 2018	$ 4,834,200	$ 4,005,602	$ 795,600	$ 161,200	$ 103,600
Actual 2018	3,081,864	3,166,505	1,053,258	186,323	126,643
Estimated 2017	3,244,935	8,423,738	1,737,410	172,787	558,800
Actual 2017	3,330,986	8,956,454	1,848,660	173,529	509,922
Estimated 2016	24,346,293	16,082,140	5,211,367	1,392,200	744,800
Actual 2016	12,644,323	18,205,026	5,457,023	294,111	675,730
Estimated 2015	15,532,197	3,612,840	1,904,283	21,221,249	14,000
Actual 2015	5,004,441	7,014,378	3,798,937	5,119,450	780,400
Estimated 2014	5,891,856	6,156,523	2,241,157	1,949,900	—
Actual 2014	4,295,832	6,741,305	2,366,667	590,908	—
Lemont WRP Network					
Estimated 2018	$ —	$ 10,800	$ —	$ —	$ —
Actual 2018	540	3,468	—	—	—
Estimated 2017	—	8,800	—	—	—
Actual 2017	—	4,739	—	—	—
Estimated 2016	70,200	126,100	—	—	—
Actual 2016	115,903	348,026	262,007	—	—
Estimated 2015	837,722	443,665	—	—	—
Actual 2015	1,415,229	1,321,857	23,898	—	—
Estimated 2014	47,000	34,200	—	—	—
Actual 2014	17,475	417	—	—	—

Schedule of Changes in the District's Net Pension Liability and Related Ratios
Last Four Fiscal Years (1)
(in thousands of dollars)

	2018	2017	2016	2015
Total pension liability:				
Service cost	$ 32,370	$ 32,058	$ 32,228	$ 31,602
Interest	179,038	173,861	168,530	163,338
Changes of benefit terms	—	—	—	—
Differences between expected and actual experience	(1,991)	13,814	14,422	10,861
Changes of assumptions	—	—	—	—
Benefit payments, including refunds of employee contributions	(154,713)	(147,336)	(140,509)	(133,898)
Net change in total pension liability	54,704	72,397	74,671	71,903
Total pension liability - beginning	2,432,163	2,359,766	2,285,095	2,213,192
Total pension liability - ending	2,486,867	2,432,163	2,359,766	2,285,095
Plan fiduciary net position:				
Contributions - employer	89,858	80,259	71,041	73,906
Contributions - employee	20,840	20,831	21,385	18,975
Net investment income	194,822	113,586	(1,428)	81,601
Benefit payments, including refunds of employee contributions	(154,713)	(147,336)	(140,509)	(133,898)
Administrative expense	(1,614)	(1,503)	(1,660)	(1,407)
Other	3	107	29	4
Net change in plan fiduciary net position	149,196	65,944	(51,142)	39,181
Plan fiduciary net position - beginning	1,352,597	1,286,653	1,337,795	1,298,614
Plan fiduciary net position - ending	1,501,793	1,352,597	1,286,653	1,337,795
Net pension liability - ending	$ 985,074	$ 1,079,566	$ 1,073,113	$ 947,300
Plan fiduciary net position as a percentage of the total pension liability	60.39%	55.61%	54.52%	58.54%
Covered-employee payroll	$ 184,385	$ 182,640	$ 177,792	$ 176,184
Net pension liability as a percentage of covered-employee payroll	534.25%	591.09%	603.58%	537.68%

(1) The District implemented the provisions of GASB 68 in Fiscal Year 2015. The District has presented as many years as are available and will show information for ten years as the additional years' information become available

Schedule of District Contributions
Last 10 Years
(in thousands of dollars)

Year	Actuarially Determined Contributions	Actual Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency/ (Excess)	Covered Payroll	Contribution as a Percentage of Covered-employee Payroll
2018	$ 65,728	$ 89,858	$ (24,130)	$ 184,385	48.73%
2017	64,596	80,259	(15,664)	182,640	43.94%
2016	62,603	71,041	(8,438)	177,792	39.96%
2015	64,478	73,906	(9,428)	176,184	41.95%
2014	68,414	92,944	(24,530)	169,376	54.87%
2013	74,829	65,098	9,731	163,817	39.74%
2012	69,393	37,379	32,014	164,275	22.75%
2011	61,873	29,918	31,955	174,486	17.15%
2010	54,790	32,154	22,636	176,915	18.17%
2009	49,758	33,407	16,351	167,865	19.90%

Notes to the Schedule of District Contributions

Valuation Date: The District's actuarially determined contribution (ADC) is calculated as of December 31, 2017.

Methods and Assumptions used to determine the ADC:

Actuarial cost method	Entry age normal
Amortization method	Level percent of pay. Prior to 2013, 30 year open amortization. From the 2013 ADC calculation, closed to 2050.
Remaining amortization period	34 years remaining as of 1/1/17
Asset valuation method	5 years smoothed value
Investment rate of return	7.50%
Inflation	2.5%
Salary increases	Varies by service
Payroll growth	3.70%
Termination rates	Termination rates vary by age and gender.
Mortality rates	Healthy Members: RP-2000 Combined Healthy Mortality Table with Generational Mortality Improvements (Scale AA). Disabled Members: RP-2000 Disabled Retiree Mortality Table.
Retirement rates	Retirement rates are based on the most recent experience analysis and vary by age and service of member. Rates were reduced by 20% as of the 2011 ADC calculation to reflect actual experience.
Disability rates	Disability rates vary by age.

A copy of the Pension Plan CAFR may be obtained by accessing the Metropolitan Water Reclamation District Retirement Fund's website at www.mwrdrf.org.

Schedule of Changes in the District's Total OPEB Liability and Related Ratios
Last Fiscal Year (1)
(in thousands of dollars)

Reporting period ending	12/31/2018
Measurement date	12/31/2017
Total OPEB liability:	
Service cost	$ 5,097,776
Interest	19,260,038
Changes of benefit terms	—
Differences between expected and actual	—
Changes of assumptions	—
Benefit payments	(13,430,657)
Net change in total OPEB liability	10,927,157
Total OPEB liability - beginning	297,820,100
Total OPEB liability - ending	308,747,257
Plan fiduciary net position:	
Employer trust contribution	5,000,000
Pay-as-you-go contributions	13,430,657
Net investment income	25,392,250
Benefit payments	(13,430,657)
Administrative expense	(36,900)
Net change in plan fiduciary net position	30,355,350
Plan fiduciary net position - beginning	164,844,450
Plan fiduciary net position - ending	195,199,800
Net OPEB liability - ending	$ 113,547,457
Plan fiduciary net position as a percentage of the total OPEB liability	63.22%
Covered employee payroll	$ 184,807
District's net OPEB liability as a percentage of covered employee payroll	61 44%

(1) The District implemented the provisions of GASB 75 in Fiscal Year 2018. The District has presented as many years as are available and will show information for ten years as the additional years' information become available

(2) The Single Discount Rate used to calculate the District's Net OPEB Liability has been 6 50% since implementation of GASB 75

Actuarial valuations are required to be completed every two years. The most recent actuarial valuation was completed as of December 31, 2017.

A copy of the OPEB Trust Fund CAFR may be obtained by accessing the District's website at www.mwrd.org

Page intentionally left blank

OTHER SUPPLEMENTARY INFORMATION

COMBINING AND INDIVIDUAL FUND STATEMENTS AND SCHEDULES

NON-MAJOR GOVERNMENTAL FUNDS

CONSTRUCTION FUND

Fund established to account for proceeds of annual property tax levies and certain other revenues used for the acquisition of long-term assets used in principal functions of the District.

STORMWATER MANAGEMENT FUND

Fund established to account for the annual property taxes which are specifically levied to finance all activities associated with stormwater management, including construction projects.

Exhibit B-1
Combining Balance Sheets - Nonmajor Governmental Funds

December 31, 2018

(in thousands of dollars)

	Construction Fund		Stormwater Management Fund		Total Nonmajor Governmental Funds	
	2018	2017	2018	2017	2018	2017
Assets						
Cash	$ 152	$ 1,175	$ 1,543	$ 1,415	$ 1,695	$ 2,590
Certificates of deposit	22,453	12,055	23,070	17,014	45,523	29,069
Investments	8,887	14,503	32,039	18,455	40,926	32,958
Prepaid insurance	—	—	76	79	76	79
Taxes receivable, net	11,290	15,702	46,152	39,426	57,442	55,128
Other receivable	792	746	162	—	954	746
Total assets	$ 43,574	$ 44,181	$ 103,042	$ 76,389	$ 146,616	$ 120,570
Liabilities, Deferred Inflows of Resources and Fund Balances						
Liabilities:						
Accounts payable and other liabilities	$ 5,017	$ 3,171	$ 7,090	$ 1,715	$ 12,107	$ 4,886
Due to other funds	—	—	132	101	132	101
Total liabilities	5,017	3,171	7,222	1,816	12,239	4,987
Deferred inflows of resources:						
Unavailable tax revenue	8,919	13,110	36,411	32,918	45,330	46,028
Total deferred inflows of resources	8,919	13,110	36,411	32,918	45,330	46,028
Fund balances:						
Nonspendable:						
Prepaid insurance	—	—	76	79	76	79
Restricted for						
Working Cash	22,395	22,204	37,698	37,509	60,093	59,713
Capital projects	7,243	5,696	21,711	4,146	28,954	9,842
Unassigned	—	—	(76)	(79)	(76)	(79)
Total fund balances	29,638	27,900	59,409	41,655	89,047	69,555
Total liabilities, deferred inflows, and fund balances	$ 43,574	$ 44,181	$ 103,042	$ 76,389	$ 146,616	$ 120,570

Exhibit B-2
Combining Statements of Revenue, Expenditures and Changes in Fund Balances - Nonmajor Governmental Funds

Year ended December 31, 2018
(with comparative amounts for prior year)

(in thousands of dollars)

	Construction Fund		Stormwater Management Fund		Total Nonmajor Governmental Funds	
	2018	2017	2018	2017	2018	2017
Revenues						
Revenues:						
Property taxes	$ 16,049	$ 12,995	$ 42,626	$ 32,555	$ 58,675	$ 45,550
Interest on investments	632	326	997	360	1,629	686
Grant revenue	—	—	346	—	346	—
Fees, forfeits and penalties	3	1,486	—	—	3	1,486
User charge	—	—	—	—	—	—
Claims and damage settlements	2	—	—	10	2	10
Miscellaneous	80	—	169	19	249	19
Total revenues	16,766	14,807	44,138	32,944	60,904	47,751
Expenditures						
Current Operations:						
Construction costs	15,028	13,792	20,613	14,065	35,641	27,857
Total expenditures	15,028	13,792	20,613	14,065	35,641	27,857
Revenues over (under) expenditures	1,738	1,015	23,525	18,879	25,263	19,894
Other financing sources (uses):						
Transfer out to Debt Service Fund	—	7,000	(5,771)	(3,269)	(5,771)	3,731
Total other financing sources (uses)	—	7,000	(5,771)	(3,269)	(5,771)	3,731
Revenues over (under) expenditures and other financing uses	1,738	8,015	17,754	15,610	19,492	23,625
Fund balances						
Beginning of the year	27,900	19,885	41,655	26,045	69,555	45,930
End of the year	$ 29,638	$ 27,900	$ 59,409	$ 41,655	$ 89,047	$ 69,555

Page intentionally left blank

GENERAL CORPORATE FUND

A fund used 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.

Exhibit C-1
General Corporate Fund - Corporate and Reserve Claim Divisions
Schedule of Appropriations and Expenditures on a Budgetary Basis

Year ended December 31, 2018

(in thousands of dollars)

Corporate Division	Budget Amounts Original	Budget Amounts Net Transfer	Budget Amounts Final	Actual Amounts	Actual Variance with Final Budget - Positive (Negative)
Board of Commissioners:					
Personal services					
Salaries of regular employees	$ 3,681	$ —	$ 3,681	$ 3,427	$ 254
Compensation plan adjustments	39	—	39	36	3
Social security and medicare contributions	86	—	86	79	7
Tuition and training payments	15	—	15	11	4
Personal services not otherwise classified	428	—	428	327	101
Total personal services	4,249	—	4,249	3,880	369
Contractual services					
Travel	20	—	20	11	9
Meals and lodging	30	—	30	16	14
Subscriptions and membership dues	39	—	39	19	20
Payment for professional services	800	—	800	218	582
Contractual services not otherwise classified	1	—	1	—	1
Total contractual services	890	—	890	264	626
Materials and supplies					
Office, printing, and photographic supplies	6	—	6	3	3
Total materials and supplies	6	—	6	3	3
Board of Commissioners total	5,145	—	5,145	4,147	998
General Administration:					
Personal services					
Salaries of regular employees	10,863	(178)	10,685	10,427	258
Compensation plan adjustments	840	(100)	740	635	105
Social security and medicare contributions	154	2	156	155	1
Tuition and training payments	38	—	38	15	23
Total personal services	11,895	(276)	11,619	11,232	387
Contractual services					
Travel	7	—	7	5	2
Meals and lodging	11	4	15	13	2
Postage, freight, and delivery charges	85	17	102	101	1
Compensation for personally owned autos	3	1	4	4	
Motor vehicle operating services	63	6	69	64	5
Reprographic services	118	—	118	93	25
Electrical energy	340	—	340	326	14
Natural gas	24	6	30	27	3
Water and water services	5	2	7	6	1
Communication services	3	—	3	3	—
Subscriptions and membership dues	778	40	818	817	1
Rental charges	9	—	9	8	1
Advertising	13	—	13	10	3
Administration building operation	1,015	187	1,202	1,145	57

(in thousands of dollars)

Corporate Division	Budget Amounts Original	Budget Amounts Net Transfer	Budget Amounts Final	Actual Amounts	Actual Variance with Final Budget - Positive (Negative)
General Administration (continued):					
Administration building operation annex	$ 646	$ 110	$ 756	$ 692	$ 64
Payment for professional services	474	(51)	423	379	44
Contractual services not otherwise classified	428	(107)	321	283	38
Repairs to buildings	27	—	27	3	24
Repairs to office furniture and equipment	118	—	118	95	23
Communication equipment maintenance	18	25	43	31	12
Repairs to vehicle equipment	437	43	480	382	98
Total contractual services	4,622	283	4,905	4,487	418
Materials and supplies					
Electrical parts and supplies	8	—	8	4	4
Plumbing accessories and supplies	8	12	20	19	1
Hardware	14	—	14	14	—
Office, printing, and photographic supplies	115	(2)	113	102	11
Cleaning supplies	1	—	1	1	—
Wearing apparel	28	6	34	28	6
Books, maps, and charts	1	—	1	—	1
Materials and supplies not otherwise classified	33	2	35	32	3
Total materials and supplies	208	18	226	200	26
General Administration total	16,725	25	16,750	15,919	831
Monitoring and Research:					
Personal services					
Salaries of regular employees	29,032	(320)	28,712	26,765	1,947
Compensation plan adjustments	644	320	964	945	19
Social security and medicare contributions	415	—	415	375	40
Salaries of non-budgeted employees	2	—	2	—	2
Tuition and training payments	58	—	58	47	11
Total personal services	30,151	—	30,151	28,132	2,019
Contractual services					
Travel	22	—	22	16	6
Meals and lodging	35	11	46	41	5
Postage, freight, and delivery charges	4	2	6	6	—
Compensation for personally owned autos	27	—	27	24	3
Motor vehicle operating services	1	—	1	—	1
Rental charges	2	—	2	—	2
Governmental services charges	67	—	67	17	50
Payment for professional services	103	—	103	63	40
Contractual services not otherwise classified	320	(54)	266	169	97
Repairs to marine equipment	30	2	32	30	2
Repairs to testing and laboratory equipment	354	(1)	353	318	35
Total contractual services	965	(40)	925	684	241

Exhibit C-1 (continued)
General Corporate Fund - Corporate and Reserve Claim Divisions
Schedule of Appropriations and Expenditures on a Budgetary Basis

Year ended December 31, 2018

(in thousands of dollars)

Corporate Division	Budget Amounts: Original	Budget Amounts: Net Transfer	Budget Amounts: Final	Actual Amounts	Actual Variance with Final Budget - Positive (Negative)
Monitoring and Research (continued):					
Materials and supplies					
Office, printing, and photographic supplies	$ 30	$ 2	$ 32	$ 26	$ 6
Farming supplies	38	—	38	26	12
Laboratory testing supplies and small equipment	355	(5)	350	321	29
Wearing apparel	10	3	13	13	—
Books, maps, and charts	1	—	1	—	1
Computer supplies	3	—	3	2	1
Fuel	9	2	11	12	(1)
Materials and supplies not otherwise classified	37	(2)	35	31	4
Total materials and supplies	483	—	483	431	52
Machinery and equipment					
Testing and laboratory equipment	290	40	330	329	1
Total machinery and equipment	290	40	330	329	1
Monitoring and Research total	31,889	—	31,889	29,576	2,313
Procurement and Materials Management.					
Personal services					
Salaries of regular employees	5,590	—	5,590	5,276	314
Compensation plan adjustments	124	—	124	76	48
Social security and medicare contributions	81	—	81	75	6
Tuition and training payments	2	—	2	1	1
Total personal services	5,797	—	5,797	5,428	369
Contractual services					
Travel	2	—	2	1	1
Meals and lodging	2	(1)	1	1	—
Compensation for personally owned autos	2	—	2	1	1
Advertising	111	(3)	108	83	25
Repairs to buildings	7	—	7	5	2
Repairs to office furniture and equipment	—	1	1	2	(1)
Repairs to vehicle equipment	8	2	10	9	1
Total contractual services	132	(1)	131	102	29
Materials and supplies					
Metals	104	(7)	97	85	12
Electrical parts and supplies	313	(30)	283	255	28
Plumbing accessories and supplies	343		343	329	14
Hardware	80	—	80	76	4
Buildings, grounds, paving materials, and supplies	457	(43)	414	328	86
Fiber, paper and insulation materials	42	—	42	42	
Paints, solvents, and related materials	51		51	49	2
Vehicle parts and supplies	11	2	13	12	1

(in thousands of dollars)

Corporate Division	Budget Amounts Original	Budget Amounts Net Transfer	Budget Amounts Final	Actual Amounts	Actual Variance with Final Budget - Positive (Negative)
Procurement and Materials Management (continued).					
Mechanical and repair parts	$ 238	$ —	$ 238	$ 223	$ 15
Office, printing, and photographic supplies	11	2	13	11	2
Laboratory testing supplies and small equipment	607	70	677	668	9
Cleaning supplies	263	—	263	255	8
Tools and supplies	73	5	78	78	—
Wearing apparel	145	—	145	144	1
Safety and medical supplies	100	—	100	71	29
Computer supplies	48	—	48	46	2
Fuel	266	—	266	232	34
Gas (in containers)	70	—	70	64	6
Communications supplies	8	—	8	5	3
Lubricants	226	—	226	157	69
Materials and supplies not otherwise classified	52	—	52	41	11
Total materials and supplies	3,508	(1)	3,507	3,171	336
Machinery and equipment					
Equipment for process facilities	30	(10)	20	20	—
Farming equipment	—	12	12	12	—
Total machinery and equipment	30	2	32	32	—
Procurement and Materials Management total	9,467	—	9,467	8,733	734
Human Resources:					
Personal services					
Salaries of regular employees	6,489	—	6,489	5,666	823
Compensation plan adjustments	214	—	214	139	75
Social security and medicare contributions	134	—	134	100	34
Employee claims	60	14	74	64	10
Tuition and training payments	554	—	554	450	104
Health and life insurance premiums	46,456	(14)	46,442	42,874	3,568
Personal services not otherwise classified	506	—	506	251	255
Total personal services	54,413	—	54,413	49,544	4,869
Contractual services					
Travel	6	—	6	4	2
Meals and lodging	18	—	18	9	9
Compensation for personally owned autos	2	—	2	—	2
Court reporting services	12	—	12	12	—
Medical services	97	7	104	90	14
Insurance premiums	3,080	—	3,080	2,777	303
Rental charges	27	—	27	10	17
Payment for professional services	1,107	(7)	1,100	884	216
Contractual services not otherwise classified	46	—	46	38	8

Exhibit C-1 (continued)
General Corporate Fund - Corporate and Reserve Claim Divisions
Schedule of Appropriations and Expenditures on a Budgetary Basis

Year ended December 31, 2018

(in thousands of dollars)

Corporate Division	Budget Amounts Original	Net Transfer	Final	Actual Amounts	Actual Variance with Final Budget - Positive (Negative)
Human Resources (continued):					
Safety repairs services	$ 135	$ —	$ 135	$ 99	$ 36
Total contractual services	4,530	—	4,530	3,923	607
Materials and supplies					
Office, printing, and photographic supplies	58	(3)	55	44	11
Books, maps, and charts	3	2	5	5	—
Safety medical supplies	194	(1)	193	143	50
Materials and supplies not otherwise classified	3	2	5	3	2
Total materials and supplies	258	—	258	195	63
Machinery and equipment					
Computer equipment	25	—	25	14	11
Total machinery and equipment	25	—	25	14	11
Human Resources total	59,226	—	59,226	53,676	5,550
Information Technology:					
Personal services					
Salaries of regular employees	8,514	(261)	8,253	7,791	462
Compensation plan adjustments	155	—	155	108	47
Social security and medicare contributions	120	—	120	109	11
Tuition and training payments	66	—	66	47	19
Total personal services	8,855	(261)	8,594	8,055	539
Contractual services					
Travel	1	—	1	1	—
Meals and lodging	2	(1)	1	1	—
Postage, freight, and delivery charges	1	1	2	1	1
Compensation for personally owned autos	2	—	2	1	1
Communication services	1,178	191	1,369	1,102	267
Rental charges	326	—	326	314	12
Payment for professional services	603	(22)	581	230	351
Contractual services not otherwise classified	50	(32)	18	10	8
Computer equipment maintenance	364	(52)	312	183	129
Computer software maintenance	4,216	44	4,260	4,124	136
Communication equipment maintenance	736	—	736	724	12
Total contractual services	7,479	129	7,608	6,691	917
Materials and supplies					
Office, printing, and photographic supplies	19	—	19	13	6
Computer software	118	54	172	121	51
Computer supplies	431	—	431	413	18
Communication supplies	121	13	134	118	16
Total materials and supplies	689	67	756	665	91

(in thousands of dollars)

Corporate Division	Budget Amounts: Original	Budget Amounts: Net Transfer	Budget Amounts: Final	Actual Amounts	Actual Variance with Final Budget - Positive (Negative)
Information Technology (continued):					
Machinery and equipment					
Computer equipment	$ —	$ 7	$ 7	$ 6	$ 1
Computer software	30	(29)	1	—	1
Communication equipment	—	16	16	15	1
Total machinery and equipment	30	(6)	24	21	3
Information Technology total	17,053	(71)	16,982	15,432	1,550
Law:					
Personal services					
Salaries of regular employees	5,083	—	5,083	4,762	321
Compensation plan adjustments	139	—	139	134	5
Social security and medicare contributions	73	—	73	68	5
Tuition and training payments	14	—	14	10	4
Total personal services	5,309	—	5,309	4,974	335
Contractual services					
Travel	5	—	5	4	1
Meals and lodging	13	—	13	9	4
Postage, freight, and delivery charges	1	—	1	—	1
Compensation for personally owned autos	5	—	5	1	4
Reprographic services	17	—	17	—	17
Court reporting services	50	9	59	13	46
Payment for professional services	1,091	(9)	1,082	355	727
Contractual services not otherwise classified	104	—	104	85	19
Total contractual services	1,286	—	1,286	467	819
Materials and supplies					
Office, printing, and photographic supplies	6	—	6	3	3
Books, maps, and charts	12	—	12	10	2
Total materials and supplies	18	—	18	13	5
Fixed and other charges					
Taxes on real estate	890	—	890	683	207
Total fixed and other charges	890	—	890	683	207
Law total	7,503	—	7,503	6,137	1,366
Finance:					
Personal services					
Salaries of regular employees	3,217	(10)	3,207	3,008	199
Compensation plan adjustments	42	—	42	6	36
Social security and medicare contributions	46	—	46	42	4
Tuition and training payments	30	10	40	40	—
Total personal services	3,335	—	3,335	3,096	239

Exhibit C-1 (continued)
General Corporate Fund - Corporate and Reserve Claim Divisions
Schedule of Appropriations and Expenditures on a Budgetary Basis

Year ended December 31, 2018

(in thousands of dollars)

Corporate Division	Budget Amounts Original	Net Transfer	Final	Actual Amounts	Actual Variance with Final Budget - Positive (Negative)
Finance (continued):					
Contractual services					
Travel	S 13	S (1)	S 12	S 2	$ 10
Meals and lodging	13	—	13	7	6
Reprographic services	2	—	2	2	—
Court reporting services	50	—	50	44	6
Discount Lost	2	1	3	2	1
Payments for professional services	307	—	307	280	27
Contractual services not otherwise classified	2	—	2	1	1
Repairs to office furniture and equipment	5	—	5	5	—
Total contractual services	394	—	394	343	51
Materials and supplies					
Office, printing, and photographic supplies	13	—	13	9	4
Books, maps, and charts	1	—	1	—	1
Materials and supplies not otherwise classified	1	—	1	—	1
Total materials and supplies	15	—	15	9	6
Finance total	3,744	—	3,744	3,448	296
Engineering:					
Personal services					
Salaries of regular employees	26,988	(200)	26,788	24,782	2,006
Compensation plan adjustments	344	200	544	454	90
Social security and medicare contributions	384	—	384	349	35
Tuition and training payments	124	—	124	56	68
Total personal services	27,840	—	27,840	25,641	2,199
Contractual services					
Travel	12	—	12	11	1
Meals and lodging	25	8	33	27	6
Postage, freight, and delivery charges	2	—	2	1	1
Compensation for personally owned autos	17	—	17	8	9
Reprographic services	4	—	4	4	—
Water and water services	3	1	4	4	—
Payments for professional services	201	(9)	192	127	65
Contractual services not otherwise classified	82	—	82	82	—
Repairs to waterway facilities	43	—	43	43	—
Repairs to testing and laboratory equipment	3	—	3	3	—
Repairs not otherwise classified	9	—	9	8	1
Total contractual services	401	—	401	318	83
Materials and supplies					
Office, printing, and photographic supplies	60	4	64	54	10
Tools and supplies	10	(4)	6	2	4

(in thousands of dollars)

Corporate Division	Budget Amounts Original	Budget Amounts Net Transfer	Budget Amounts Final	Actual Amounts	Actual Variance with Final Budget - Positive (Negative)
Engineering (continued):					
Wearing apparel	$ 7	$ —	$ 7	$ 6	$ 1
Books, maps, and charts	4	—	4	3	1
Total materials and supplies	81	—	81	65	16
Engineering total	28,322	—	28,322	26,024	2,298
Maintenance and Operations:					
Personal services					
Salaries of regular employees	88,537	(19)	88,518	87,035	1,483
Compensation plan adjustments	5,102	—	5,102	4,947	155
Social security and medicare contributions	1,271	19	1,290	1,282	8
Salaries of non-budgeted employees	30	—	30	—	30
Tuition and training payments	239	(18)	221	154	67
Total personal services	95,179	(18)	95,161	93,418	1,743
Contractual services					
Travel	30	(1)	29	18	11
Meals and lodging	71	4	75	69	6
Compensation for personally owned autos	145	(19)	126	107	19
Motor vehicle operating services	1	—	1	—	1
Electrical energy	38,602	191	38,793	38,789	4
Natural gas	2,796	336	3,132	3,104	28
Water and water services	1,795	290	2,085	2,035	50
Communications services	882	48	930	926	4
Testing and inspection services	276	(54)	222	189	33
Rental charges	170	(8)	162	150	12
Governmental service charges	3,474	294	3,768	3,763	5
Maintenance of grounds and pavements	1,014	(115)	899	809	90
Payments for professional services	535	—	535	493	42
Contractual services not otherwise classified	674	(172)	502	367	135
Waste material disposal charges	10,893	(406)	10,487	9,665	822
Farming services	25	(5)	20	20	—
Sludge disposal	3,700	325	4,025	3,786	239
Repairs to collection facilities	3,249	(136)	3,113	2,975	138
Repairs to waterway facilities	47	—	47	40	7
Repairs to process facilities	5,529	75	5,604	5,330	274
Repairs to railroads	369	(46)	323	313	10
Repairs to buildings	1,059	(121)	938	729	209
Repairs to material handling and farm equipment	314	30	344	329	15
Safety repairs and services	324	(46)	278	211	67
Repairs to marine equipment	65	2	67	67	—
Computer software maintenance	8	2	10	9	1

Exhibit C-1 (continued)
General Corporate Fund - Corporate and Reserve Claim Divisions
Schedule of Appropriations and Expenditures on a Budgetary Basis

Year ended December 31, 2018

(in thousands of dollars)

Corporate Division	Budget Amounts Original	Budget Amounts Net Transfer	Budget Amounts Final	Actual Amounts	Actual Variance with Final Budget - Positive (Negative)
Maintenance and Operations (continued):					
Communication equipment maintenance	$ 5	$ —	$ 5	$ 3	$ 2
Repairs to vehicle equipment	166	(9)	157	154	3
Repairs not otherwise classified	25	(4)	21	4	17
Total contractual services	76,243	455	76,698	74,454	2,244
Materials and supplies					
Metals	35	(4)	31	29	2
Electrical parts and supplies	2,007	815	2,822	2,467	355
Plumbing accessories and supplies	786	(7)	779	655	124
Hardware	8	—	8	7	1
Buildings, grounds, paving materials, and supplies	173	(3)	170	113	57
Fiber, paper and insulation materials	10	—	10	5	5
Paints, solvents, and related materials	7	—	7	6	1
Vehicle parts and supplies	151	14	165	153	12
Mechanical repair parts	2,453	1,369	3,822	3,388	434
Manhole materials	7	—	7	6	1
Office, printing, and photographic supplies	49	(3)	46	44	2
Farming supplies	4	—	4	3	1
Processing chemicals	12,878	(2,670)	10,208	9,573	635
Laboratory testing supplies and small equipment	26	(2)	24	20	4
Cleaning supplies	2	3	5	3	2
Tools and supplies	210	20	230	220	10
Wearing apparel	1	—	1	1	—
Safety and medical supplies	70	(10)	60	55	5
Computer software	25	(2)	23	19	4
Computer supplies	38	(1)	37	35	2
Fuel	339	21	360	313	47
Gas (in containers)	1	—	1	—	1
Communication supplies	6	—	6	5	1
Lubricants	21	(10)	11	7	4
Materials and supplies not otherwise classified	189	(10)	179	159	20
Total materials and supplies	19,496	(480)	19,016	17,286	1,730
Machinery and equipment					
Equipment for collection facilities	44	—	44	44	—
Equipment for process facilities	149	69	218	156	62
Testing and laboratory equipment	25	8	33	30	3
Materials and equipment not otherwise classified	—	12	12	11	1
Total machinery and equipment	218	89	307	241	66
Maintenance and Operations total	191,136	46	191,182	185,399	5,783

(in thousands of dollars)

Corporate Division	Budget Amounts: Original	Budget Amounts: Net Transfer	Budget Amounts: Final	Actual Amounts	Actual Variance with Final Budget - Positive (Negative)
Corporate Division Total					
Total all departments:					
Personal services	$ 247,023	$ (555)	$ 246,468	$ 233,400	$ 13,068
Contractual services	96,942	826	97,768	91,733	6,035
Materials and supplies	24,762	(396)	24,366	22,038	2,328
Machinery and equipment	593	125	718	637	81
Fixed and other charges	890	—	890	683	207
Total Corporate Division	370,210	—	370,210	348,491	21,719
Reserve Claim Division					
Employee claims	10,000	—	10,000	4,214	5,786
General claims and emergency repair and replacement cost over $10,000	20,290	—	20,290	1,283	19,007
Total Reserve Claim Division	30,290	—	30,290	5,497	24,793
Total General Corporate Fund	$ 400,500	$ —	$ 400,500	$ 353,988	$ 46,512

Exhibit C-2
General Corporate Fund - Corporate and Reserve Claim Divisions
Schedule of Expenditures by Type - GAAP Basis

Year ended December 31, 2018
(with comparative amounts for prior year)

	(in thousands of dollars) 2018	2017	Increase (Decrease)	Percent Increase (Decrease)	Percent of Total 2018
Personal services:					
Salaries and wages	$ 186,997	$ 183,651	$ 3,346	2%	53%
Employee health and life insurance premiums	42,874	42,901	(27)	0	12
Social security and medicare contributions	2,634	2,602	32	1	1
Tuition and training payments	830	1,028	(198)	(19)	0
Other	64	22	42	191	0
Total personal services	233,399	230,204	3,195	1	66
Contractual services:					
Electrical energy	39,114	36,219	2,895	8	11
Natural gas	3,132	2,954	178	6	1
Postage, freight, and delivery charges	110	105	5	5	0
Waste material disposal charges	9,665	10,285	(620)	(6)	3
Administration building operation	1,837	1,752	85	5	1
Communication services	2,199	1,506	693	46	1
Farming services	20	25	(5)	(20)	0
Court reporting services	69	77	(8)	(10)	0
Water and water services	2,046	1,869	177	9	1
Motor vehicle operating services	65	69	(4)	(6)	0
Employee travel and transportation	413	352	61	17	0
Medical services	90	90	—	0	0
Rental charges	482	473	9	2	0
Maintenance of grounds and pavements	809	829	(20)	(2)	0
Governmental service charges	3,780	3,577	203	6	1
Repairs to process facilities	5,330	4,648	682	15	2
Other repairs	10,470	8,516	1,954	23	3
Other contractual services	11,211	11,889	(678)	(6)	3
Total contractual services	90,842	85,235	5,607	7	26
Materials and supplies:					
Processing chemicals	9,564	9,137	427	5	3
Laboratory testing supplies	978	984	(6)	(1)	0
Mechanical repair parts	3,510	2,917	593	20	1
Fuels and lubricants	847	802	45	6	0
Electrical parts and supplies	2,641	1,886	755	40	1
Plumbing accessories and supplies	1,090	924	166	18	0
Office, printing, and photographic supplies	313	319	(6)	(2)	0
Buildings, grounds, paving materials, and supplies	436	367	69	19	0
Cleaning supplies	306	279	27	10	0
Metals	130	130	—	0	0
Computer supplies	457	651	(194)	(30)	0
Other materials and supplies	3,038	1,893	1,145	60	1
Total materials and supplies	23,310	20,289	3,021	15	7

(continued)

	(in thousands of dollars) 2018	2017	Increase (Decrease)	Percent Increase (Decrease)	Percent of Total 2018
Machinery and equipment:					
Vehicle equipment	$ —	$ —	$ —	0%	0%
Testing and laboratory equipment	359	424	(65)	(15)	0
Equipment for collection facilities	67	23	44	191	0
Computer software	14	—	14	0	0
Communication equipment	15	—	15	0	0
Other machinery and equipment	250	284	(34)	(12)	0
Total machinery and equipment	705	731	(26)	(4)	0
Fixed other charges:					
Taxes on real estate	683	686	(3)	0	0
Total fixed other charges	683	686	(3)	0	0
Claims and judgments	5,497	6,905	(1,408)	(20)	2
Total expenditures	$ 354,436	$ 344,050	$ 10,386		100%

Page intentionally left blank

DEBT SERVICE FUND

Fund established to account for annual property tax levies and certain other revenues, principally interest on investments, which are used for payments of interest and redemption of general obligation bond issues.

Exhibit D-1
Debt Service Fund
Schedule of Revenues, Expenditures and Changes in Fund Balances Including Comparison of Budget and Actual on Budgetary Basis

Year ended December 31, 2018

(in thousands of dollars)

		Final Budget		Actual on Budgetary Basis		Actual Variance with Final Budget - Positive (Negative)
Revenues:						
Property taxes	$	226,618	$	223,954	$	(2,664)
Total tax revenue		226,618		223,954		(2,664)
Interest on investments		1,000		2,472		1,472
Miscellaneous		—		36		36
Total revenues		227,618		226,462		(1,156)
Expenditures:						
Debt service		256,304		256,304		—
Revenues over (under) expenditures		(28,686)		(29,842)		(1,156)
Other financing sources (uses):						
Transfers from Stormwater Fund		5,771		5,771		—
Total other financing sources (uses)		5,771		5,771		—
Revenues and Other financing (use) over (under) expenditures		(22,915)		(24,071)		(1,156)
Fund balances at beginning of year		118,423		172,516		54,093
Fund balances at end of the year	$	95,508	$	148,445	$	52,937

CAPITAL PROJECTS FUNDS

Construction Fund

Fund established to account for proceeds of annual property tax levies and certain other revenues used for the acquisition of long-term assets used in principal functions of the District.

Stormwater Management Fund

Fund established to account for the annual property taxes which are specifically levied to finance all activities associated with stormwater management, including construction projects.

Capital Improvements Bond Fund

Fund established to account for proceeds of debt, government grants, and certain other revenues used in connection with improvements, replacements, and additions to designated environmental projects.

Exhibit E-1
Capital Project Funds
Schedule of Appropriations and Expenditures on Budgetary Basis

Year ended December 31, 2018

(in thousands of dollars)

	Budget Amounts Original	Budget Amounts Net Transfers	Budget Amounts Final	Actual Amounts	Actual Variance with Final Budget - Positive (Negative)
Construction Fund:					
Contractual services					
Testing and Inspection Services	$ 1,016	$ —	$ 1,016	$ 662	$ 354
Intergovernmental Agreements	70	—	70	64	6
Payments for professional services	3,282	—	3,282	2,394	888
Preliminary engineering reports and studies	50	163	213	26	187
Professional engineering services for construction projects	1,834	(163)	1,671	12	1,659
Contractual services not otherwise classified	50	—	50	—	50
Total contractual services	6,302	—	6,302	3,158	3,144
Machinery and equipment					
Equipment for collection facilities	665	(93)	572	293	279
Equipment for waterway facilities	110	53	163	56	107
Equipment for process facilities	1,958	(15)	1,943	1,279	664
Material Handling and Farming Equipment	975	1,165	2,140	2,084	56
Computer equipment	406	—	406	404	2
Computer software	85	—	85	44	41
Communications equipment	64	—	64	41	23
Vehicle equipment	1,134	75	1,209	845	364
Total machinery and equipment	5,397	1,185	6,582	5,046	1,536
Capital Projects					
Collection facilities structures	876	400	1,276	852	424
Waterway facilities structures	75	—	75	—	75
Process facility structures	2,527	—	2,527	1,017	1,510
Buildings	3,781	(185)	3,596	1,956	1,640
Capital projects not otherwise classified	2,625	(2,000)	625	139	486
Preservation of collection facility structures	1,140	(473)	667	—	667
Preservation of waterway facility structures	650	24	674	446	228
Preservation of process facility structures	833	250	1,083	294	789
Preservation of buildings	1,796	799	2,595	2,090	505
Preservation capital projects not otherwise classified	79	—	79	29	50
Total capital projects	14,382	(1,185)	13,197	6,823	6,374
Construction Fund Summary:					
Contractual services	6,302	—	6,302	3,158	3,144
Machinery and equipment	5,397	1,185	6,582	5,046	1,536
Capital projects	14,382	(1,185)	13,197	6,823	6,374
Construction Fund total	26,081	—	26,081	15,027	11,054

(continued)

Stormwater Management Fund:

(in thousands of dollars)

	Budget Amounts				Actual Variance with Final Budget -
	Original	Net Transfers	Final	Actual Amounts	Positive (Negative)
Personal services					
Salaries of regular employees	$ 5,811	$ —	$ 5,811	$ 5,619	$ 192
Compensation plan adjustments	192	—	192	188	4
Social security and medicare contributions	83	—	83	81	2
Salaries of nonbudgeted employees	20	—	20	—	20
Tuition and training payments	10	—	10	10	—
Health and life insurance premiums	567	—	567	518	49
Total personal services	6,683	—	6,683	6,416	267
Contractual services					
Travel	2	—	2	1	1
Meals and lodging	4	—	4	3	1
Postage, freight and delivery charges	3	—	3	1	2
Compensation for personally owned autos	25	—	25	16	9
Motor vehicle operating services	1	—	1	—	1
Testing and inspection services	10	—	10	—	10
Court reporting services	12	3	15	13	2
Rental charges	3	—	3	2	1
Intragovernmental agreements	26,270	—	26,270	5,422	20,848
Payments for professional services	1,059	(3)	1,056	284	772
Preliminary engineering reports and studies	3,725	—	3,725	1,099	2,626
Professional engineering services for construction projects	4,147	(350)	3,797	349	3,448
Contractual services not otherwise classified	415	350	765	533	232
Waste material disposal charges	60	—	60	29	31
Repairs to waterways facilities	2,585	—	2,585	2,383	202
Computer Software	145	—	145	145	—
Repairs not otherwise classified	2	—	2	1	1
Total contractual services	38,468	—	38,468	10,281	28,187
Materials and supplies					
Building and grounds materials and supplies	5	—	5	5	—
Office, printing, and photo supplies	12	—	12	8	4
Processing chemicals	5	—	5	—	5
Tools and supplies	11	—	11	5	6
Wearing apparel	2	—	2	2	—
Materials and supplies not otherwise classified	90	—	90	9	81
Total materials and supplies	125	—	125	29	96

(continued)

Stormwater Management Fund (continued):

Exhibit E-1 (continued)
Capital Project Funds
Schedule of Appropriations and Expenditures on Budgetary Basis

Year ended December 31, 2018

(in thousands of dollars)

	Budget Amounts				Actual Variance with Final Budget - Positive (Negative)
	Original	Net Transfers	Final	Actual Amounts	
Capital Projects					
Waterways facilities structure	16,176	—	16,176	293	15,883
Army Corps of Engineers Services	1,750	—	1,750	—	1,750
Capital projects not otherwise classified	400	—	400	—	400
Preservation of waterway facility structures	1,181	—	1,181	—	1,181
Total capital projects	19,507	—	19,507	293	19,214
Land					
Land	400	—	400	342	58
Total land	400	—	400	342	58
Fixed and other charges					
Payments for easements	400	—	400	346	54
Total fixed and other charges	400	—	400	346	54
Stormwater Management Fund Summary:					
Personal services	6,683	—	6,683	6,416	267
Contractual services	38,468	—	38,468	10,281	28,187
Materials and supplies	125	—	125	29	96
Capital projects	19,507	—	19,507	293	19,214
Land	400	—	400	342	58
Fixed and other charges	400	—	400	346	54
Stormwater Management Fund total	65,583	—	65,583	17,707	47,876
Capital Improvements Bond Fund Summary:					
Contractual services	9,472	26,311	35,783	13,181	22,602
Machinery and Equipment	795	—	795	8	787
Capital projects	300,666	60,010	360,676	108,172	252,504
Land	300	1,100	1,400	1,084	316
Fixed and other charges	1,750	3,290	5,040	4,660	380
Capital Improvements Bond Fund total *	312,983	90,711	403,694	127,105	276,589
Capital Projects Funds total	$ 404,647	$ 90,711	$ 495,358	$ 159,839	$ 335,519

* 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.

TRUST FUNDS

PENSION TRUST FUND

A fiduciary fund established to account for employer / employee contributions, investment earnings, and expenses for employee pensions.

OPEB TRUST FUND

Fund established to administer the defined benefit post-employment health care plan.

Exhibit F-1
Pension and Other Post Employment Trust Funds
Combing Statements of Fiduciary Net Position

Year ended December 31, 2018
(with comparative amounts for prior year)

(in thousands of dollars)

	Pension Trust Fund		OPEB Trust Fund		Total Fiduciary Funds	
	2018	2017	2018	2017	2018	2017
Assets						
Cash	$ 2,131	$ 1,990	$ —	$ —	$ 2,131	$ 1,990
Receivables						
Employer contributions - taxes (net of allowance for uncollectible amounts of $4,203 in 2018 & $3,883 in 2017)	87,281	89,604	—	—	87,281	89,604
Securities sold	—	42,172	—	—	—	42,172
Forward foreign exchange contracts	111,905	123,333	—	—	111,905	123,333
Accrued interest and dividends	3,844	3,660	95	73	3,939	3,733
Accounts receivable	53	43	—	—	53	43
Total receivables	203,083	258,812	95	73	203,178	258,885
Investments at fair value						
Equities	470,320	568,135	—	—	470,320	568,135
U.S. Government and government agency obligations	91,161	96,641	—	—	91,161	96,641
Corporate and foreign government obligations	145,707	143,848	—	—	145,707	143,848
Fixed Income Mutual Funds	—	—	69,189	62,805	69,189	62,805
Mutual and exchange traded funds	89,341	100,269	114,648	115,342	203,989	215,611
Pooled funds - equities	215,174	251,104			215,174	251,104
Pooled funds - fixed income	152,257	193,075	—		152,257	193,075
Limited partnerships - real estate	63,898	—	—		63,898	—
Short-term investment funds	14,814	30,701	4,400	16,994	19,214	47,695
Total investments	1,242,672	1,383,773	188,237	195,141	1,430,909	1,578,914
Securities lending capital	14,166	27,448	—	—	14,166	27,448
Total assets	1,462,052	1,672,023	188,332	195,214	1,650,384	1,867,237
Liabilities						
Accounts payable	1,210	1,360	14	14	1,224	1,374
Due to broker	102,681	141,421	—	—	102,681	141,421
Securities lending collateral	14,166	27,448	—	—	14,166	27,448
Total liabilities	118,057	170,229	14	14	118,071	170,243
Net position restricted for pension and OPEB benefits	$ 1,343,995	$ 1,501,794	$ 188,318	$ 195,200	$ 1,532,313	$ 1,696,994

Exhibit F-2
Pension and Other Post Employment Trust Funds
Combining Statements of Changes in Fiduciary Net Position

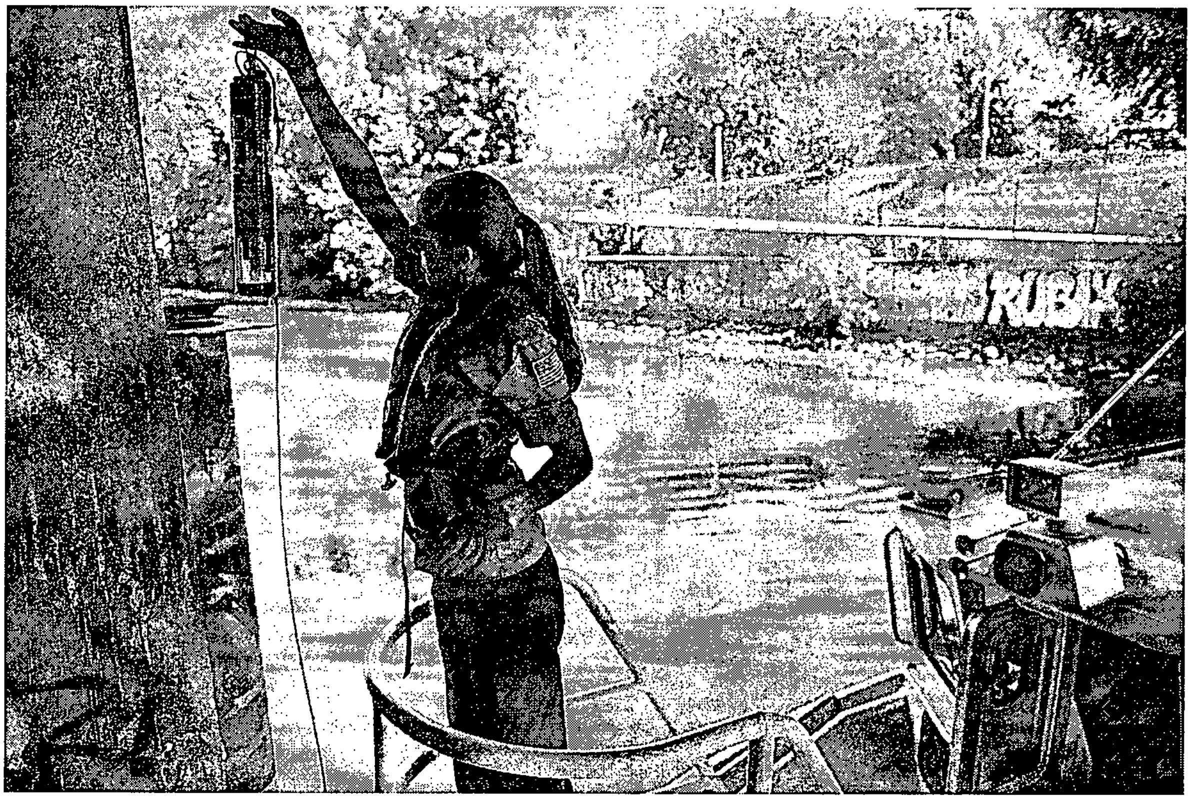
Year ended December 31, 2018
(with comparative amounts for prior year)

(in thousands of dollars)

	Pension Trust Fund		OPEB Trust Fund		Total Fiduciary Funds	
	2018	2017	2018	2017	2018	2017
Additions:						
Contributions:						
Employer contributions	$ 87,167	$ 89,858	$ 17,571	$ 18,431	$ 104,738	$ 108,289
Employee contributions	21,033	20,840	—	—	21,033	20,840
Retiree contributions	—	—	—	—	—	—
Total contributions	108,200	110,698	17,571	18,431	125,771	129,129
Investment income:						
Net appreciation (depreciation) in fair value of investments	(122,365)	177,342	(16,589)	21,209	(138,954)	198,551
Interest and dividend income	24,076	21,754	4,803	4,225	28,879	25,979
Total investment income (loss)	(98,289)	199,096	(11,785)	25,434	(110,074)	224,530
Less investment expenses	(5,024)	(4,621)	(55)	(42)	(5,079)	(4,663)
Investment income (loss) net of expenses	(103,313)	194,475	(11,840)	25,392	(115,153)	219,867
Security lending activities:						
Security lending income	556	448	—	—	556	448
Borrower rebates	(164)	(13)	—	—	(164)	(13)
Bank fees	(85)	(89)	—	—	(85)	(89)
Net income from securities lending activities	307	346	—	—	307	346
Other	15	3	—	—	15	3
Total additions	5,209	305,522	5,730	43,823	10,939	349,345
Deductions:						
Annuities and benefits						
Employee annuitants	133,184	127,099	—	—	133,184	127,099
Retiree health care benefits	—	—	12,571	13,431	12,571	13,431
Surviving spouse annuitants	25,264	24,203	—	—	25,264	24,203
Child annuitants	143	142	—	—	143	142
Ordinary disability benefits	856	631	—	—	856	631
Duty disability benefits	113	77	—	—	113	77
Total annuities and benefits	159,560	152,152	12,571	13,431	172,131	165,583
Refunds of employee contributions	1,762	2,560	—	—	1,762	2,560
Administrative expenses	1,685	1,614	42	37	1,727	1,651
Total deductions	163,007	156,326	12,613	13,468	175,620	169,794
Net increase (decrease)	(157,798)	149,196	(6,883)	30,356	(164,681)	179,551
Net position held in trust for pension and OPEB benefits						
Beginning of year	1,501,794	1,352,598	195,200	164,844	1,696,994	1,517,442
End of year	$ 1,343,994	$ 1,501,794	$ 188,317	$ 195,200	$ 1,532,313	$ 1,696,994

Page intentionally left blank

III. STATISTICAL AND DEMOGRAPHICS SECTION



MWRD Pollution Control Technician Ann Dangles collects ambient water quality data on the North Branch of the Chicago River in July.

Page intentionally left blank

Statistical and Demographics Section (Unaudited)

This part of the District's comprehensive annual financial report presents detailed information as a context for understanding the information in the financial statements, note disclosures, and required supplementary information and the District's overall financial health.

Sources: *Unless otherwise noted the information in these schedules is derived from the comprehensive annual financial reports for the relevant year.*

Exhibit I-1
Net Position by Component

Last Ten Fiscal Years

(accrual basis of accounting)

(in thousands of dollars)

	2018	2017	2016	2015
Net investment in capital assets *	$ 4,822,532	$ 4,710,123	$ 4,591,899	$ 4,630,463
Restricted				
Restricted for corporate working cash	282,055	280,437	279,390	278,852
Restricted for reserve claim	11,728	9,976	2,128	6,499
Restricted for debt service	299,106	318,646	318,575	310,383
Restricted for capital projects	53,443	32,067	75,762	—
Restricted for construction working cash	22,395	22,204	22,070	21,947
Restricted for stormwater working cash	37,698	37,509	37,384	37,216
Unrestricted (Deficit)	(908,577)	(897,766)	(787,263)	(756,154)
Total net position	$ 4,620,380	$ 4,513,196	$ 4,539,945	$ 4,529,206

* Infrastructure under the modified approach is reported in the period the initial condition assessment was completed.

2014	2013	2012	2011	2010	2009
$ 4,548,793	$ 4,506,950	$ 4,514,633	$ 4,506,544	$ 4,492,811	$ 4,559,884
278,148	276,894	277,006	277,270	277,249	275,459
7,764	9,861	4,524	6,211	22,521	25,073
305,375	278,970	268,760	257,418	227,320	232,815
15,457	28,886	18,828	29,908	38,018	—
21,833	21,644	21,649	21,611	27,377	27,286
37,035	37,690	37,737	39,573	39,554	38,953
(722,949)	4,037	(1,006)	(53,477)	(96,934)	(49,191)
$ 4,491,456	$ 5,164,932	$ 5,142,131	$ 5,085,058	$ 5,027,916	$ 5,110,279

Exhibit I-2
Changes in Net Position

Last Ten Fiscal Years

(accrual basis of accounting)

(in thousands of dollars)

	2018	2017	2016	2015
Revenues				
General Revenues:				
Property taxes	$ 599,224	$ 563,764	$ 556,648	$ 533,240
Personal property replacement tax	37,018	43,194	38,961	37,863
Interest on investments	15,531	8,784	6,181	5,381
Tax increment financing distributions	6,153	9,100	9,228	13,069
Claims and damage settlements	1,482	783	209	350
Miscellaneous	7,628	5,819	5,527	5,804
Gain on sale of capital assets	--	50	1,210	2,922
Total general revenues	667,036	631,494	617,964	598,629
Program Revenues:				
Charges for services				
User charges	44,000	51,098	48,621	46,238
Land rentals	22,678	17,352	20,166	18,189
Fees, forfeits and penalties	5,116	5,401	4,164	4,885
Capital grants and contributions				
Federal grants	17,086	14,558	12,825	11,170
Total program revenues	88,880	88,409	85,776	80,482
Total revenues	755,916	719,903	703,740	679,111
Expenses				
Board of Commissioners	4,167	4,094	4,166	3,671
General Administration	16,063	15,791	15,690	14,835
Monitoring and Research	30,262	29,591	28,753	27,259
Procurement and Materials Management	7,102	5,947	6,602	6,801
Human Resources	53,182	54,267	54,447	58,512
Information Technology	15,173	12,734	14,702	14,602
Law	6,023	5,830	6,709	6,008
Finance	3,460	3,520	3,570	3,401
Engineering	27,800	27,830	28,002	27,232
Maintenance and Operations	187,660	178,994	177,829	173,177
Pension costs	102,993	106,814	108,606	87,145
OPEB Trust Fund costs *	(6,955)	1,486	(7,008)	(5,408)
Claims and judgments	(4,059)	(2,662)	(8,548)	23,560
Construction costs	85,813	85,535	136,203	69,434
Loss on sale of capital assets	92	202	13	32
Depreciation (unallocated)	11,849	12,063	12,083	12,123
Interest on bonds	108,107	109,550	111,182	118,977
Total expenses	648,732	651,586	693,001	641,361
Change in Net Position	$ 107,184	$ 68,317	$ 10,739	$ 37,750

* The 2012 decrease resulted from a reduction in the liability estimate for OPEB.

2014	2013	2012	2011	2010	2009
$ 526,851	$ 470,855	$ 486,316	$ 506,888	$ 409,550	$ 429,968
39,571	40,737	35,605	36,849	39,352	37,477
9,486	3,051	11,123	13,156	9,119	7,632
4,925	3,361	6,239	12,715	6,818	1,359
630	2,271	1,472	1,298	285	695
5,290	4,765	5,822	4,859	5,181	6,642
8	923	—	676	2,736	—
586,761	525,963	546,577	576,441	473,041	483,773
50,696	49,182	69,322	57,469	49,433	47,886
16,357	14,851	12,081	12,161	10,040	9,660
5,456	3,396	3,353	3,279	2,731	4,305
11,089	11,110	22,164	17,218	17,156	5,518
83,598	78,539	106,920	90,127	79,360	67,369
670,359	604,502	653,497	666,568	552,401	551,142
3,721	3,520	3,471	3,348	3,627	3,680
15,096	14,426	14,296	14,844	15,767	19,046
26,922	25,294	24,689	25,221	28,450	29,252
6,331	5,660	5,694	6,928	6,447	6,196
72,896	67,841	63,103	47,683	46,882	43,670
14,708	14,331	13,714	14,423	16,127	20,611
6,812	6,975	5,942	7,151	8,132	7,491
3,433	3,394	3,175	2,962	3,189	3,233
26,561	25,051	4,332	4,028	6,245	9,284
169,234	162,372	161,919	178,438	191,090	209,488
92,944	52,065	78,360	70,331	62,996	54,804
(19,449)	(19,567)	(7,155)	10,251	24,540	25,464
2,660	3,369	25,738	25,488	9,134	17,536
77,191	88,528	75,496	84,240	104,947	131,095
127	173	147	95	381	436
12,229	12,020	12,459	12,235	11,428	9,227
114,328	116,249	111,044	101,760	95,382	72,249
625,744	581,701	596,424	609,426	634,764	662,762
$ 44,615	$ 22,801	$ 57,073	$ 57,142	$ (82,363)	$ (111,620)

Exhibit I-3
Fund Balances: Governmental Funds

Last Ten Fiscal Years

(modified accrual basis of accounting)

(in thousands of dollars)

	2018	2017	2016	2015
General Corporate Fund				
Nonspendable:				
Prepaid insurance	$ 5,201	$ 4,101	$ 2,117,000	$ 2,137
Inventories	33,436	34,787	35,502,000	37,623
Restricted	310,677	306,854	306,800,000	305,779
Unassigned (Deficit)	(64,772)	(53,799)	(44,428,000)	(58,427)
Total General Corporate Fund	284,542	291,943	299,991,000	287,112
All Other Governmental Funds				
Nonspendable:				
Prepaid insurance	76	79	—	—
Restricted	335,306	381,079	451,657,000	378,458
Assigned	158,319	147,473	145,341,000	127,920
Unassigned	(76)	(79)	(13,525,000)	(9,090)
Total Governmental Funds	$ 778,167	$ 820,495	$ 883,464,000	$ 784,400

2012	2013	2012	2011	2010	2009
$ 2,143	$ 2,391	$ —	$ —	$ —	$ —
39,586	40,136	39,467	38,922	38,924	38,761
307,147	344,558	344,186	342,398	341,381	338,602
(61,850)	(51,960)	(19,151)	(96,225)	(175,521)	(166,687)
287,026	335,125	364,502	285,095	204,784	210,676
—	—	—	—	—	—
219,606	328,953	575,796	763,064	519,456	773,035
112,768	112,478	—	—	—	—
—	—	—	—	—	—
$ 619,400	$ 776,556	$ 940,298	$ 1,048,159	$ 724,240	$ 983,711

Exhibit I-4
Changes in Fund Balances: Governmental Funds

Last Ten Fiscal Years

(modified accrual basis of accounting) *(in thousands of dollars)*

	2018	2017	2016	2015
Revenues				
General Revenues:				
Property taxes	$ 603,244	$ 526,932	$ 583,875,000	$ 525,302
Personal property replacement tax	37,018	43,194	38,961,000	37,863
Interest on investments	15,531	8,784	6,181,000	5,381
Land sales	—	50	1,233,000	3,164
Tax-increment financing distributions	6,153	9,100	9,228,000	13,069
Claims and damage settlements	1,482	783	209,000	350
Miscellaneous	7,666	5,878	5,540,000	5,869
Program Revenues:				
Charges for services				
User charges	44,000	51,098	48,621,000	46,238
Land rentals	22,678	17,352	20,166,000	18,189
Fees, forfeits and penalties	5,116	5,401	4,164,000	4,885
Capital grants and contributions				
Government grants	17,082	14,555	12,817,000	11,165
Total revenues	759,970	683,127	730,995,000	671,475
Expenditures				
Operations				
Board of Commissioners	4,148	4,075	4,158,000	3,662
General Administration	15,816	15,766	15,490,000	14,833
Monitoring and Research	30,204	29,696	28,490,000	27,486
Procurement and Materials Management	7,236	5,954	6,611,000	6,885
Human Resources	53,227	54,225	54,606,000	58,441
Information Technology	15,125	12,728	14,213,000	14,697
Law	6,139	5,922	6,707,000	6,018
Finance	3,450	3,530	3,597,000	3,427
Engineering	26,031	26,068	26,051,000	25,971
Maintenance and Operations	187,563	179,181	177,695,000	173,534
Pension costs	92,668	75,579	77,712,000	62,498
Claims and judgments	5,497	6,905	4,786,000	5,658
Construction costs	158,670	268,497	296,768,000	326,430
Debt service:				
Redemption of bonds	144,296	113,695	102,670,000	101,220
Interest on bonds	116,398	119,520	117,474,000	118,680
Total expenditures	866,468	921,341	937,028	949,440
Revenues over (under) expenditures	(106,498)	(238,214)	(206,033)	(277,965)
Other Financing Sources (Uses)				
Payment to escrow agent	—	—	(399,432,000)	(82,906)
State revolving fund loan proceeds	64,170	175,245	179,224,000	181,537
Sale of refunding bonds		—	322,260,000	70,805
Proceeds from sale of bonds	—	—	104,000,000	225,000
Premium on sale of bonds	—	—	99,045,000	48,529
Proceeds from capital lease	—	—	—	—
Total other financing sources (uses)	64,170	175,245	305,097,000	442,965
Net change in fund balance	$ (42,328)	$ (62,969)	$ 99,064,000	$ 165,000
Debt service as a percentage of non-capital expenditures	32.8%	31.6%	28.4%	31.7%

2014	2013	2012	2011	2010	2009
$ 516,316	$ 454,966	$ 489,168	$ 492,751	$ 410,663	$ 418,077
39,571	40,737	35,605	36,849	39,352	37,477
9,486	3,051	11,123	13,156	9,119	7,632
8	2,575	—	2,326	3,045	6
4,925	3,361	6,239	12,715	6,818	1,359
630	2,271	1,472	1,298	285	695
5,445	4,765	5,822	4,859	5,181	6,642
50,696	49,182	69,322	57,469	49,433	47,886
16,357	14,851	12,081	12,161	10,040	9,660
5,456	3,396	3,353	2,534	2,731	4,305
11,162	11,110	22,164	17,218	20,233	1,440
660,052	590,265	656,349	653,336	556,900	535,179
3,710	3,514	3,463	3,344	3,628	3,659
14,829	14,111	13,877	14,332	15,411	18,555
26,687	25,128	24,495	25,084	28,445	28,891
6,325	5,671	5,698	6,949	6,493	6,156
72,879	67,856	63,105	47,710	46,944	43,603
14,582	14,024	13,167	13,820	15,823	20,200
6,802	6,984	5,942	7,166	8,164	7,446
3,425	3,393	3,172	2,965	3,203	3,208
25,278	23,987	3,229	2,975	5,367	7,951
168,376	161,787	161,188	177,908	191,165	208,123
75,556	67,523	66,191	36,635	30,099	31,744
44,988	4,970	5,998	6,923	6,728	9,464
236,259	199,231	259,315	337,051	496,885	397,265
89,118	85,709	71,400	64,112	60,602	73,105
110,115	111,665	118,854	98,015	104,414	67,148
898,929	795,553	819,094	844,989	1,023,371	926,518
(238,877)	(205,288)	(162,745)	(191,653)	(466,471)	(391,339)
—	—	—	(253)	—	—
81,721	41,546	54,884	78,481	152,465	81,000
—	—	—	—	—	—
—	—	—	400,000		600,000
—	—	—	37,344	—	—
—	—	—	—	54,535	
81,721	41,546	54,884	515,572	207,000	681,000
$ (157,156)	$ (163,742)	$ (107,861)	$ 323,919	$ (259,471)	$ 289,661
26.9%	28.8%	29.9%	27.4%	26.1%	21.2%

Exhibit I-5
Equalized Assessed Value, Direct Tax Rate and Estimated Actual Value of Taxable Property

Last Ten Fiscal Years

(in thousands of dollars, except tax rates)

Fiscal Year Ended December 31,	Chicago Equalized Assessed Value	Suburbs Equalized Assessed Value	Total Equalized Assessed Value	Total Direct Tax Rate (1)	Estimated Full Taxable Value (3)	Equalized Assessed Value as a Percentage of Full Value
2008	$ 80,977,543	$ 89,119,839	$ 170,097,382	0.252	$ 616,163,594	27.6%
2009	84,586,808	89,880,835	174,467,643	0.261	550,135,370	31.7
2010	82,087,170	84,830,896	166,918,066	0.274	449,811,540	37.1
2011	75,122,914	73,925,579	149,048,493	0.320	442,787,689	33.7
2012	65,250,387	68,147,608	133,397,995	0.370	414,382,389	32.2
2013	62,363,876	61,055,668	123,419,544	0.417	459,860,597	26.8
2014	64,908,057	60,828,131	125,736,188	0.430	499,136,554	25.2
2015	70,963,289	59,341,515	130,304,804	0.426	528,843,259	24.6
2016	74,016,506	66,735,695	140,752,201	0.406	559,685,160	25.1
2017	76,765,303	71,180,521	147,945,824	0.402	559,685,160 (2)	26.4

Source: Cook County Clerk for Equalized Assessed Values and Tax Rates and the Civic Federation for Estimated Full Values

(1) Tax rates per $100 equalized assessed valuation.

(2) Current data not available from Civic Federation

(3) Does not include values for Railroad, Pollution Control or the part of O'Hare Airport located in DuPage County.

Exhibit I-6
District Direct Property Tax Rates, Overlapping Property Tax Rates of Major Local Governments, and Districted Tax Levies by Fund

Last Ten Fiscal Years

(rates per $100 of assessed value)

	2018 (1)	2017	2016	2015	2014	2013	2012	2011	2010	2009
District direct rates										
Corporate	$ 0.158	$ 0.152	$ 0.161	$ 0.175	$ 0.183	$ 0.182	$ 0.179	$ 0.168	$ 0.144	$ 0.135
Reserve Claim	0.004	0.004	0.004	0.004	0.002	0.005	0.005	0.002	0.001	0.002
Retirement	0.047	0.050	0.047	0.044	0.040	0.042	0.021	0.019	0.016	0.016
Debt Service	0.161	0.157	0.160	0.175	0.174	0.163	0.135	0.114	0.094	0.097
Construction	0.008	0.011	0.010	0.013	0.014	0.009	0.015	0.001	0.005	0.006
Stormwater Management	0.031	0.028	0.024	0.019	0.017	0.016	0.015	0.016	0.014	0.005
Total direct rate	$ 0.409	$ 0.402	$ 0.406	$ 0.430	$ 0.430	$ 0.417	$ 0.370	$ 0.320	$ 0.274	$ 0.261
Major local governments' tax rates (2)										
City of Chicago	$ —	$ 1.652	$ 1.630	$ 1.549	$ 1.193	$ 1.209	$ 1.151	$ 0.999	$ 0.914	$ 0.887
Chicago Board of Education	—	3.890	3.726	3.455	3.660	3.671	3.422	2.875	2.581	2.366
Chicago Park District	—	0.352	0.362	0.372	0.401	0.402	0.395	0.346	0.319	0.309
Cook County	—	0.496	0.533	0.552	0.568	0.560	0.531	0.462	0.423	0.394
Cook County Forest Preserve Dist.	—	0.062	0.063	0.069	0.069	0.069	0.063	0.058	0.051	0.049
Community College #508 (City Coll)	—	0.164	0.169	0.177	0.193	0.198	0.190	0.165	0.151	0.150
City of Chicago Library Fund	—	0.118	0.122	0.123	0.134	0.135	0.128	0.111	0.102	0.099
City of Chicago School Bldg/Imprvmt	—	0.124	0.128	0.134	0.146	0.152	0.146	0.119	0.116	0.112
District's tax levies by fund (in thousands)										
Corporate	$240,466	$224,825	$226,743	$227,196	$230,000	$224,400	$237,193	$249,828	$240,059	$237,116
Stormwater Management	47,826	40,856	34,250	24,050	21,000	20,000	20,000	24,100	24,029	8,849
Reserve Claim	6,000	5,900	5,800	5,700	3,000	6,500	6,670	3,400	1,951	3,182
Retirement	71,534	73,438	65,161	58,004	50,531	51,621	28,490	28,163	26,478	26,751
Debt Service	244,859	232,751	225,715	228,728	218,319	202,290	180,748	169,645	156,090	169,051
Construction	11,700	17,000	13,785	16,500	17,400	11,079	20,418	1,819	8,749	10,411
Total tax levies	$622,385	$594,770	$571,454	$560,178	$540,250	$515,890	$493,519	$476,955	$457,356	$455,360

Source: Cook County Clerk

(1) District's tax rates are estimated based on 2017 equalized assessed valuation of $148 billion

(2) Major local governments' rates for 2018 are not yet available

Exhibit I-7
Principal Property Taxpayers

2017 and Nine Years Ago

(in thousands of dollars)

		2017 (1)			2008		
Taxpayer	**Type of Business**	**Equalized Assessed Value**	**Rank**	**Percentage of Total Equalized Assessed Value (2)**	**Equalized Assessed Value**	**Rank**	**Percentage of Total Equalized Assessed Value**
Willis Tower	Retail & Office	$ 444,405	1	0.30%	$ 514,662	1	0.33%
300 East Randolph Street	Office	264,940	2	0.18	—	—	—
HCSC Blue Cross (AON)	Insurance	263,985	3	0.18	374,456	2	0.23
One Prudential Plaza	Office	248,867	4	0.17	307,510	5	0.18
Water Tower Place	Financial Services	239,238	5	0.16	293,604	8	0.19
300 North LaSalle Street	Retail & Office	217,715	6	0.15	—	—	—
AT&T Corporate Center	Retail & Office	215,948	7	0.15	294,569	4	0.17
Chase Tower	Communications	214,683	8	0.15	297,653	6	0.19
3 First National Plaza	Banking	202,646	9	0.14	—	—	—
Citadel Center	Office	184,853	10	0.12	208,906	10	0.13
Citicorp Center	Banking	—	—	—	216,217	9	0.15
Leo Burnett Building	Advertising	—	—	—	211,813	7	0.14
Equity Office Center	Property Management	—	—	—	382,061	3	0.22
		$ 2,497,280		1.70%	$ 3,101,451		1.93%

Source: Cook County Treasurer's Office and Cook County Clerk's Office

(1) 2018 information is unavailable.

(2) The Equalized Assessed Valuation for 2017 is $147,945,823,261.

Exhibit I-8
Property Tax Levies and Collections

Last Ten Fiscal Years

(in thousands of dollars)

Fiscal Year Ended December 31	Taxes Levied for the Fiscal Year	Collected within the First Year		
		Amount	Percentage of Levy	Final Due Date
2009	$ 455,360	$ 383,612	84.2%	12/13/10
2010	457,356	435,009	95.1	11/01/11
2011	476,955	460,618	96.6	08/01/12
2012	493,573	476,881	96.6	08/01/13
2013	514,659	497,452	96.7	08/01/14
2014	540,666	523,203	96.8	08/01/15
2015	555,098	541,008	97.5	08/01/16
2016	571,454	559,938	98.0	08/01/17
2017	593,135	581,007	98.0	08/01/18
2018	616,233	—	—	08/01/18

Exhibit I-9
User Charge Rates

Last Ten Fiscal Years

		2018		2017		2016		2015 (1)
Large Commercial/Industrial User Rates (2)								
Flow per million gallons	$	264.28	$	259.61	$	255.02	$	250.51
5-day BOD per 1,000 lbs. (5)		223.03		229.13		234.95		240.49
SS per 1,000 lbs. (6)		136.48		142.47		148.33		154.08
Tax-Exempt User Rates (3)								
Flow per million gallons	$	264.28	$	259.61	$	255.02	$	250.51
5-day BOD per 1,000 lbs. (5)		223.03		229.13		234.95		240.49
SS per 1,000 lbs. (6)		136.48		142.47		148.33		154.08
OM&R Rate (4)		0.3010		0.3390		0.3440		0.3910

(1) The Large Commercial-Industrial and Tax-Exempt Users Rates are the same beginning with tax year 2014.

(2) Large Commercial-Industrial Users are non-governmental, non-residential Users engaged in significant commercial or industrial activities.

(3) Tax-Exempt Users are exempt from payment of property taxes.

(4) This rate represents the OM&R costs as a percentage of the District's total tax levy and it is applied to Commercial-Industrial Users' real estate tax credits for determining their final User Charge.

(5) BOD = Biochemical Oxygen Demand

(6) SS = Suspended Solids

2014	2013	2012	2011	2010	2009
$ 246.08	$ 241.73	$ 256.48	$ 243.99	$ 262.44	$ 229.37
245.75	250.76	259.22	247.48	270.68	231.90
159.72	165.24	195.95	194.18	200.33	174.25
$ 246.08	$ 245.18	$ 263.48	$ 250.31	$ 269.25	$ 235.96
245.75	254.34	266.27	253.89	277.70	238.56
159.72	167.60	201.24	199.21	205.53	179.25
0.4350	0.4240	0.4860	0.4730	0.5570	0.5040

Exhibit I-10
Ratios of Total General Bonded Debt and Net Bonded Debt Outstanding (1)

Last Ten Fiscal Years

(dollars and population in thousands, except debt per capita)

Fiscal Year	General Obligation Bonds	Bond Anticipation Notes and Interest	Capital Lease Payable (4)	Total Debt	Resources Available for Repayment of Debt (2)	Net Debt	Total Debt as a % Personal Income (3)	Total Debt per Capita (3)	Net Debt as a % of Est Full Taxable Value (3)	Net Debt Per Capita (3)
2009	$ 1,979,203	$ 86,286	$ —	$ 2,065,489	$ 106,279	$ 1,959,210	1 46%	$ 392.01	0 36%	$ 371.84
2010	1,961,974	196,225	53,688	2,211,887	111,055	2,100,832	1 44	422.12	0 47	400.92
2011	2,466,464	108,008	51,784	2,626,256	137,217	2,489,039	1 87	503.50	0.56	477.19
2012	2,515,376	44,527	49,838	2,609,740	136,173	2,473,567	1 79	506.75	0.60	480.30
2013	2,481,973	35,809	47,795	2,565,577	122,527	2,443,050	1.73	489.52	0.53	466 14
2014	2,500,785	90,460	45,653	2,636,898	140,162	2,496,736	1.83	495.84	0.50	469.49
2015	2,770,788	161,697	43,405	2,975,890	140,806	2,835,084	1.91	565.76	0.57	538.99
2016	2,965,282	157,390	41,047	3,163,719	163,508	3,000,211	1.86	603.88	0.60	572.67
2017	2,879,915	296,529	38,574	3,215,018	147,000	3,068,018	1 65	619.70	0.58	591.37
2018	2,978,999	109,866	35,979	3,124,844	134,450	2,990,394	1 56	601.28	0.53	575.41

(1) Represents long-term debt for general bonded debt, and bond anticipation notes, including interest, which are eventually converted to general bonded debt. Details of the District's long-term debt can be found in the notes to the basic financial statements.

(2) Represents the restricted fund balance in the Debt Service Fund.

(3) See Exhibit I-13 for personal income and population information, and Exhibit I-5 for estimated full taxable value information.

(4) The District entered into a capital lease agreement in 2010.

Exhibit I-11
Estimate of Direct and Overlapping Debt

As of December 31, 2018

(in thousands of dollars)

Direct debt						
Bonds and notes payable						$ 2,810,177
Capital lease						35,979
Overlapping bonded debt of major local governments (1)	Net Debt	(2)	% Applicable	(3)	Applicable Amount	
City of Chicago (4)	$ 8,024,797		100.00%		$ 8,024,797	
Chicago Board of Education (4)(5)	8,409,348		100.00		8,409,348	
Chicago Park District (4)	827,500		100.00		827,500	
City Colleges (District 508) (4)	311,010		100.00		311,010	
Cook County	3,372,227		98.10		3,308,039	
Cook County Forest Preserve District	145,190		98.10		142,431	
Total overlapping debt (6)						21,023,125
Total direct and overlapping debt						$ 23,869,281

(1) Excludes outstanding tax anticipation notes and warrants. Except as stated, does not include debt issued by other taxing authorities in Cook County.

(2) Source: Each of the respective taxing districts, current as of 12/31/2018.

(3) Based on 2016 Equalized Assessed Valuations, which are the most recent available.

(4) Includes approximately $234 million, $233 million, $7.48 billion and $281 million of general obligation bonds of the City of Chicago, City Colleges (District 508), Chicago Board of Education and the Chicago Park District, respectively, issued as "alternate revenue bonds" secured by alternate revenue sources.

(5) Includes approximately $54 million of Public Building Commission Bonds debt.

(6) Does not include debt issued by other taxing authorities located in Cook County.

Exhibit I-12
Computation of Statutory Debt Margin

Last Ten Fiscal Years

(in thousands of dollars)

	2018 (1)	2017	2016	2015
Equalized assessed valuation	$ 147,945,823	$ 147,945,823	$ 140,752,201	$ 130,304,804
Statutory debt limit (5.75% of equalized assessed valuation)	8,506,885	8,506,885	8,093,252	7,492,526
Total debt applicable to debt limit:				
General obligation bonds outstanding	2,810,177	2,697,667	2,769,608	2,655,365
Less: alternate bonds (2)	(97,190)	(98,145)	(99,080)	(50,000)
Adjusted general obligation bonds outstanding	2,712,987	2,599,522	2,670,528	2,605,365
Bond anticipation notes outstanding	109,866	296,529	157,390	161,697
Capital lease outstanding	35,979	38,574	41,047	43,405
Liabilities of tax financed funds:				
Corporate	24,983	21,650	27,952	23,647
Stormwater	7,090	1,715	2,062	6,973
Reserve claim	643	274	174	205
Construction	5,017	3,171	3,368	4,812
Total applicable debt	2,896,565	2,961,435	2,902,521	2,846,104
Less applicable assets:				
Debt service funds unrestricted cash and investments	85,880	109,965	115,673	108,671
Interest payable in the next twelve months	(115,017)	(114,603)	(117,604)	(115,735)
Total applicable assets	(29,137)	(4,638)	(1,931)	(7,064)
Total net debt applicable to debt limit	2,925,702	2,966,073	2,904,452	2,853,168
Statutory debt margin	$ 5,581,183	$ 5,540,812	$ 5,188,800	$ 4,639,358
Total applicable net debt as a percentage of statutory debt limit	34.4%	34.9%	35.9%	38.1%

(1) Debt limit calculation based on 2016 equalized assessed valuation since 2017 value is not yet available.

(2) Alternate bonds do not count against the debt limit.

2014	2013	2012	2011	2010	2009
$ 125,736,188	$ 123,419,544	$ 133,397,995	$ 149,048,493	$ 166,918,066	$ 174,467,643
7,229,831	7,096,624	7,670,385	8,570,288	9,597,789	10,031,889
2,422,620	2,481,973	2,515,375	2,466,464	1,961,974	1,979,203
—	—	—	—	—	—
2,422,620	2,481,973	2,515,375	2,466,464	1,961,974	1,979,203
90,460	35,809	44,527	108,008	196,225	86,286
45,653	47,795	49,837	51,784	53,688	—
37,136	30,150	30,076	35,347	45,381	45,260
5,689	3,515	2,496	1,956	2,496	1,101
—	—	—	—	—	—
681	380	1,110	1,381	410	327
6,648	2,816	4,062	1,542	1,732	4,236
2,608,887	2,602,438	2,647,483	2,666,482	2,261,906	2,116,413
108,392	98,006	105,285	114,344	88,710	88,849
(106,175)	(107,868)	(109,300)	(116,410)	(92,619)	(59,873)
2,217	(9,862)	(4,015)	(2,066)	(3,909)	28,976
2,606,670	2,612,300	2,651,498	2,668,548	2,265,815	2,087,437
$ 4,623,161	$ 4,484,324	$ 5,018,887	$ 5,901,740	$ 7,331,974	$ 7,944,452
36.1%	36.8%	34.6%	31.1%	23.6%	20.8%

Exhibit I-13
Demographic and Economic Statistics

Last Ten Fiscal Years

(population and dollars in thousands)

Year	Population	Personal Income	Per Capita Personal Income	Median Household Income	Unemployment Rate
2018	5,197	$ 191,289,682	$ 36,806	$ 65,818	4.1%
2017	5,188	186,434,150	35,936	63,794	4.8
2016	5,239	170,081,127	32,464	58,708	5.8
2015	5,260	155,734,043	29,607	54,461	5.8
2014	5,318	144,394,219	27,152	53,653	7.0
2013	5,241	148,352,487	28,304	51,391	9.1
2012	5,150	145,456,281	28,246	53,852	8.8
2011	5,216	140,483,393	26,933	54,036	9.8
2010	5,240	153,959,010	29,381	59,201	10.4
2009	5,269	141,675,329	26,888	53,709	10.1

Source: Population, Personal Income and Median Household Income is for Cook County, Illinois. Population, Median Household Income and Personal Income information is provided by The Nielsen Claritas Data Services, and unemployment information is provided by the U.S. Department of Labor, Bureau of Labor Statistics. The District service area represents 98% of the assessed valuation of Cook County.

Exhibit I-14
Principal Employers

2018 and Nine Years Ago

Employer	2018 Employees	2018 Rank	2018 Percentage of Total Employment (5)	2009 Employees	2009 Rank	2009 Percentage of Total Employment
U.S. Government (1)	41,500	1	0.80%	77,000	1	1.46%
Chicago Public Schools (2)	36,415	2	0.70	43,740	2	0.83
City of Chicago	31,854	3	0.61	36,242	3	0.69
Cook County (3)	22,438	4	0.43	23,416	5	0.44
Northwestern Memorial Healthcare (4)	19,886	5	0.38	—	—	—
University of Chicago (2)	17,345	6	0.33	—	—	—
United Continental Holdings Inc.	14,582	7	0.28	—	—	—
Amazon.Com Inc. (5)(6)	14,018	8	0.27	—	—	—
J.P. Morgan Chase & Co.	13,795	9	0.27	13,142	9	0.25
State of Illinois	13,642	10	0.26	26,000	4	0.49
Wal-Mart Stores Inc.	—	—	—	19,990	6	0.38
Advocate Health Care	—	—	—	14,784	7	0.28
Walgreen Co.	—	—	—	13,281	8	0.25
Abbott Laboratories	—	—	—	13,000	10	0.25
Total	225,475		4.33%	280,595		5.32%

(1) Fiscal year ends in September

(2) Fiscal year ends in June

(3) Fiscal year ends in November

(4) Fiscal year ends in August

(5) Includes Whole Foods employees

(6) Includes part-time employees.

Source: Reprinted with permission, Crain's Chicago Business [February 11, 2019] © Crain Communications, Inc.

Exhibit I-15
Budgeted Positions by Fund/Department

Last Ten Fiscal Years

Fund/Department	Budgeted Positions 2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
General Corporate Fund										
Board of Commissioners	38	38	38	37	37	37	37	40	45	45
General Administration	121	123	122	119	112	109	114	125	124	146
Monitoring and Research	312	309	308	297	288	286	280	303	308	308
Procurement and Materials Management	63	63	63	63	62	62	62	69	70	70
Human Resources	91	141	73	74	72	58	57	59	60	54
Information Technology	73	75	76	70	70	70	69	71	71	72
Law	37	38	38	37	36	38	37	38	40	40
Finance	28	28	28	29	29	29	29	31	31	31
Engineering (Corporate Fund) (1)	242	246	244	242	241	242	29	32	34	34
Maintenance & Operations	904	922	927	955	951	947	943	1,029	1,047	1,046
Total General Corporate Fund	1,909	1,983	1,917	1,923	1,898	1,878	1,657	1,797	1,830	1,846
Engineering (Construction Fund) (2)	0	0	0	0	0	0	21	28	45	45
Engineering (Stormwater Management)	57	59	59	59	63	49	48	44	50	49
Engineering (Capital Improvements Bond Fund) (2)	0	0	0	0	0	0	196	202	191	191
Grand Total	1,966	2,042	1,976	1,982	1,961	1,927	1,922	2,071	2,116	2,131

(1) Increase due to the transfer of positions from the Capital Improvements Bond and Construction Funds to the Corporate Fund

(2) Decrease due to the transfer of positions from the Capital Improvements Bond and Construction Funds to the Corporate Fund

Exhibit I-16
Operating Indicators

Last Ten Fiscal Years

	Area Served (1)	Communities Served (2)	Number of People Served (3)	Commercial and Industrial Population Equivalent Served	Number of Local Sewer Connections to Intercepting Sewers	Gallons of Pumping Station Maximum Capacity (4)	Gallons of Sewage Processed per Day (4)	Daily Sewage Treatment Capacity (4)
2018	882	129	5,197,297	4,500,000	10,000	4,000,000	1,300,000	2,000,000
2017	882	129	5,188,486	4,500,000	10,000	4,000,000	1,251,000	2,000,000
2016	883	129	5,239,253	4,500,000	10,000	4,000,000	1,300,000	2,000,000
2015	883	129	5,260,069	4,500,000	10,000	4,000,000	1,244,200	2,000,000
2014	883	129	5,318,365	4,500,000	10,000	4,000,000	1,288,600	2,000,000
2013	884	126	5,241,489	4,500,000	10,000	4,000,000	1,218,200	2,000,000
2012	884	126	5,149,578	4,500,000	10,000	4,000,000	1,070,200	2,000,000
2011	884	126	5,215,968	4,500,000	10,000	4,000,000	1,342,800	2,000,000
2010	884	126	5,239,879	4,500,000	10,000	4,000,000	1,245,200	2,000,000
2009	884	126	5,269,000	4,500,000	10,000	4,000,000	1,366,700	2,000,000

(1) In square miles
(2) Including the City of Chicago
(3) Nielsen -- Claritas Data Service
(4) In thousands of gallons

Exhibit I-17
Capital Asset Statistics

Last Ten Fiscal Years

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Miles of intercepting sewers and force mains operated	560	560	560	560	560	560	559	559	559	559
Miles of waterway water levels controlled	76	76	76	76	76	76	76	76	76	76
Acres of strip-mined land utilized for solids processing	13,796+	13,796+	13,796+	13,796+	13,796+	13,796+	13,796+	13,796+	13,796+	13,796+
Number of water reclamation plants	7	7	7	7	7	7	7	7	7	7
Number of pumping stations	23	23	23	23	23	23	23	23	23	23
Miles of TARP tunnels constructed for pollution and flood control	109.4	109 4	109.4	109.4	109.4	109.4	109.4	109.4	109 4	109.4
Number of TARP reservoirs constructed	2	2	2	2	1	1	1	1	1	1
Number of TARP reservoirs under construction	1	1	1	1	2	2	2	2	2	2
Number of flood control reservoirs	34	34	34	34	33	31	31	31	31	31
Instream aeration stations	2	2	2	2	2	2	2	2	2	2
Sidestream elevated pool aeration stations	5	5	5	5	5	5	5	5	5	5

Source: District's Engineering Department

IV.
SINGLE AUDIT SECTION

MWRD President Kari K. Steele greets visitors to the MWRD's display at the Chicago Flower and Garden Show at Navy Pier. The MWRD participated in the annual show for the first time to showcase its exceptional quality compost, a soil amendment that is derived from wood chips and nutrient-rich materials. The MWRD also provided visitors with tips on how to manage stormwater and implement green infrastructure tools at their own yards, holding daily drawings for free rain barrels, while also distributing about 500 free buckets of compost.

RSM

RSM US LLP

Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With *Government Auditing Standards*

To the Honorable President and Members of the Board of Commissioners
Metropolitan Water Reclamation District of Greater Chicago

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the governmental activities, each major fund, and the aggregate remaining fund information of Metropolitan Water Reclamation District of Greater Chicago (the District), as of and for the year ended December 31, 2018, and the related notes to the financial statements, and the respective changes in financial position thereof and the respective budgetary comparisons for the General Corporate Fund and the Retirement Fund for the year then ended, which collectively comprise the District's basic financial statements, and have issued our report thereon dated May 10, 2019. Our report includes a reference to other auditors who audited the financial statements of the District's Pension Trust Fund as described in our report on the District's financial statements. Additionally, our report includes an emphasis of a matter paragraph relative to the adoption of the reporting and disclosure requirements of Governmental Accounting Standards Board Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, which required a restatement to opening net position. This report does not include the results of the other auditors' testing of internal control over financial reporting or compliance and other matters that are reported separately by those auditors.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the District's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we do not express an opinion on the effectiveness of the District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

THE POWER OF BEING UNDERSTOOD
AUDIT | TAX | CONSULTING

Compliance and Other Matters
As part of obtaining reasonable assurance about whether the District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report
The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the District's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

RSM US LLP

Chicago, Illinois
May 10, 2019

PRADO & RENTERIA
Certified Public Accountants

1837 S. Michigan Ave., Chicago, Illinois 60616
TEL (312) 567-1330 FAX (312) 567-1360
www.pradorenteria.com

INDEPENDENT AUDITORS' REPORT

The Honorable President and
Members of the Board of Commissioners
Metropolitan Water Reclamation District of Greater Chicago

Report on the Schedule of Expenditures of Federal Awards

We have audited the accompanying Schedule of Expenditures of Federal Awards (the "Schedule") of the Metropolitan Water Reclamation District of Greater Chicago (the "District"), for the year ended December 31, 2018 and the related notes to the Schedule.

Management's Responsibility for the Schedule of Expenditures of Federal Awards
Management is responsible for the preparation and fair presentation of this Schedule in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the Schedule that is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility
Our responsibility is to express an opinion on this Schedule based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained *in Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulation* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether the Schedule is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Schedule. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the Schedule, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the Schedule in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the Schedule.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion
In our opinion, the Schedule referred to above presents fairly, in all material respects, the expenditures of federal awards of the District for the year ended December 31, 2018, in accordance with accounting principles generally accepted in the United States of America.

Report on Other Legal and Regulatory Requirements
In accordance with Title 2 U.S. *Code of Federal Regulation* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance), we have also issued a report dated May 10, 2019 on our consideration of the District's compliance with requirements that could have a direct and material effect on the major program and on internal control over compliance in accordance with the Uniform Guidance. That report is an integral part of an audit performed in accordance with the Uniform Guidance and should be read in conjunction with this report.

Prado & Renteria

Chicago, Illinois
May 10, 2019

PRADO & RENTERIA
Certified Public Accountants

1837 S. Michigan Ave., Chicago, Illinois 60616
TEL (312) 567-1330 FAX (312) 567-1360
www.pradorenteria.com

INDEPENDENT AUDITORS' REPORT ON COMPLIANCE FOR EACH MAJOR PROGRAM AND ON INTERNAL CONTROL OVER COMPLIANCE REQUIRED BY THE UNIFORM GUIDANCE

The Honorable President and
Members of the Board of Commissioners
Metropolitan Water Reclamation District of Greater Chicago

Report on Compliance for the Major Federal Program

We have audited the Metropolitan Water Reclamation District of Greater Chicago's (the "District") compliance with the types of compliance requirements described in the OMB *Compliance Supplement* that could have a direct and material effect on the District's major federal program for the year ended December 31, 2018. The District's major federal program is identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility
Management is responsible for compliance with the federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

Auditor's Responsibility
Our responsibility is to express an opinion on compliance for the District's major federal program based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Costs Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the District's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the major federal program. However, our audit does not provide a legal determination of the District's compliance.

Opinion on the Major Federal Program
In our opinion, the District complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on its major federal program for the year ended December 31, 2018.

Report on Internal Control over Compliance

Management of the District is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the District's internal control over compliance with the types of requirements that could have a direct and material effect on the major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for the major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the District's internal control over compliance.

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Chicago, Illinois
May 10, 2019

Schedule of Expenditures of Federal Awards

Year ended December 31, 2018

Federal Grantor/Pass-Through Grantor/ Program or Cluster Title	Federal CFDA Number	Pass-Through Entity Identifying Number	Award Date	Pass-Through to Subrecipients	Total Federal Expenditures
U.S. Environmental Protection Agency					
Passed through Illinois Environmental Protection Agency					
Capitalization Grants for Clean Water State Revolving Funds					
Project Descriptions					
Salt Creek Intercepting Sewer 2 Rehabilitation, SSA	66.458	L173062	December 2015	—	$ 1,066,900
Calumet TARP Pumping Station Improvements, Calumet WRP	66.458	L174923	May 2013	—	68,300
A/B and C/D Service Tunnel Rehabilitation - Phase Two, SWRP	66.458	L175152	March 2016	—	712,800
Calumet TARP Screens, CWRP	66.458	L175168	March 2015	—	122,300
D799 Switchgear Replacement, SWRP	66.458	L175223	December 2015	—	676,600
Calumet Intercepting Sewer 19F Rehabilitation, CSA	66.458	L175263	May 2016	—	187,800
Streambank Stabilization on Oak Lawn Creek, Cal-Sag Ch Watershed	66.458	L175305	September 2016	—	1,499,800
McCook Reservoir Des Plaines Inflow Tunnel, SSA	66.458	L175367	June 2018	—	1,635,800
Conversion of Two New GCTs to Primary Sludge Fermenters and Installation of Gas Detection System, SWRP	66.458	L175369	September 2017	—	778,800
McCook Reservoir Expanded Stage 2 Slope Stabilization & Retaining Walls, SWRP	66.458	L175460	May 2017	—	741,100
Total U S. Environmental Protection Agency Funding of Capitalization Grants for Clean Water State Revolving Funds					$ 7,490,200
Total Federal Expenditures					**$ 7,490,200**

See Accompanying Notes to Schedule of Expenditures of Federal Awards

Note 1 – Basis of Presentation

The accompanying Schedule of Expenditures of Federal Awards (the "Schedule") includes the federal award activity of the Metropolitan Water Reclamation District of Greater Chicago (the "District") under programs of the federal government for the year ended December 31, 2018. The information in this Schedule is presented in accordance with the requirements of Title 2 U.S. *Code of Federal Regulation* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Because the Schedule presents only a selected portion of the operations of the District, it is not intended to and does not present the financial position and the respective change in financial position of the District.

Note 2 – Summary of Significant Accounting Policies

Expenditures reported on the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following the cost principles contained in the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement.

Note 3 – Indirect Cost Rate

The District does not receive funding for indirect costs.

Note 4 – Program Description

CFDA # 66.458 – Capitalization Grants for Clean Water State Revolving Funds

The Capitalization Grants for Clean Water State Revolving Funds create State Revolving Funds (SRFs) through a program of capitalization grants to states, which will provide a long-term source of state financing for construction of wastewater treatment facilities and implementation of other water quality management activities. The capitalization grant is deposited in the SRF, which is used to provide loans and other types of financial assistance, but no grants, to local communities and inter-municipal and interstate agencies. The States must agree to enter into binding commitments with recipients to provide financial assistance from the SRF in an amount equal to 16.67% of the total SRF loan, with the federal share being 83.33%. Those loans awarded under the American Recovery and Reinvestment Act of 2009 (ARRA) are funded 50% from ARRA funds and 50% from SRFs. There were no loans awarded under ARRA for the year ended December 31, 2018.

Note 5 – Project Descriptions

Descriptions of projects, funded wholly or partially by federal sources, for which the District received funds during the year ended December 31, 2018:

Note 5 – Project Descriptions – Continued

State Revolving Fund Loans

Loan #L173062 was awarded to the District on December 17, 2015, under Public Law 95-217 (Federal Water Pollution Control Act). The loan provides for Salt Creek Intercepting Sewer 2 Rehabilitation, SSA, Project 06-155-3S. The maximum SRF loan amount is $45,056,403. The maximum pass through federal funding is $37,545,501. A total of $1,066,900 in federal funds was disbursed by the IEPA during fiscal year 2018. As of December 31, 2018, $7,697,653 was outstanding. The outstanding amount is presented as a bond anticipation note in the District's financial statements.

Loan #L174923 was awarded to the District on May 2, 2013, under Public Law 95-217 (Federal Water Pollution Control Act). The loan provides for Calumet TARP Pumping Station Improvements, Calumet WRP, Project 06-212-3M. The maximum SRF loan amount is $32,893,059. The maximum pass through federal funding is $27,409,786. A total of $68,300 in federal funds was disbursed by the IEPA during fiscal year 2018. As of December 31, 2018, $1,033,275 was outstanding. The outstanding amount is presented as a bond anticipation note in the District's financial statements.

Loan #L175152 was awarded to the District on March 25, 2016, under Public Law 95-217 (Federal Water Pollution Control Act). The loan provides for A/B and C/D Service Tunnel Rehabilitation – Phase Two, SWRP, Project 04-132-3D. The maximum SRF loan amount is $21,111,910. The maximum pass through federal funding is $17,592,555. A total of $712,800 in federal funds was disbursed by the IEPA during fiscal year 2018. As of December 31, 2018, $4,093,313 was outstanding. The outstanding amount is presented as a bond anticipation note in the District's financial statements.

Loan #L175168 was awarded to the District on March 20, 2015, under Public Law 95-217 (Federal Water Pollution Control Act). The loan provides for Calumet TARP Screens, CWRP, Project 13-246-3M. The maximum SRF loan amount is $13,105,926. The maximum pass through federal funding is $10,921,168. A total of $122,300 in federal funds was disbursed by the IEPA during fiscal year 2018. As of December 31, 2018, $210,766 was outstanding. The outstanding amount is presented as a bond anticipation note in the District's financial statements.

Loan #L175223 was awarded to the District on December 15, 2015, under Public Law 95-217 (Federal Water Pollution Control Act). The loan provides for D799 Switchgear Replacement, SWRP, Project 09-182-3E. The maximum SRF loan amount is $9,800,000. The maximum pass through federal funding is $8,166,340. A total of $676,600 in federal funds was disbursed by the IEPA during fiscal year 2018. As of December 31, 2018, $1,397,781 was outstanding. The outstanding amount is presented as a bond anticipation note in the District's financial statements.

Loan #L175263 was awarded to the District on May 27, 2016, under Public Law 95-217 (Federal Water Pollution Control Act). The loan provides for Calumet Intercepting Sewer 19F Rehabilitation, CSA, Project 11-239-3S. The maximum SRF loan amount is $12,746,856. The maximum pass through federal funding is $10,621,955. A total of $187,800 in federal funds was disbursed by the IEPA during fiscal year 2018. As of December 31, 2018, $566,535 was outstanding. The outstanding amount is presented as a bond anticipation note in the District's financial statements.

Loan #L175305 was awarded to the District on September 22, 2016, under Public Law 95-217 (Federal Water Pollution Control Act). The loan provides for Streambank Stabilization Project on Oak Lawn Creek, Cal-Sag Ch Watershed Project 10-237-3F. The maximum SRF loan amount is $3,121,415. The maximum pass through federal funding is $2,601,075. A total of $1,499,800 in federal funds was disbursed by the IEPA during fiscal year 2018. As of December 31, 2018, $3,021,905 was outstanding. The outstanding amount is presented as a bond anticipation note in the District's financial statements.

Loan #L175367 was awarded to the District on June 22, 2018, under Public Law 95-217 (Federal Water Pollution Control Act). The loan provides for McCook Reservoir Des Plaines Inflow Tunnel, SSA, Project 13-106-4F. The maximum SRF loan amount is $33,382,100. The maximum pass through federal funding is $27,817,304. A total of $1,635,800 in federal funds was disbursed by the IEPA during fiscal year 2018. As of December 31, 2018, $5,113,905 was outstanding. The outstanding amount is presented as a bond anticipation note in the District's financial statements.

Loan #L175369 was awarded to the District on September 8, 2017, under Public Law 95-217 (Federal Water Pollution Control Act). The loan provides for Conversion of Two New GCTs to Primary Sludge Fermenters and Installation of a Gas Detection System, SWRP, Project 15-124-3P. The maximum SRF loan amount is $4,000,000. The maximum pass through federal funding is $3,333,200. A total of $778,800 in federal funds was disbursed by the IEPA during fiscal year 2018. As of December 31, 2018, $2,513,587 was outstanding. The outstanding amount is presented as a bond anticipation note in the District's financial statements.

Loan #L175460 was awarded to the District on May 12, 2017, under Public Law 95-217 (Federal Water Pollution Control Act). The loan provides for McCook Reservoir Expanded Stage 2 Slope Stabilization and Retaining Walls, SWRP, Project 16-125-4F. The maximum SRF loan amount is $7,546,837. The maximum pass through federal funding is $6,288,780. A total of $741,100 in federal funds was disbursed by the IEPA during fiscal year 2018. As of December 31, 2018, $2,719,912 was outstanding. The outstanding amount is presented as a bond anticipation note in the District's financial statements.

Schedule of Findings and Questioned Costs

Year ended December 31, 2018

SECTION I – SUMMARY OF AUDITORS' RESULTS

Financial Statements

Type of report the auditor issued on whether the financial statements audited were prepared in accordance with GAAP: **Unmodified**

Internal control over financial reporting:

Material weakness(es) identified?	______ Yes	X No
Significant deficiency(ies) identified?	______ Yes	X None reported
Noncompliance material to financial statements noted?	______ Yes	X No

Federal Awards

Internal control over major programs:

Material weakness(es) identified?	______ Yes	X No
Significant deficiency(ies) identified?	______ Yes	X None reported

Type of auditors' report issued on compliance for major federal programs: **Unmodified**

Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?

______ Yes X No

Identification of major federal programs:

U.S. Environmental Protection Agency

CFDA Number	Name of Federal Program or Cluster
66.458	Capitalization Grants for Clean Water State Revolving Funds

Dollar threshold used to distinguish between Type A and Type B programs: $750,000

Auditee qualified as low-risk auditee? X Yes ______ No

SECTION II – FINANCIAL STATEMENT FINDINGS – Required to be Reported in Accordance with Governmental Auditing Standards

None.

SECTION III – FEDERAL AWARD FINDINGS AND QUESTIONED COSTS

None

SECTION IV – SUMMARY OF PRIOR YEAR AUDIT FINDINGS

None.