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# Metropolitan Water Reclamation District Retiree Health Care Trust

A Component Unit of the Metropolitan Water  
Reclamation District of Greater Chicago

Chicago, Illinois



## Comprehensive Annual Financial Report As of and for the year ended December 31, 2018

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Prepared by the Management and Staff of  
The Metropolitan Water Reclamation District of Greater Chicago

Mary Ann Boyle, Treasurer

Trust Established December 6, 2007

**Metropolitan Water Reclamation District Retiree Health Care Trust  
A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

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A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

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## **INTRODUCTORY SECTION**



Government Finance Officers Association

**Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting**

Presented to

**Metropolitan Water Reclamation District  
Retiree Health Care Trust  
Illinois**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**December 31, 2017**

*Christopher P. Morill*

Executive Director/CEO

# Metropolitan Water Reclamation District Retiree Health Care Trust

100 East Erie Street  
Chicago, Illinois 60611  
(312) 751-5150

May 10, 2019

Members of the Board of Commissioners of the  
Metropolitan Water Reclamation District of Greater Chicago  
Trustee and Fiduciary for the MWRD Retiree Health Care Trust  
100 East Erie Street  
Chicago, Illinois 60611

Dear Commissioners:

Submitted herewith is the Comprehensive Annual Financial Report (“CAFR”) of the Metropolitan Water Reclamation District Retiree Health Care Trust (“Trust”) for the year ended December 31, 2018. Responsibility for the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, is fully assumed by management of the Metropolitan Water Reclamation District of Greater Chicago (“the District”). To the best of our knowledge and belief, the enclosed financial statements, supporting schedules, and statistical tables are accurate in all material respects and are reported in a manner designed to present fairly the financial position and the results of operations of the Trust. All disclosures necessary to enable the reader to gain an understanding of the Trust’s financial activities have been included.

Accounting principles generally accepted in the United States of America require that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of 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 MD&A can be found immediately following the report of the independent auditor.

## **INTERNAL CONTROLS**

The District operates within a system of internal controls established and continually reviewed by management. This provides reasonable assurance that assets are adequately safeguarded and transactions are recorded correctly according to District policies and procedures. When establishing or reviewing controls, management must consider the cost of the control and value of the benefit derived from its utilization. Management normally maintains and implements all sensitive controls and those controls whose value adequately exceeds their cost. Management believes both the District’s and the Trust’s internal controls, procedures, and policies adequately safeguard assets and provide reasonable assurance of proper recording of financial transactions. The Trust’s annual independent audit disclosed no material weakness.

## **FUND DESCRIPTION**

Pursuant to 70 ILCS 2605/9.6d, the Metropolitan Water Reclamation District Retiree Health Care Plan (“Plan”) and the Trust Agreement were adopted by the Board of Commissioners (“BOC”) of the District effective December 6, 2007, to recognize the contribution made to the employer by its employees. Its purpose is to reward the employees by providing retiree health care benefits

for qualifying employees and their eligible spouses and dependents. Retiree health care benefits are defined as post-retirement medical and prescription drug coverage only; no dental, life, or disability benefits are provided by the Plan. The Plan is intended to satisfy the requirements of Section 115 of the Internal Revenue Code of 1986, as amended. The District established the Trust to fund future benefits to be provided under the Plan. The Trust is considered a component unit of the District and as such is included in the District's financial statements as a retiree health care trust fund.

The Plan and Trust descriptions are provided within the footnotes to the Financial Statements in the Financial Section and within the Actuarial Section of this report.

### **BOARD OF COMMISSIONERS OF THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO**

The District, through its Board of Commissioners ("BOC"), serves as Trustee and Fiduciary for the Trust. The Trustee takes, holds, invests, administers, and distributes contributions and assets paid or delivered to the Trust. All rights, title and interest in and to the assets of the Trust Fund are at all times vested exclusively in the Plan. All contributions received together with the income from the contributions are held, managed, and administered by the Trustee pursuant to the terms of the Plan without distinction between principal and income and without liability for the payment of interest.

The BOC appointed an Executive Committee, comprised of the Chairman of Finance, the Treasurer, and the Director of Finance, to be responsible for certain activities with regard to the Trust, subject to the approval of the BOC. These activities include but are not limited to: recommendation of an investment advisor; acceptance or rejection of investment recommendations from the investment advisor; and certain financial reporting responsibilities.

### **PROFESSIONAL STAFF AND SERVICES**

The District staff is responsible for providing the various services and information to the Trustee and to the members of the Trust, active and retired. This team is comprised of an Investment Advisor ("Advisor") and personnel from the Treasury, Finance, Human Resources, Budget, and Law Departments of the District. The Trustee selects the Advisor for a five-year service contract via a public Request for Proposal.

Typical staff activities include the development of an Investment Policy and Asset Allocation Strategy; investment and management of Trust assets; regular reporting to the Trustee; internal and external audits of the Trust; and training of the Trustee. General accounting activities are tracked on the SAP Enterprise system.

## **FUNDING POLICY**

In 2007, the BOC 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 BOC 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 contributions required after 2026.

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

## **FUNDING STATUS**

The funding for the Trust is accomplished in two parts. The District pays the retiree health care claim payments and insurance premiums from operating funds, and also contributes the advance funding amount to the Trust. Benefit payments and premiums are not paid from the advance funding contributions to the Trust. Currently, the Trust functions solely as an advance funding vehicle.

Income for the Trust is from two sources: employer contributions and investment income. Income from employer contributions is appropriated each year by the BOC. The District's BOC has discretionary authority to determine contribution amounts to be paid into the Trust. Through December 31, 2018, an aggregate of \$132,400,000 has been contributed by the District to the OPEB Trust Fund. The advance funding contribution for 2018 was \$5,000,000 in accordance with the Trust's current funding policy requirement. In succeeding fiscal years the Trust will receive the District (employer) contributions as determined by the BOC.

The Plan's Net OPEB Liability was \$133,185,649 as of December 31, 2018, based on an update roll-forward calculation from the most recent actuarial valuation. The Net OPEB Liability is measured as the Total OPEB Liability, less the amount of the Plan's Fiduciary Net Position, in which plan assets have been placed in a trust and dedicated to providing benefits to retirees and their beneficiaries. Future direction may be changed based on national health care policies.

The Plan Fiduciary Net Position as a percentage of the Total OPEB Liability was 58.6% at December 31, 2018, based on update roll-forward procedures from the most recent actuarial valuation.

## **INVESTMENT POLICY AND PERFORMANCE**

The assets of the Trust shall be managed by the Treasurer of the District in any manner, subject only to prudent investor standards and any requirements of federal law. The Trust shall discharge its duties in the same manner as that of a prudent person acting in a like capacity with the same resources and aims; diversify the holdings of the Trust to minimize the risk of loss and maximize the rate of return; and discharge duties solely in the interest and for the benefit of the funds



managed. The Trust's Investment Policy was initially adopted by the District's BOC on November 19, 2009, and was subsequently revised on November 15, 2018 to allow for new asset allocation targets structured to provide competitive performance while minimizing the potential for losses.

The Trust reported a total investment loss of \$11,785,345 for 2018, yielding -5.9%, compared to the Trust's Policy Index return of -3.5%. In 2017 the Trust reported a total investment return of \$25,434,000, yielding 15.1%, compared to the Policy Index return of 11.5%.

Refer to the Investment Section of this report for further information regarding investment authority and performance.

### **BENEFITS**

The establishment and funding of the Trust is expected to provide multiple benefits, including:

- Progress towards reducing large unfunded liability;
- Capture of long-term investment returns by using the Trust only as a funding vehicle;
- Reduction in future GASB No. 75 expense and cash funding requirements; and
- Provide funding so that the District is able to ease the financial burden of administering the Plan benefits to its current and future retirees.

### **AWARDS AND ACKNOWLEDGMENTS**

The preparation of this report reflects the combined efforts of the District staff under the direction of the Board of Trustees. This report is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and as a means for determining responsible stewardship of the assets of the Trust.

The Government Finance Officers Association of the United States and Canada ("GFOA") awarded a Certificate of Achievement for Excellence in Financial Reporting to the Trust for its CAFR for the period ended December 31, 2017. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports.

To be awarded the Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report whose contents meet or exceed the program standards. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

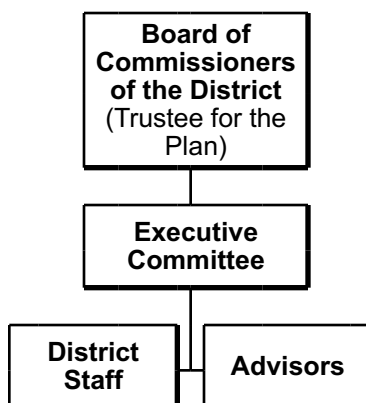
A Certificate of Achievement is valid for only one year. The Trust received a Certificate of Achievement for the last eleven years. We believe our current report continues to conform to the Certificate of Achievement program requirements; we are therefore submitting it to the GFOA to determine its eligibility for a Certificate of Achievement for the year ending December 31, 2018.

Respectfully submitted,



Mary Ann Boyle, Treasurer  
Metropolitan Water Reclamation District of Greater Chicago

## ORGANIZATION CHART AND PRINCIPAL OFFICIALS



### BOARD OF COMMISSIONERS OF THE DISTRICT

The District, through its Board of Commissioners, serves as Trustee and Fiduciary for the Plan.

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

### EXECUTIVE COMMITTEE

Frank Avila, Chairman of Finance  
Mary Ann Boyle, Treasurer of the District  
Jacqueline Torres, Clerk/Director of Finance

### DISTRICT STAFF

Treasury Department – Mary Ann Boyle, Treasurer  
Finance Department – Jacqueline Torres, Clerk/Director of Finance  
Department of Human Resources – Beverly K. Sanders, Director of Human Resources  
Law Department – Susan T. Morakalis, General Counsel

### ADVISORS

Actuary: Foster & Foster, Inc. An actuarial valuation is required to be performed biennially for the Trust. The next valuation date is December 31, 2019.

Investment Advisor: Marquette Associates, Inc. See further detail in the summary schedule of investment fees on page 40.

## **FINANCIAL SECTION**

## Independent Auditor's Report

RSM US LLP

To the Members of the Board of Trustees of the  
Metropolitan Water Reclamation District Retiree Health Care Trust  
Chicago, Illinois

### Report on the Financial Statements

We have audited the accompanying Statement of Plan Net Position of the Metropolitan Water Reclamation District Retiree Health Care Trust (Trust), a component unit of the Metropolitan Water Reclamation District of Greater Chicago (District), as of and for the year ended December 31, 2018, and the related Statement of Changes in Plan Net Position for the year then ended, and the related notes to the financial statements, which collectively comprise the Trust'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 conducted our audit in accordance with auditing standards generally accepted in the United States of America. 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 opinion.

### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the net position of the Metropolitan Water Reclamation District Retiree Health care Trust (Trust) as of December 31, 2018, and the changes in plan net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### Other Matters

#### *Prior Year Comparative Information*

The financial statements include partial prior-year comparative information. Such information does not include all of the information required to constitute a presentation in accordance with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the government's financial statements for the year ended December 31, 2017, from which such partial information was derived.

### **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 through 7 and the schedule of changes in the District's net OPEB liability and related ratios, schedule of District contributions and related notes and schedule of investment returns on pages 23 through 25 be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the 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 was conducted for the purpose of forming opinions on the Trust's financial. The accompanying supplementary information, consisting of Summary Schedules in the financial section, and the accompanying investment, actuarial, and statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supplementary 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. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements 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. In our opinion, the supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole. The introductory, investment, actuarial, and statistical sections have not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

We have also previously audited, in accordance with auditing standards generally accepted in the United States of America, the Trust's financial statements as of and for the year ended December 31, 2017 (not presented herein), and have issued our report thereon dated May 11, 2018, which contained an unmodified opinion on those financial statements. The accompanying summary schedule of administrative expenses and the summary schedule of investment fees for the year ended December 31, 2017 is presented for purposes of additional analysis and is not a required part of the 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 2017 financial statements. The other supplementary information has been subjected to the auditing procedures applied in the audit of the 2017 financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare those financial statements or to those financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information is fairly stated, in all material respects, in relation to the financial statements as a whole for the year ended December 31, 2017.

*RSM US LLP*

Chicago, Illinois  
May 10, 2019

# Metropolitan Water Reclamation District Retiree Health Care Trust

## A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago

### FINANCIAL SECTION

#### Management's Discussion and Analysis (Unaudited)

Year Ended December 31, 2018 (With comparative amounts for prior year)

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#### MANAGEMENT'S DISCUSSION AND ANALYSIS (Unaudited)

This section presents management's discussion and analysis of the Trust's financial performance for the years ended December 31, 2018 and 2017, and provides an introduction to the financial statements of the Trust. It is designed as required supplementary information which focuses on current activities, resulting changes and current known facts. It should be read in conjunction with the letter of transmittal found in the Introductory Section of this report.

#### Overview and Analysis of the Financial Statements

The Financial Section of the Trust's Comprehensive Annual Financial Report consists of the following parts: the independent auditor's report; management's discussion and analysis; the financial statements, including notes to the financial statements; required supplementary information and supplementary information.

The Trust prepared its financial statements on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America. The Statements of Fiduciary Net Position includes all of the Trust's assets and liabilities and provides information about the nature and amount of investments available to satisfy the retiree health care benefits of the Trust. All additions to and deductions from the net position restricted for OPEB for retiree health care benefits are accounted for in the Statements of Changes in Fiduciary Net Position. These statements measure the Trust's success in increasing the net position available for retiree health care benefits.

On August 23, 2007, the General Assembly of the State of Illinois approved the amendment to the Metropolitan Water Reclamation District Act (70 ILCS 2605/9.6d), which authorized and set forth the requirements for the establishment of the District Other Postemployment Benefit Trust ("OPEB Trust"), for the purpose of providing for the funding and payment of health and other fringe benefits for retired, disabled, or terminated employees of the District or for their dependents and beneficiaries. The Trust was established December 6, 2007.

The OPEB Trust implemented Statement No. 74 of the Governmental Accounting Standards Board (GASB), *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, beginning in fiscal year ended December 31, 2017. The financial reporting standard modified the Trust's notes to the basic financial statements and required supplementary information as well as required the calculation of a total OPEB liability and a net OPEB liability.

The Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position measure the value of the plan's net position and the changes to it. As of December 31, 2018, the plan net position decreased to \$188,317,255 from \$195,199,800 at December 31, 2017.

# Metropolitan Water Reclamation District Retiree Health Care Trust

## A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago

### FINANCIAL SECTION

#### Management's Discussion and Analysis (Unaudited)

Year Ended December 31, 2018 (With comparative amounts for prior year)

### FIDUCIARY NET POSITION AND CHANGES IN FIDUCIARY NET POSITION

The following table summarizes the Plan's Statements of Fiduciary Net Position:

	December 31, 2018	December 31, 2017	Change	Percent Change
<b>Assets</b>				
Investments at Fair Value	\$ 188,236,277	\$ 195,140,843	\$ (6,904,566)	(3.5)%
Accrued Interest Receivable	94,728	72,707	22,021	30.3 %
<b>Total Assets</b>	<b>188,331,005</b>	<b>195,213,550</b>	<b>(6,882,545)</b>	<b>(3.5)%</b>
<b>Liabilities</b>				
Accounts Payable	13,750	13,750	—	— %
<b>Total Liabilities</b>	<b>13,750</b>	<b>13,750</b>	<b>—</b>	<b>— %</b>
<b>Net Position Restricted for OPEB</b>	<b>\$ 188,317,255</b>	<b>\$ 195,199,800</b>	<b>\$ (6,882,545)</b>	<b>(3.5)%</b>

In 2018 the decrease in net position restricted for OPEB was mainly due to an unrealized loss on equity investments, as explained below. The Trust's time-weighted investment rate of return was -5.9% for the year, and 3.7% for the five years ended December 31, 2018.

The following table summarizes the Plan's Statements of Changes in Fiduciary Net Position:

	Year Ended December 31, 2018	Year Ended December 31, 2017	Change	Percent Change
<b>Additions:</b>				
Contributions by Employer	\$ 17,570,679	\$ 18,430,657	\$ (859,978)	(4.7)%
<b>Total Contributions</b>	<b>17,570,679</b>	<b>18,430,657</b>	<b>(859,978)</b>	<b>(4.7)%</b>
Net Appreciation (Depreciation) in Fair Value of Investments	(16,588,686)	21,208,737	(37,797,423)	(178.2)%
Interest and Dividends	4,803,341	4,225,263	578,078	13.7 %
Total Investment Return (Loss)	(11,785,345)	25,434,000	(37,219,345)	(146.3)%
Less Investment Expenses	(55,000)	(41,750)	(13,250)	(31.7)%
Net Investment Income (Loss)	(11,840,345)	25,392,250	(37,232,595)	(146.6)%
<b>Total Additions</b>	<b>5,730,334</b>	<b>43,822,907</b>	<b>(38,092,573)</b>	<b>(86.9)%</b>
<b>Deductions:</b>				
Retiree Health Care Benefits	12,570,679	13,430,657	(859,978)	(6.4)%
Administrative Expenses	42,200	36,900	5,300	14.4 %
<b>Total Deductions</b>	<b>12,612,879</b>	<b>13,467,557</b>	<b>(854,678)</b>	<b>(6.3)%</b>
<b>Net Increase (Decrease)</b>	<b>(6,882,545)</b>	<b>30,355,350</b>	<b>(37,237,895)</b>	<b>(122.7)%</b>
<b>Net Position Restricted For OPEB</b>				
Beginning of year	195,199,800	164,844,450	30,355,350	18.4 %
<b>End of year</b>	<b>\$ 188,317,255</b>	<b>\$ 195,199,800</b>	<b>\$ (6,882,545)</b>	<b>(3.5)%</b>

# Metropolitan Water Reclamation District Retiree Health Care Trust

## A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago

### FINANCIAL SECTION

#### Management's Discussion and Analysis (Unaudited)

Year Ended December 31, 2018 (With comparative amounts for prior year)

#### Additions

Additions are accumulated through employer and retiree contributions, and returns are provided by invested assets. Total additions for 2018 were \$5.7 million compared to \$43.8 million in 2017, a decrease of \$38.1 million or (86.9)%. Employer contributions were \$17.6 million for 2018, representing a decrease of \$0.9 million or 4.7%. Advance funding contributions made by the District were \$5.0 million in 2018 and 2017. Through December 31, 2018, a total of \$132.4 million has been contributed to the Trust. The 2018 net investment loss of \$11.8 million was due to the net depreciation in fair value of investments of \$16.6 million offset by dividends earned on mutual fund investments of \$4.8 million. Net investment income (loss) is a combination of interest and dividend income, and gains and losses on investments held at year-end. Overall the -5.9% investment return for 2018 reflected a -8.8% return on equity investments, -1.0% return on fixed income investments, and -4.8% return on global balanced investments. The negative return on equities was mainly due to the broader market experiencing a significant down turn beginning in October of 2018. The S&P 500 declined 13.5% in the fourth quarter and 4.4% for the year, making 2018 the worst year for the index since 2008. International indices also finished the year with double digit negative returns including the MSCI EAFE Index declining 13.8%, MSCI EAFE Small-Cap Index declining 17.9%, and the MSCI Emerging Markets Index declining 14.6%. The geopolitical environment in 2018 led to increased levels of uncertainty contributing to soured sentiment and slower momentum. Emerging market returns suffered from currency losses and price declines which led to a 15.0% decline in the index. The Trust's investment in the PIMCO All Asset Fund under the global balanced composite was divested in late 2018.

#### Deductions

The expenses paid by the Trust are retiree health care benefit payments and administrative expenses. Total deductions for 2018 were \$12.6 million compared to \$13.5 million in 2017, a decrease of \$0.9 million or 6.3%. Benefit payments decreased 6.4% from 2017, mainly due to cost savings associated with the District's Medicare Advantage Plan with Part D coverage, referred to as a MAPD plan, a fully insured health insurance plan administrated by a major insurance carrier. Total administrative expenses represent the cost of fiduciary insurance for the Trustee, along with external audit fees.

#### Return on Investments and Asset Allocation

Comparative investment returns by asset allocation are as follows:

Asset Class	2018 Percent of Investments	2017 Percent of Investments	2018 Time-Weighted Investment Return	2017 Time-Weighted Investment Return
Domestic Equity	42%	35%	-8.0%	22.3%
International Equity	19%	15%	-13.0%	29.0%
Domestic Fixed Income	37%	32%	-1.0%	5.6%
Global Balanced	0%	9%	-4.8%	14.0%
Money Market Funds	2%	9%	1.7%	0.0%
Total	100%	100%	-5.9%	15.1%



# Metropolitan Water Reclamation District Retiree Health Care Trust

## A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago

### FINANCIAL SECTION

#### Management's Discussion and Analysis (Unaudited)

Year Ended December 31, 2018 (With comparative amounts for prior year)

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The decrease in value of the Trust's invested assets was 3.5%. The return on invested assets for 2018 using the Modified Dietz time-weighted approach was -5.9%, calculated on a quarterly compounded basis. The disparity between the percentage return on investments and the decrease in asset value reflects the impact and timing of \$5.0 million advance funding contribution made during 2018.

#### Funded Status

The Trust's funded status is the ratio of the actuarial value of assets to the actuarial liability and is a measure of the ability to pay all future benefits from the assets held in the Trust. The Plan Fiduciary Net Position as a percentage of the Total OPEB Liability was 58.6% as of December 31, 2018, representing a decrease from 63.2% as of December 31, 2017, resulting from negative investment returns in 2018. The District remains confident it is well on its way to meeting its goals of providing financial stability to the Plan despite the year's investment loss.

#### Required Supplementary Information

To provide actuarial determined information about the Trust, this report includes schedules of historical trend information in the Required Supplementary Information (RSI) section as required by accounting standards. The RSI provides a Schedule of Changes in the District's Net OPEB Liability and Related Ratios, a Schedule of District Contributions and Related Notes, and a Schedule of Investment Returns. The RSI section complies with the Statement 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* from the Governmental Accounting Standards Board (GASB). The RSI section displays changes for the Trust's Net OPEB Liability (NPL) and related ratios, contributions related to payrolls, and money-weighted investment returns for the Trust.

The Actuarial Assumptions presented were determined as part of the actuarial valuation at December 31, 2017. An actuarial valuation is required to be performed biennially for the Trust. The next valuation date is December 31, 2019. For the years in which a valuation is not completed, such as December 31, 2018, a required roll-forward calculation is completed from the latest actuarial valuation to compute the updated Net OPEB liability. Please note that the actuarial information is based on assumptions about future events, and therefore, the figures presented are estimates.

#### Other Information

This report also includes an Investment Section, an Actuarial Section, and a Statistical Section. The Investment Section contains the investment consultant report, a statement on investment authority and responsibility, an outline of investment policies, reports on investment objectives, allocation, performance, assets, and analytics, a schedule of investment returns, and a summary schedule of investment fees. The Actuarial Section contains the Actuarial Certification Letter, an introduction, a summary of assumptions and methods, and other actuarial information. The statistical section consists of a description of the statistical schedules, member statistics, and the change in net positions, revenues by source, schedule of return on investments, schedule of employer contributions, and schedule of expenses by type.

**Metropolitan Water Reclamation District Retiree Health Care Trust**  
**A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**FINANCIAL SECTION**

**Management's Discussion and Analysis (Unaudited)**

**Year Ended December 31, 2018 (With comparative amounts for prior year)**

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**CONTACT INFORMATION**

This Report is intended to provide a general overview of the Metropolitan Water Reclamation District Retiree Health Care Trust. Questions or requests for additional information should be addressed to the Trust at 100 East Erie Street, Chicago, Illinois 60611, Attn: Treasurer, or call (312) 751-5150.

**Metropolitan Water Reclamation District Retiree Health Care Trust  
A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**FINANCIAL SECTION  
Financial Statements**

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**Statements of Fiduciary Net Position  
December 31, 2018  
(With comparative amounts for prior year)**

	<u>2018</u>	<u>2017</u>
Assets		
Investments at Fair Value		
Fixed Income Mutual Funds	\$ 69,189,037	\$ 62,804,603
Equity Mutual Funds	114,647,697	97,893,327
Balanced Mutual Funds	—	17,449,113
Money Market Funds	4,399,543	16,993,800
Total Investments	<u>188,236,277</u>	<u>195,140,843</u>
Accrued Interest Receivable	94,728	72,707
Total Assets	<u>188,331,005</u>	<u>195,213,550</u>
Liabilities		
Accounts Payable	13,750	13,750
Total Liabilities	<u>13,750</u>	<u>13,750</u>
Net Position Restricted for OPEB	<u>\$ 188,317,255</u>	<u>\$ 195,199,800</u>

See accompanying notes to the Financial Statements

**Metropolitan Water Reclamation District Retiree Health Care Trust  
A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**FINANCIAL SECTION  
Financial Statements**

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**Statements of Changes in Fiduciary Net Position  
Year Ended December 31, 2018  
(With comparative amounts for prior year)**

	<u>2018</u>	<u>2017</u>
Additions:		
Contributions by Employer	\$ 17,570,679	\$ 18,430,657
Total Contributions	<u>17,570,679</u>	<u>18,430,657</u>
Net Appreciation (Depreciation) in Fair Value of Investments	(16,588,686)	21,208,737
Interest and Dividends	4,803,341	4,225,263
Total Investment Return (Loss)	<u>(11,785,345)</u>	<u>25,434,000</u>
Less Investment Expenses	(55,000)	(41,750)
Net Investment Income (Loss)	<u>(11,840,345)</u>	<u>25,392,250</u>
Total Additions	<u>5,730,334</u>	<u>43,822,907</u>
Deductions:		
Retiree Health Care Benefits	12,570,679	13,430,657
Administrative Expenses	42,200	36,900
Total Deductions	<u>12,612,879</u>	<u>13,467,557</u>
Net Increase (Decrease)	(6,882,545)	30,355,350
Net Position Restricted for OPEB		
January 1	<u>195,199,800</u>	<u>164,844,450</u>
December 31	<u>\$ 188,317,255</u>	<u>\$ 195,199,800</u>

See accompanying notes to the Financial Statements

**Metropolitan Water Reclamation District Retiree Health Care Trust  
A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**FINANCIAL SECTION  
Year Ended December 31, 2018**

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**1. Summary of Significant Accounting Policies**

a. Reporting Entity

Pursuant to 70 ILCS 2605/9.6d, the Board of Commissioners (the Board) of the Metropolitan Water Reclamation District of Greater Chicago (District) adopted the Plan and Trust effective December 6, 2007, to recognize the contribution made to the District by its Employees. Its purpose is to reward them by providing benefits for those employees who shall qualify hereunder and their eligible spouses and dependents.

The District, through its nine-member Board of Commissioners, serves as Trustee and Fiduciary for the Trust. The Board members are elected at large for six-year terms. The terms are staggered so that three commissioners are elected every two years. The Board authorizes all policies which govern funding and plan benefits.

The intention of the District is that the Plan 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 Internal Revenue Service.

The Metropolitan Water Reclamation District Retiree Health Care Trust (Trust) is a component unit of the District and, as such, is included in the District's financial statements. As defined by accounting principles generally accepted in the United States of America established by the Governmental Accounting Standards Board (GASB), the financial reporting entity consists of a primary government, as well as its component units, which are legally separate organizations for which the elected officials of the primary government are financially accountable, or for which the nature and significance to the primary government are such that exclusion would cause the reporting entity's financial statements to be misleading or otherwise incomplete. Based on the required criteria, the Trust has no component units.

b. Basis of Accounting

The Trust's financial statements are prepared using the accrual basis of accounting. Employer contributions to the Trust are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

c. Investments

The Trust is authorized under State Statute 70 ILCS 2605/9.6d. In accordance with the Statute, the Trust funds shall be managed by the District Treasurer in any manner deemed

**Metropolitan Water Reclamation District Retiree Health Care Trust  
A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**FINANCIAL SECTION  
Year Ended December 31, 2018**

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appropriate subject only to the prudent person standard. The Trust initially adopted its investment policy on November 19, 2009, which was most recently revised on November 15, 2018.

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability 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 changes in plan net position.

The Trust's assets are invested in fixed income and equity mutual funds traded on national securities exchanges. 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. The Trust's assets are also invested in money market funds with maturities of less than one year, reported at fair value.

d. Management's Use of Estimates

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amount of assets, liabilities, additions and deductions. Actual results could differ from those estimates. The District uses an actuary to determine the actuarial accrued liability for post-retirement benefits and to determine the actuarially required contribution and annual OPEB expense.

e. Prior Year Comparative Information

The financial statements include certain prior year summarized comparative information, but not at the level of detail required for 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 Trust's financial statements as of and for the year ended December 31, 2017, from which the summarized comparative information was derived.

**2. Plan Description**

The Metropolitan Water Reclamation District's Retiree Health Care 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 certain eligibility requirements to continue medical and prescription drug coverage as a participant in the District's plan.

The District, through its Board of Commissioners, serves as Trustee and Fiduciary for the Trust. The Trustee takes, holds, invests, administers, and distributes contributions and assets paid or

**Metropolitan Water Reclamation District Retiree Health Care Trust**  
**A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**FINANCIAL SECTION**  
**Year Ended December 31, 2018**

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delivered to the Trust. All rights, title and interest in and to the assets of the Trust Fund are at all times vested exclusively in the Plan. All contributions received together with the income from the contributions are held, managed, and administered by the Trustee pursuant to the terms of the Plan without distinction between principal and income and without liability for the payment of interest.

The BOC appointed an Executive Committee, comprised of the Chairman of Finance, the Treasurer, and the Director of Finance, to be responsible for certain activities with regard to the Trust, subject to the approval of the BOC. These activities include but are not limited to: recommendation of an investment advisor; acceptance or rejection of investment recommendations from the investment advisor; and certain financial reporting responsibilities.

a. Membership

Membership of the Trust consisted of the following at December 31, 2017, the date of the most recent actuarial valuation:

Inactive Plan Members Currently Receiving Benefits	1,505
Beneficiaries of Deceased Plan Members Currently Receiving Benefits	438
Inactive Plan Members Entitled to But Not Receiving Benefits	41
Active Plan Members	<u>1,835</u>
Total Membership	<u><u>3,819</u></u>

b. Benefits Provided

Retiree health care benefits are defined as post-retirement medical and prescription drug coverage only; no dental, life, or disability benefits are provided by the Plan. Such benefits are provided by the District through either a self-insured or fully-insured healthcare plan for non-Medicare eligible retirees, while Medicare eligible retirees are provided a fully-insured Medicare Advantage Plan. The benefit levels are the same as those provided to 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 health care 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. The benefit terms may only be amended by the authority of the District's Board of Commissioners. All classes of employees receive the same Plan benefits.

c. Eligibility for Insurance Coverage

Retirees and their dependents who meet the age and service requirements are eligible for medical and prescription drug benefits payable for life. Employees must have at least ten years of service with the District, and coverage does not commence until the member begins receiving payments from the District's Retirement Fund. Eligibility is based on the employee's

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Year Ended December 31, 2018**

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hire date as follows: age 50 for those hired before June 13, 1997, and age 55 for those hired between June 13, 1997 and January 1, 2011, and age 63 for those hired after January 1, 2011.

d. Contributions

State Statute 70 ILCS 2605/9.6d is the legislation establishing the Trust and gives the District Board of Commissioners (BOC) discretionary authority to determine contribution amounts to be paid by the District. In accordance with the legislation, the BOC may lawfully agree with the Trustee to a binding level of funding for periods of time not to exceed 5 fiscal years. As of the date of this report, the BOC has not entered into any such agreements. In addition, the Trust documents permit employees of the District to contribute money to provide for such benefits. No contribution is required at this time.

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 District is required to contribute the balance of the current premium and claims costs. Contributions by the District in excess of the employer portion of current premiums and claims costs represent advance funding in accordance with the funding policy. The District has contributed \$132,400,000 to the Trust as the advance funding amount to date.

The retiree contribution rates are set based on prior year claims incurred and become effective July 1st each year. The retiree contribution rate is based on the contribution rate policy established by the Board of Commissioners. This policy requires 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 2019 will be 45.0%. In future years, contributions are assumed to increase at the same rate as premiums.

e. Retiree Health Care Benefit Costs

Benefit costs are post-retirement medical and prescription drug coverage benefit premiums and claims paid by the District.

f. Administrative Costs

Administrative costs of the Trust are financed primarily through investment earnings; however, the Trust is not prohibited from expending contributions for administrative purposes.



**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**FINANCIAL SECTION  
Year Ended December 31, 2018**

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**3. Investments**

a. Authorization

As authorized under State Statute 70 ILCS 2605/9.6d, the Trust's investment function is managed by the District's Treasurer, with the District, through its Board of Commissioners, serving as Trustee and Fiduciary for the Trust. Per the Trust agreement, the Trustee has total discretion and authority with regard to the investment of the assets of the Trust to which it holds title. The Trustee is authorized and empowered to delegate to the District Treasurer and other individuals as deemed appropriate, the following powers, rights and duties, each of which shall be subject to the approval of the Trustee:

- (1) To purchase and cause stocks, bonds, exchange-traded funds, mutual funds, or other investments to be registered in its name as Trustee or in the name of a nominee, or to take and keep the same unregistered;
- (2) To employ such agents, advisors and legal counsel as it deems advisable or proper in connection with its duties and to pay such agents, advisors and legal counsel a reasonable fee. The Trustee shall not be liable for the acts of such agents, advisors and legal counsel for the acts done in good faith and in reliance upon the advice of such agents, advisors and legal counsel, provided it has used reasonable care in selecting such agents, advisors and legal counsel;
- (3) To exercise where applicable and appropriate any rights of ownership in any contracts of insurance in which any part of the Trust may be invested and to pay the premiums thereon; and
- (4) To buy, sell, convey or transfer, invest and reinvest any part of each and every kind of investment listed above in Section (1).

b. Investment Policy

The Trust's investment policy was initially adopted on November 19, 2009, designed to control risk and provide guidance in establishing a prudent investment strategy that serves the long-term needs of the Trust and its beneficiaries. The investment policy was most recently revised on November 15, 2018 to allow for asset allocation targets that are structured to provide competitive performance while minimizing the potential for losses. The current policy allows for a range of exposure to four aggregate asset classes, including domestic equities, international equities, fixed income securities, along with money market funds and cash.

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**FINANCIAL SECTION  
Year Ended December 31, 2018**

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c. Concentration of Credit Risk

There are no significant investments in any one issuer that represent 5% or more of the Trust's investments.

d. Annual Money-Weighted Rate of Return

For the year ended December 31, 2018 the Trust's annual money-weighted rate of return on investments, net of investment expense, was -5.91%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts invested.

e. Interest Rate Risk

The 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.

At December 31, 2018, the Trust's investments in fixed income mutual funds stated at fair value with weighted average maturities are as follows:

<b>Fund Name</b>	<b>Fair Value</b>	<b>Percentage</b>	<b>Weighted Average Maturities (Years)</b>
Dodge & Cox Income Fund	\$ 29,424,512	42.5%	8.3
Payden Core Bond Fund	9,837,017	14.2%	9.0
Western Asset Core Plus Bond Fund	29,927,508	43.3%	10.8
		100.0%	

The Trust's net fair value of money market investment funds was \$4,399,543 as of December 31, 2018 having a weighted-average maturity of less than one year.

f. Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. The Trust's Investment Policy requires a minimum of 75% 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

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**FINANCIAL SECTION**  
**Year Ended December 31, 2018**

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.

As of December 31, 2018, the Trust’s investments in fixed income mutual funds were not individually rated by a nationally recognized statistical rating organization.

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

<b>Credit Rating (1)</b>	<b>Fund Name</b>		
	Dodge & Cox Income Fund	Payden Core Bond Fund	Western Asset Core Plus Bond 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	—%	4.0%	2.3%
Below B	—%	—%	2.7%
Not Rated	—%	6.0%	—%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

(1) Provided by Morningstar, Inc. Report details 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 investments in money market funds were not individually rated by a nationally recognized statistical rating organization as of December 31, 2018.

**g. Foreign Currency Risk**

The Trust’s Investment Policy requires that it disclose any investment denominated in a foreign currency. Exposure to foreign currency risk is limited to the international investment allocation target maximum of 25% of the fair value of the investment portfolio. As of December 31, 2018, the Trust had no investments denominated in foreign currency.

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Year Ended December 31, 2018**

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

<u>Fund Name</u>	<u>Fair Value</u>
Fidelity International Index Fund	\$ 27,245,486
Vanguard Global Minimum Volatility	8,854,051
	<u>\$ 36,099,537</u>

h. Custodial Credit Risk

The 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. Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Trust will not be able to recover the value of its investments or collateral securities which are in the possession of the outside party. 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.

i. Fair Value Measurement

GASB Statement No. 72, *Fair Value Measurement and Application*, 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 Trust categorizes 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 investments reflect quoted prices in active markets for identical assets.
- Level 2 investments reflect significant other observable inputs which include quoted prices for similar assets or liabilities in active markets; quoted prices for identical assets or liabilities in markets that are not active; or using other inputs such as interest rates and yield curves at commonly quoted intervals, implied volatilities and credit spreads or market-corroborated inputs.
- Level 3 investments are valued at significant unobservable inputs.

**Metropolitan Water Reclamation District Retiree Health Care Trust**  
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**FINANCIAL SECTION**  
**Year Ended December 31, 2018**

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

Fair Value of Investments	December 31, 2018	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Domestic Equity Funds	\$ 78,548,160	\$ 78,548,160	\$ —	\$ —
International Equity Funds	36,099,537	36,099,537	—	—
Domestic Fixed Income Funds	69,189,037	69,189,037	—	—
Money Market Funds	4,399,543	4,399,543	—	—
Total Fair Value of Investments	<u>\$ 188,236,277</u>	<u>\$ 188,236,277</u>	<u>\$ —</u>	<u>\$ —</u>

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

**4. OPEB Liability of the District**

a. Net OPEB Liability

The information included in the report is based on the actuarial valuation performed as of December 31, 2017. Actuarial valuations of the total OPEB liability are required to be completed every two years for the Trust. The total OPEB liability is required to be based on update calculations to roll-forward amounts from the most recent actuarial valuation for fiscal year-ends when an actuarial valuation is not performed. The next valuation date is December 31, 2019.

The components of the net OPEB Liability of the District as of December 31, 2018, were as follows:

Total OPEB Liability	\$ 321,502,904
Plan Fiduciary Net Position	(188,317,255)
District's Net OPEB Liability	<u>\$ 133,185,649</u>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	<u>58.57%</u>

See the Schedule of Changes in the District's Net OPEB Liability and Related Ratios on page 23 of the required supplementary information for additional information related to the Plan.

**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**FINANCIAL SECTION  
Year Ended December 31, 2018**

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b. Actuarial Assumptions

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

Actuarial Valuation Date	December 31, 2017
Cost Method	Entry Age Normal
Inflation	3.00%
Salary Increases	Varies by Service
Investment Rate of Return (net of investment expense, including inflation)	6.50%
Healthcare Cost Trend Rates	8.00% for fiscal year 2018, decreasing 0.75% each year to fiscal year 2022, then decreasing 0.5% to the ultimate rate of 4.5% in fiscal year 2023
Asset Valuation Method	Fair Value

For all employees, mortality rates were based on the RP-2000 combined health mortality tables with fully generational mortality improvements using scale AA.

The information included in the report is based on the actuarial valuation performed as of December 31, 2017. Actuarial valuations of the total OPEB liability are required to be completed every two years for the Trust. The total OPEB liability is required to be based on update calculations to roll-forward amounts from the most recent actuarial valuation for fiscal year-ends when an actuarial valuation is not performed. The next valuation date is December 31, 2019.

c. Long-Term Expected Rate of Return

The long-term expected rate of return on OPEB Plan investments was determined using a building-block method in which best-estimate ranges 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, 2018 are summarized in the following table:

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Year Ended December 31, 2018**

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<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-Term Expected Real Rate of Return</b>
Broad Fixed Income	20.0%	3.1%
Core Plus Fixed Income	15.0%	4.0%
<b>Total Fixed Income</b>	<b>35.0%</b>	
Large-Cap Core	10.0%	7.4%
Large-Cap Value	7.5%	7.5%
Large-Cap Growth	7.5%	7.4%
Mid-Cap Core	10.0%	7.8%
Small-Cap Core	10.0%	8.1%
<b>Total U.S. Equity</b>	<b>45.0%</b>	
Global Low Volatility	5.0%	6.9%
Non-U.S. Large-Cap Core	15.0%	7.2%
<b>Total Non-U.S. Equity</b>	<b>20.0%</b>	
<b>Total-All Asset Classes</b>	<b>100.0%</b>	

The Trust's long-term expected rate of return calculated using the method described above exceeds 6.5% (assuming 3.0% inflation).

d. Discount Rate

The expected rate of return used to measure the total OPEB liability was 6.5%. The projection of cash flows used to determine the discount rate assumed that current District contributions will be made at the current contribution rate. The District 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 District has shown they are following the funding policy completely and will continue to do so. Therefore, the long-term expected rate of return on investments was used to discount projected benefit payments for all projected benefit payments, and the single equivalent was 6.5%.

e. Rate Sensitivity

The following is a sensitivity analysis of the net OPEB liability to changes in the discount rate and to the healthcare cost trend rate.

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**FINANCIAL SECTION  
Year Ended December 31, 2018**

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The table below presents the Net OPEB Liability of the District calculated using the discount rate of 6.5% as well as what the District's Net OPEB Liability would be if it were calculated using a discount rate that is one percentage point lower (5.5%) or one percentage point higher (7.5%) than the current discount rate:

	<b>1% Decrease (5.5%)</b>	<b>Current Discount Rate (6.5%)</b>	<b>1% Increase (7.5%)</b>
Net OPEB Liability	\$ 176,463,310	\$ 133,185,649	\$ 98,322,971

The table below presents the Net OPEB Liability of the District calculated using the healthcare cost trend rate of 4.0% to 8.5% as well as what the District's Net OPEB Liability would be if it were calculated using a healthcare cost trend rate that is one percentage point lower (3.0% to 7.5%) or one percentage point higher (5.0% to 9.5%) than the current rate:

	<b>1% Decrease (3.0% to 7.5%)</b>	<b>Healthcare Cost Trend Rates (4.0% to 8.5%)</b>	<b>1% Increase (5.0% to 9.5%)</b>
Net OPEB Liability	\$ 91,148,614	\$ 133,185,649	\$ 185,690,196



**REQUIRED SUPPLEMENTARY INFORMATION**

**Metropolitan Water Reclamation District Retiree Health Care Trust**  
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**REQUIRED SUPPLEMENTARY INFORMATION**

**SCHEDULE OF CHANGES IN THE DISTRICT'S NET OPEB LIABILITY AND RELATED RATIOS**  
**Last Two Fiscal Years**

	<u>2018</u>	<u>2017</u>
Total OPEB Liability		
Service Cost	\$ 5,314,432	\$ 5,097,776
Interest	20,011,894	19,260,038
Changes of Assumptions*	—	—
Benefit Payments	<u>(12,570,679)</u>	<u>(13,430,657)</u>
Net Change in Total OPEB Liability	12,755,647	10,927,157
Total OPEB Liability		
Beginning of Year	308,747,257	297,820,100
End of Year	<u>\$ 321,502,904</u>	<u>\$ 308,747,257</u>
Change in Fiduciary Net Position		
Employer Trust Contribution	\$ 5,000,000	\$ 5,000,000
Pay-As-You-Go Contributions	12,570,679	13,430,657
Net Investment Income (Loss)	(11,840,345)	25,392,250
Benefit Payments	(12,570,679)	(13,430,657)
Administrative Expense	<u>(42,200)</u>	<u>(36,900)</u>
Net Change in Fiduciary Net Position	(6,882,545)	30,355,350
Net Position Restricted for OPEB		
Beginning of Year	195,199,800	164,844,450
End of Year	<u>\$ 188,317,255</u>	<u>\$ 195,199,800</u>
District's Net OPEB Liability	<u>\$ 133,185,649</u>	<u>\$ 113,547,457</u>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	<u>58.57%</u>	<u>63.22%</u>
Covered Employee Payroll	<u>\$ 192,661,666</u>	<u>\$ 184,807,353</u>
District's Net OPEB Liability as a Percentage of Covered Employee Payroll	<u>69.13%</u>	<u>61.44%</u>

\*No value is shown in the changes of assumptions because both the beginning and ending total OPEB liability are based upon the actuarial assumptions adopted as of December 31, 2017, the most recent valuation. Those assumptions are listed in Note 4 of these financial statements.

This schedule will show information for ten years as the additional years' information becomes available.

**Metropolitan Water Reclamation District Retiree Health Care Trust  
A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**REQUIRED SUPPLEMENTARY INFORMATION**

**SCHEDULE OF DISTRICT CONTRIBUTIONS AND RELATED NOTES**

**Last Ten Fiscal Years**

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Actuarial Determined Contribution	\$ 11,506,823	\$ 11,506,823	\$ 12,471,893	\$ 12,471,893	\$ 13,211,937	\$ 13,211,937	\$ 27,263,684	\$ 27,263,684	\$ 39,847,021	\$ 39,847,021
Contributions in Relation to the Actuarial Determined Contributions*	17,570,679	18,430,657	19,916,860	18,316,713	33,716,523	33,834,831	35,426,215	18,020,374	15,516,965	14,591,543
Contribution Deficiency (Excess)	\$ (6,063,856)	\$ (6,923,834)	\$ (7,444,967)	\$ (5,844,820)	\$ (20,504,586)	\$ (20,622,894)	\$ (8,162,531)	\$ 9,243,310	\$ 24,330,056	\$ 25,255,478
Covered Employee Payroll	\$ 192,661,666	\$ 184,807,353	\$ 183,120,020	\$ 176,756,776	\$ 169,909,275	\$ 164,005,092	\$ 158,995,000	\$ 162,853,163	\$ 172,273,000	\$ 170,392,445
Contributions as a Percentage of Covered Employee Payroll	9.12%	9.97%	10.88%	10.36%	19.84%	20.63%	22.28%	11.07%	9.01%	8.56%

\*Includes pay-as-you-go benefit amounts plus the cash contribution to the Trust

**NOTES TO SCHEDULE:**

Valuation date: Actuarial determined contribution rates shown above are calculated as of December 31 for the fiscal year in which contributions are reported. Covered Employee Payroll for fiscal year 2018 is projected based on Covered Employee Payroll for fiscal year 2017.

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry Age Normal
Amortization method	Level Percentage of Payroll
Amortization period	30 Years
Asset valuation method	Fair Value
Discount Rate	6.5%
Inflation Rate	3%
Health Care Cost Trend Rate	8.00% for fiscal year 2018, decreasing 0.75% each year to fiscal year 2022, then decreasing 0.5% to the ultimate rate of 4.5% in fiscal year 2023.
Annual Payroll Growth Rate	3.6%
Disability	None assumed
Age of Spouse	Male spouses are assumed to be 3 years older than female spouses.
Coverage at	90% of future eligible service retirees are assumed to elect coverage at retirement. 76% of active employees are assumed to have single plus spouse coverage at retirement.
Dependent children	No children are assumed to be covered at retirement.
Medicare eligibility	100% of members are assumed to enroll in Medicare if eligible and hired on or after April 1, 1986. 93% of members are assumed to enroll in Medicare if eligible and hired prior to April 1, 1986.

**Metropolitan Water Reclamation District Retiree Health Care Trust  
A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**REQUIRED SUPPLEMENTARY INFORMATION**

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**SCHEDULE OF INVESTMENT RETURNS  
Last Two Fiscal Years**

	<u>2018</u>	<u>2017</u>
Covered Employee Payroll	<u>\$ 192,661,666</u>	<u>\$ 184,807,353</u>
Annual Money-Weighted Rate of Return, Net of Investment Expense	<u>-5.91%</u>	<u>15.06%</u>

This schedule will show information for ten years as the additional years' information becomes available.

**SUPPLEMENTARY INFORMATION**

**Metropolitan Water Reclamation District Retiree Health Care Trust  
A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**SUPPLEMENTARY INFORMATION**

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**SUMMARY SCHEDULE OF ADMINISTRATIVE EXPENSES**

	<b>Year Ended December 31, 2018</b>	<b>Year Ended December 31, 2017</b>
Professional services - audit fees	\$ 35,500	\$ 30,600
Fiduciary insurance	6,700	6,300
Total Administrative Expenses	<u>\$ 42,200</u>	<u>\$ 36,900</u>

**SUMMARY SCHEDULE OF INVESTMENT FEES**

	<b>Year Ended December 31, 2018</b>	<b>Year Ended December 31, 2017</b>
Investment consulting fees	<u>\$ 55,000</u>	<u>\$ 41,750</u>

## **INVESTMENT SECTION**

**Metropolitan Water Reclamation District Retiree Health Care Trust  
A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**INVESTMENT SECTION**

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**INVESTMENT CONSULTANT REPORT**



180 North LaSalle Street, Suite 3500  
Chicago, IL 60601

March 07, 2019

Board of Trustees,  
Metropolitan Water Reclamation District Retiree Health Care Trust  
100 East Erie Street  
Chicago, IL 60611-2829

To the Board of Trustees:

Marquette Associates (“Marquette”) is the independent investment consultant for the Metropolitan Water Reclamation District Retiree Health Care Trust (“Trust”). Marquette is responsible for the implementation of the Trust’s allocation, trustee education, the selection and monitoring of investment managers as well as investment performance analysis. Marquette calculates and reports performance returns using a time-weighted rate of return methodology.

Investment Policy

The Trust’s investment policy was initially adopted on November 19, 2009 and most recently revised on November 15, 2018 to allow for new asset allocation targets structured to provide competitive performance while minimizing the potential for losses. The revised policy allows for a range of exposures to four aggregated asset classes as follows:

<b>Asset Class</b>	<b>Benchmark Fund Asset Mix</b>		
	<b>Minimum</b>	<b>Normal</b>	<b>Maximum</b>
<b>Domestic Equities</b>	40%	45%	50%
<b>International Equities</b>	15%	20%	25%
<b>Fixed Income Securities (Bonds)</b>	30%	35%	40%
<b>Cash/Cash Equivalents (Money Market)</b>	0%	<1%	100%



**Metropolitan Water Reclamation District Retiree Health Care Trust**  
**A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**INVESTMENT SECTION**

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Investment Portfolio Activities

Investments are made in accordance with the guidelines stated within the Trust's investment policy. In 2018, \$5.0 million was contributed to the Trust along with interest and dividends of \$4.8 million, offset by a \$16.7 million loss in capital depreciation generated by the underlying funds. Total District contributions to the Trust have aggregated to \$132.4 million as of year-end 2018. Trust holdings in investments at year-end 2018 were valued at \$188.2 million. Investments of the Trust are stated at fair value at the last reported sales price on the last business day for the fiscal year of the Trust.

The assumed actuarial rate of return for the Trust is 6.5%. In 2018, the Trust returned -5.9% net of fees. Over the same period, the policy index returned -3.5%. At the end of 2018, the Trust's Policy index was comprised of approximate weightings in the following indices: Bloomberg Barclays U.S. Aggregate Index (45.0%), Bloomberg Barclays U.S. Treasury Inflation Notes 1-10 Year Index (10.0%), Russell 3000 Index (30.0%), and MSCI EAFE Index (15.0%).

As we entered a New Year, the yield curve inverted on short end. After nine post-recession hikes, the market expects the Fed to be dovish and Fed funds futures currently project zero hikes for 2019. Rising global tariffs and an escalating global slowdown may have been priced into the widened spreads.

The Trust ended 2018 with a 36.8% allocation to fixed income; net of fees, the fixed income composite returned -1.0% versus the benchmark (Bloomberg Barclays U.S. Aggregate Index) which returned 0.0% during the year.

In the domestic equities market, 2018 commenced with high investor expectations fueled by seemingly pro-growth fiscal policies such as tax cuts and deregulation. Ultimately, the euphoria lasted the first 26 days of the year before fears of increasing inflation, higher interest rates, and accelerating wage growth took root. The S&P 500 fell 10% over the span of just nine trading days in early February and had its first correction in over two years.

Despite a tough February, sentiment turned positive in March with the S&P 500 continuing to break records and the small cap Russell 2000 index hitting an all-time high. There were other bright spots during the year when in August, Apple and Amazon became the first trillion-dollar companies, and the S&P 500 peaked in September.

For most of 2018, growth sectors such as Technology, Healthcare, and Consumer Discretionary outpaced value-oriented sectors such as Financials and Energy. The so-called "FAANG" stocks - Facebook, Apple, Amazon, Netflix and Alphabet's Google - were leading the market as growth and momentum factors were rewarded. However, the broader market took a down turn in October. The S&P 500 declined 13.5% in the fourth quarter and 4.4% for the year, making 2018 the worst year for the index since 2008.

Over the course of 2018, market drawdowns were significant with a max intra-year drawdown of 19.0%. In 2018, we experienced a correction that was overdone, based on the strong underlying fundamentals in the U.S. economy. The OPEB Plan ended the year with a 41.7% allocation to U.S equities; net of fees, the U.S equities composite returned -8.0% versus the benchmark (Russell 3000 Index) which returned -5.2%.

**Metropolitan Water Reclamation District Retiree Health Care Trust  
A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**INVESTMENT SECTION**

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Non-US Indices also finished the year in negative territory. Broad benchmarks returned double digit negative returns including the MSCI EAFE Index (-13.8%), MSCI EAFE Small-Cap Index (-17.9%), and the MSCI Emerging Markets Index (-14.6%). The geopolitical environment in 2018 led to increased levels of uncertainty contributing to soured sentiment and slower momentum. Emerging market returns suffered from currency losses and price declines which led to a 15.0% decline in the index. Although earnings momentum remains positive, it continued to sputter in 2018 leading to slower earnings growth expectations for 2019. The Trust ended 2018 with a 19.2% allocation to Non-U.S. equities; net of fees, the Non-U.S. equity composite had a -13.0% return versus the benchmark (MSCI EAFE Index) which returned -13.8%.

The Trust's investment in the PIMCO All Asset Fund under the GTAA composite was divested on November 23, 2018, leaving the Trust with no allocation to the GTAA asset class. Through October 31, 2018, net of fees, the GTAA Composite had returned -4.8% and underperformed the designated index (Bloomberg Barclays U.S. Treasury Inflation Notes 1-10 Year Index) which returned -0.3%.

Despite the highly volatile market in 2018, longer term numbers in the portfolio remain competitive. The Trust also continues to be diversified, highly liquid and transparent.

Sincerely,



Kweku Obed, CFA, CAIA

**Metropolitan Water Reclamation District Retiree Health Care Trust  
A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**INVESTMENT SECTION**

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**TABLE 1  
INVESTMENT PORTFOLIO ACTIVITY**

<b>Beginning Balance January 1, 2018</b>	<b>\$195.2 million</b>
<b>Contributions</b>	<b>\$5.0 million</b>
<b>Interest &amp; Dividends</b>	<b>\$4.8 million</b>
<b>Net Capital Depreciation</b>	<b><u>-\$16.7 million</u></b>
<b>Ending Balance December 31, 2018</b>	<b><u><u>\$188.3 million</u></u></b>
<b>Time Weighted Return</b>	<b><u><u>-5.87%</u></u></b>

**Metropolitan Water Reclamation District Retiree Health Care Trust**  
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**INVESTMENT SECTION**

**TABLE 2**  
**TIME WEIGHTED RETURNS OF INVESTMENTS**  
**Annualized Performance (Net of Fees as of December 31, 2018)**

	Asset Class	Ticker	1 Year	3 Years	5 Years	Inception Return	Since
<b>Total Fund Composite</b>			<b>-5.87%</b>	<b>5.01%</b>	<b>3.74%</b>	<b>6.61%</b>	<b>2010-April</b>
<b>Policy Index*</b>			<b>-3.49%</b>	<b>4.39%</b>	<b>3.98%</b>	<b>6.71%</b>	<b>2010-April</b>
<b>Total Fixed Income Composite</b>			<b>-0.99%</b>	<b>3.17%</b>	<b>2.98%</b>	<b>3.63%</b>	<b>2010-April</b>
<b>BBgBarc US Aggregate TR</b>			<b>0.01%</b>	<b>2.06%</b>	<b>2.52%</b>	<b>3.09%</b>	<b>2010-April</b>
Payden Core Bond Fund	Broad Fixed Income	PYCBX	-1.26%	2.51%	2.89%	3.53%	2010-April
BBgBarc US Int TR			0.92%	1.72%	2.09%	2.64%	2010-April
Dodge & Cox Income Fund	Broad Fixed Income	DODIX	-0.31%	3.19%	2.87%	3.70%	2010-April
BBgBarc US Int TR			0.92%	1.72%	2.09%	2.64%	2010-April
Western Asset Core Plus Institutional	Core Plus Fixed Income	WACPX	-1.59%	3.34%	N/A	3.13%	2015-July
BBgBarc US Aggregate TR			0.01%	2.06%	2.52%	1.95%	2015-July
<b>Total Equity Composite</b>			<b>-8.82%</b>	<b>6.63%</b>	<b>4.81%</b>	<b>8.67%</b>	<b>2010-April</b>
<b>Total Equity Benchmark</b>			<b>-8.06%</b>	<b>7.00%</b>	<b>5.49%</b>	<b>8.81%</b>	<b>2010-April</b>
<b>U.S. Equity Composite</b>			<b>-7.96%</b>	<b>8.11%</b>	<b>7.10%</b>	<b>10.51%</b>	<b>2010-April</b>
<b>Russell 3000</b>			<b>-5.24%</b>	<b>8.97%</b>	<b>7.91%</b>	<b>11.23%</b>	<b>2010-April</b>
Fidelity 500 Index Institutional Class	Large Cap Core	FXAIX	-4.10%	9.36%	N/A	8.38%	2014-Aug
S&P 500			-4.38%	9.26%	8.49%	13.12%	2014-Aug
LSV Value Equity Institutional	Large Cap Value	LSVEX	-14.57	5.93%	N/A	4.55%	2014-Oct
Russell 1000 Value			-8.27%	6.95%	5.95%	5.10%	2014-Oct
Fidelity Contrafund	Large Cap Growth	FCNTX	-2.17%	10.18%	9.30%	12.22%	2010-April
Russell 1000 Growth			-1.51%	11.15%	10.40%	12.89%	2010-April
Fidelity Mid Cap Index Institutional	Mid Cap Core	FSMDX	-9.04%	7.05%	N/A	4.57%	2015-July
Russell MidCap			-9.06%	7.04%	6.26%	4.56%	2015-July
Vanguard Small Cap Index Institutional	Small Cap Core	VSCIX	-9.32%	7.64%	5.26%	10.48%	2010-April
CRSP US Small Cap TR USD			-9.33%	7.62%	5.24%	10.70%	2010-April
<b>Non-U.S. Equity Composite</b>			<b>-12.96%</b>	<b>2.52%</b>	<b>-0.30%</b>	<b>4.07%</b>	<b>2010-April</b>
<b>MSCI EAFE</b>			<b>-13.79%</b>	<b>2.87%</b>	<b>0.53%</b>	<b>3.82%</b>	<b>2010-April</b>
Fidelity International Index Institutional	Non-U.S. Large-Cap	FSPSX	-13.52	N/A	N/A	-7.13%	2017-Sept
MSCI ACWI ex USA			-14.20	4.48%	0.68%	-6.24%	2017-Sept
Vanguard Global Min Volatility Admr	Global Tactical Balanced	VMNVX	N/A	N/A	N/A	-3.26%	2018-Nov
FTSE Global All Cap			-9.62%	7.00%	4.71%	-5.76%	2018-Nov
<b>Cash Composite</b>			<b>1.69%</b>	<b>0.78%</b>	<b>N/A</b>	<b>0.50%</b>	<b>2014-May</b>
<b>91 Day T-Bills</b>			<b>1.94%</b>	<b>1.05%</b>	<b>0.64%</b>	<b>0.68%</b>	<b>2014-May</b>
FIMM Government Class I	Cash & Equivalent	FIGXX	1.64%	N/A	N/A	1.26%	2017-Mar
91 Day T-Bills			1.94%	1.05%	0.64%	1.51%	2017-Mar
Fidelity Government Money Market	Cash & Equivalent	SPAXX	2.83%	1.13%	N/A	0.73%	2014-May
91 Day T-Bills			1.94%	1.05%	0.64%	0.68%	2014-May

\* The Trust's Policy Index was revised in accordance with the amended investment policy approved in late 2018. The revised Policy Index will be reflected beginning in 2019 due to the revision occurring late in fiscal year 2018.

**Policy Index:** 30.0% Russell 3000, 15.0% MSCI EAFE (Net), 45.0% Barclays US Aggregate, 10% Barcap U.S. TIPS 1-10YR

**Total Equity Benchmark:** 67% Russell 3000, 33% MSCI EAFE

**Metropolitan Water Reclamation District Retiree Health Care Trust**  
**A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**INVESTMENT SECTION**

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**TABLE 3**  
**TIME WEIGHTED RETURNS OF COMPOSITES**  
**Annualized Performance (Net of Fees as of December 31, 2018)**

	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>Inception Return</b>	<b>Since</b>
<b>Total Fund Composite</b>	<b>-5.87%</b>	<b>5.01%</b>	<b>3.74%</b>	<b>6.61%</b>	<b>2010-April</b>
<i>Policy Index*</i>	-3.49%	4.39%	3.98%	6.71%	2010-April
<b>Total Fixed Income Composite</b>	<b>-0.99%</b>	<b>3.17%</b>	<b>2.98%</b>	<b>3.63%</b>	<b>2010-April</b>
<i>Barclay's U.S. Aggregate Bond Index</i>	0.01%	2.06%	2.52%	3.09%	2010-April
<b>Total Equity Composite</b>	<b>-8.82%</b>	<b>6.63%</b>	<b>4.81%</b>	<b>8.67%</b>	<b>2010-April</b>
<i>Total Equity Benchmark</i>	-8.06%	7.00%	5.49%	8.81%	2010-April
<b>U.S. Equity Composite</b>	<b>-7.96%</b>	<b>8.11%</b>	<b>7.10%</b>	<b>10.51%</b>	<b>2010-April</b>
<i>Russell 3000 Index</i>	-5.24%	8.97%	7.91%	11.23%	2010-April
<b>Non-U.S. Equity Composite</b>	<b>-12.96%</b>	<b>2.52%</b>	<b>-0.30%</b>	<b>4.07%</b>	<b>2010-April</b>
<i>MSCI EAFE Index</i>	-13.79%	2.87%	0.53%	3.82%	2010-April
<b>Cash Composite</b>	<b>1.69%</b>	<b>0.78%</b>	<b>N/A</b>	<b>0.50%</b>	<b>2014-May</b>
<i>91 Day T-Bills</i>	1.94%	1.05%	0.64%	0.68%	2014-May

\* The Trust's Policy Index was revised in accordance with the amended investment policy approved in late 2018. The revised Policy Index will be reflected beginning in 2019 due to the revision occurring late in fiscal year 2018.

**Policy Index:** 30% Russell 3000, 15% MSCI EAFE (Net), 45% Barclays US Aggregate, 10% Barcap U.S. TIPS 1-10YR

**Total Equity Benchmark:** 67% Russell 3000, 33% MSCI EAFE

**Metropolitan Water Reclamation District Retiree Health Care Trust  
A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**INVESTMENT SECTION**

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**INVESTMENT AUTHORITY AND RESPONSIBILITY**

As authorized under State Statute 70 ILCS 2605/9.6d, the Trust's investment function is managed by the District's Treasurer, with the District, through its Board of Commissioners, serving as Trustee and Fiduciary for the Trust. Per the Trust agreement, the Trustee has total discretion and authority with regard to the investment of the assets of the Trust to which it holds title. The Trustee is authorized and empowered to delegate to the District Treasurer and other individuals as deemed appropriate, the following powers, rights and duties, each of which shall be subject to the approval of the Trustee:

- (a) To purchase and cause stocks, bonds, exchange-traded funds, mutual funds, or other investments to be registered in its name as Trustee or in the name of a nominee, or to take and keep the same unregistered;
- (b) To employ such agents, advisors and legal counsel as it deems advisable or proper in connection with its duties and to pay such agents, advisors and legal counsel a reasonable fee. The Trustee shall not be liable for the acts of such agents, advisors and legal counsel for the acts done in good faith and in reliance upon the advice of such agents, advisors and legal counsel, provided it has used reasonable care in selecting such agents, advisors and legal counsel;
- (c) To exercise where applicable and appropriate any rights of ownership in any contracts of insurance in which any part of the Trust may be invested and to pay the premiums thereon; and
- (d) To buy, sell, convey or transfer, invest and reinvest any part of each and every kind of investment listed above in Section (a).

**OUTLINE OF INVESTMENT POLICIES**

In accordance with state Statute 70 ILCS 2605/9.6d, "To the extent participants do not direct the investment of their own account, the assets of the OPEB Trusts shall be managed by the Treasurer of the District in any manner, subject only to the prudent investor standard and any requirements of applicable federal law. The limitations of any other statute affecting the investment of District funds shall not apply to the OPEB Trust. The Trustee shall adopt an investment policy consistent with the standards articulated in Section 2.5 of the Public Funds Investment Act." The Investment Policy for the Trust was initially approved by the District's Board of Commissioners on November 19, 2009 and was most recently revised on November 15, 2018.

**INVESTMENT OBJECTIVES**

The Trust, based on its overall purpose of supporting the long-term financial ability to fund retiree healthcare expenditures, is structured to provide competitive performance while minimizing the potential for losses. Accordingly, the Trust will have a balanced overall structure in accordance with the Trust's strategy. The Trust's investment policy allows for asset allocation targets that are structured to provide competitive performance while minimizing the potential for losses. The asset allocation targets for the Trust are as follows:

**Metropolitan Water Reclamation District Retiree Health Care Trust**  
**A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**INVESTMENT SECTION**

<b>Asset Class</b>	<b>Fund Asset Mix</b>		
	<b>Minimum</b>	<b>Normal</b>	<b>Maximum</b>
<b>Domestic Equities</b>	40%	45%	50%
<b>International Equities</b>	15%	20%	25%
<b>Fixed Income Securities (Bonds)</b>	30%	35%	40%
<b>Cash and Money Market Funds</b>	0%	<1%	100%

The initial investments for the Trust were held in cash and cash equivalents until the Investment Policy was approved and the initial asset allocation was completed in 2010.

A blended benchmark has been designated for evaluation of the performance of the Trust’s investment account. Appropriate individual benchmarks are used for evaluation of underlying investments based on their respective investment style categories. For 2018 the blended benchmark for evaluation of the Trust account’s performance is a mix of the Russell 3000 Index (30.0%), MSCI EAFE Index (15%), Barclay’s U.S. Aggregate Bond Index (45.0%), and Barclays U.S. Treasury Inflation Notes: 1-10 Year Index (10%). The Trust’s blended benchmark was revised in accordance with the amended investment policy on November 15, 2018, which will be in place beginning in 2019.

**INVESTMENT ALLOCATION**

Investment by the Trust is undertaken through investment custodial accounts. Through December 31, 2018, the Trust’s cumulative contributions of \$132.4 million along with accumulated distributions have been invested in accordance with the Trust’s strategy. All investments are in mutual funds and money market funds.

As of December 31, 2018 and 2017, the Trust’s asset allocations at fair value are as follows:

<b>Asset Class</b>	<b>Actual Asset Allocation 2018</b>	<b>Actual Asset Allocation 2017</b>	<b>Target Allocation 2018</b>
Domestic Equity	42%	35%	45%
International Equity	19%	15%	20%
Domestic Fixed Income	37%	32%	35%
Global Balanced	0%	9%	0%
Money Market Funds & Cash	2%	9%	<1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

The Trust’s Executive Committee delayed the investment of accumulated investment earnings in fiscal year 2017 pending amendments to the Investment Policy in 2018. The amendments have reduced the allocation of fixed income funds to prevent market value losses in a rapidly rising interest rate market. Per the Investment Policy, “The Trust may maintain cash reserves in money market securities. For temporary, defensive purposes, the Trust may invest without limitation in cash reserves. A reserve position provides flexibility in meeting redemptions, expenses, and the timing

**Metropolitan Water Reclamation District Retiree Health Care Trust  
A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**INVESTMENT SECTION**

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of new investments, and serves as a short-term defense during periods of unusual volatility. In situations where the Trustee determines that the divestiture of an asset class is necessary to protect the valuation, safety, or liquidity of the portfolio, amounts may temporarily exceed the maximum asset mix limit.”

**INVESTMENT PERFORMANCE**

The Investment Advisor evaluates mutual fund performance and reports to the Executive Committee individual fund performance as well as overall performance. Investment returns are calculated based on a time-weighted rate of return based upon market values and in compliance with industry-accepted reporting standards. Exchange-traded mutual funds report return net of investment fees.

The investment rate of return on invested assets for the year ending December 31, 2018, was -5.87%, compared to the Trust’s Policy Index return of -3.49%.

The investment rate of return on invested assets for the year ending December 31, 2017, was 15.06%, compared to the Trust’s Policy Index return of 11.53%.



**Metropolitan Water Reclamation District Retiree Health Care Trust**  
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**INVESTMENT SECTION**

**INVESTMENT ASSETS**

	<b>December 31, 2018</b>		<b>December 31, 2017</b>	
	<b>Fair Value</b>	<b>Percent</b>	<b>Fair Value</b>	<b>Percent</b>
<b>Domestic Equity Funds</b>				
Fidelity 500 Index Fund	\$ 17,873,532	9.5%	\$ 17,760,194	9.1%
Fidelity Contrafund	12,727,791	6.8%	17,671,173	9.1%
Fidelity Mid Cap Index Fund	17,779,753	9.4%	7,679,492	3.9%
LSV Value Equity Institutional	12,275,223	6.5%	17,639,388	9.0%
Vanguard Small Cap Index Institutional	17,891,861	9.5%	8,076,284	4.1%
Total Domestic Equity Funds	78,548,160	41.7%	68,826,531	35.2%
<b>International Equity Funds</b>				
Fidelity International Index Fund	27,245,486	14.5%	29,066,796	14.9%
Vanguard Global Minimum Volatility	8,854,051	4.7%	—	—%
Total International Equity Funds	36,099,537	19.2%	29,066,796	14.9%
<b>Domestic Fixed Income Funds</b>				
Dodge & Cox Income Fund	29,424,512	15.6%	27,664,595	14.2%
Payden Core Bond Fund	9,837,017	5.2%	7,608,921	3.9%
Western Asset Core Plus Bond Fund	29,927,508	16.0%	27,531,087	14.1%
Total Domestic Fixed Income Funds	69,189,037	36.8%	62,804,603	32.2%
<b>Global Balanced Funds</b>				
PIMCO All Asset Institutional Class	—	—%	17,449,113	8.9%
Total Global Balanced Funds	—	—%	17,449,113	8.9%
<b>Money Market Funds</b>				
	4,399,543	2.3%	16,993,800	8.8%
<b>Total Investments at Fair Value</b>	<b>\$ 188,236,277</b>	<b>100.0%</b>	<b>\$ 195,140,843</b>	<b>100.0%</b>

**Metropolitan Water Reclamation District Retiree Health Care Trust**  
**A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**INVESTMENT SECTION**

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**INVESTMENT ANALYTICS**

**Schedule of Investment Returns**

	Year Ended 12/31/2018 (1)	Year Ended 12/31/2017 (2)	Three Years Ended 12/31/2018	Five Years Ended 12/31/2018
<b>Trust's Total Portfolio</b>	<b>-5.87%</b>	<b>15.06%</b>	<b>5.01%</b>	<b>3.74%</b>
<i>Trust's Policy Index</i>	-3.49%	11.53%	4.39%	3.98%
<i>*(30% Russell 3000 Index; 15% MSCI EAFE Index; 45% Barclays U.S. Aggregate Bond Index; 10% Barcap U.S. 1-10 YR TIPS Index)</i>				
<b>Trust's Equity Composite</b>	<b>-8.82%</b>	<b>24.22%</b>	<b>6.63%</b>	<b>4.81%</b>
<i>67% Russell 3000; 33% MSCI EAFE</i>	-8.06%	22.40%	7.00%	5.49%
Domestic Equity Composite	-7.96%	22.34%	8.11%	7.10%
<i>Russell 3000 Index</i>	-5.24%	21.13%	8.97%	7.91%
International Equity Composite	-12.96%	28.99%	2.52%	-0.30%
<i>MSCI EAFE Index</i>	-13.79%	25.03%	2.87%	0.53%
<b>Trust's Fixed Income Composite</b>	<b>-0.99%</b>	<b>5.61%</b>	<b>3.17%</b>	<b>2.98%</b>
<i>Barclay's U.S. Aggregate Bond Index</i>	0.01%	3.54%	2.06%	2.52%
<b>Global Balanced Composite</b>	<b>-4.80%</b>	<b>13.99%</b>	—%	—%
<i>Barcap U.S. TIPS: 1-10 Year</i>	-0.25%	1.90%	1.87%	1.20%

\* The Trust's Policy Index was revised in accordance with the amended investment policy approved in late 2018. The new Policy Index will be reflected beginning in 2019 due to the revision occurring late in fiscal year 2018.

(1) The decrease in value of invested assets was -3.54% for the year ending December 31, 2018. The return on invested assets using the Modified Dietz approach was -5.87%. The disparity between the percentage return on investments and the decrease in asset value reflects the impact and timing of the \$5,000,000 advance funding contribution made during the year.

(2) The increase in value of invested assets was 18.43% for the year ending December 31, 2017. The return on invested assets using the Modified Dietz approach was 15.06%. The disparity between the percentage return on investments and the increase in asset value reflects the impact and timing of the \$5,000,000 advance funding contribution made during the year.

**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**INVESTMENT SECTION**

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**History of Investment Yields at Fair Value  
Years Ending December 31**

<b>Year</b>	<b>Invested Assets</b>	<b>Yield at Market</b>	<b>Trust's Policy Index</b>	<b>Notes</b>
2018	\$ 188,236,277	-5.87%	-3.49%	
2017	195,140,843	15.06%	11.53%	
2016	164,772,053	6.90%	5.69%	
2015	149,237,550	-1.39%	0.47%	
2014	146,317,546	4.87%	6.34%	
2013	120,681,050	16.29%	16.47%	
2012	83,849,674	14.63%	11.26%	
2011	53,605,063	0.18%	4.90%	
2010	50,960,000	7.47%	7.88%	(1)
2009	47,902,573	0.29%	N/A	

(1) Reflects the portfolio performance from date of investment (March 29, 2010) through December 31, 2010.

**Summary Schedule of Investment Fees**

<b>Years Ending December 31</b>	<b>2018</b>	<b>2017</b>
Investment Consulting Fees	\$ 55,000	\$ 41,750

**ACTUARIAL SECTION**

**Metropolitan Water Reclamation District Retiree Health Care Trust**  
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**ACTUARIAL SECTION**

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**ACTUARIAL CERTIFICATION**

Metropolitan Water Reclamation District of Chicago ("MWRD") retained Foster & Foster Consulting Actuaries Inc. to provide all necessary schedules required to comply with the Governmental Accounting Standards Board No. 74 ("GASB 74") and No. 75 ("GASB 75") for its Retiree Health Care Benefit Plan ("the Plan"). The GASB 74 and 75 results are applicable for MWRD's fiscal years ending December 31, 2018 and December 31, 2019 respectively. The schedules related to the Governmental Accounting Standards Board No. 74 can be found in the Notes to the Basic Financial Statements and Required Supplementary Information.

Actuarial calculations under GASB 74 and 75 are for purposes of fulfilling MWRD's financial accounting requirements. The calculations contained herein have been made on a basis consistent with our understanding of GASB 74 and 75.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects all applicable federal laws and regulations. GASB 74 and 75 requires that each significant assumption reflect the client's best estimate of the Plan's future experience solely with respect to that assumption. In our opinion, the assumptions and methods used in this valuation, as adopted by the District, represent reasonable expectations of anticipated plan experience under GASB 74 and 75.

The total OPEB liability and certain sensitivity information shown in this report are based on an actuarial valuation performed as of December 31, 2017. All calculations contained in this report are based on same census information, substantive plan provisions, and assumptions/methods as set forth in the respective sections of the report entitled Actuarial Valuation as of December 31, 2017, including GASB 45 Disclosures for the Plan/Fiscal Year Ending December 31, 2017 and GASB 74 Disclosures for the Plan/Fiscal Year Ending December 31, 2017. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB 74 and 75.

The total OPEB liability and certain sensitivity information shown in this report are based on an actuarial valuation performed as of December 31, 2017. All calculations contained in this report are based on same census information, substantive plan provisions, and assumptions/methods as set forth in the respective sections of the report entitled *Actuarial Valuation as of December 31, 2017, including GASB 45 Disclosures for the Plan/Fiscal Year Ending December 31, 2017 and GASB 74 Disclosures for the Plan/Fiscal Year Ending December 31, 2017*. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB 74 and 75.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period);

**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**ACTUARIAL SECTION**

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and changes in plan provisions or applicable law. Due to the limited scope of this report an analysis of the potential range of such future measurements has not been performed. This report was prepared for the internal use of Metropolitan Water Reclamation District in connection with our actuarial valuation of the Plan for the purpose noted above and not for reliance by any other person. Foster & Foster Consulting Actuaries, Inc. disclaims any contractual or other responsibility or duty of care to others based upon the services or deliverables provided in connection with this report.

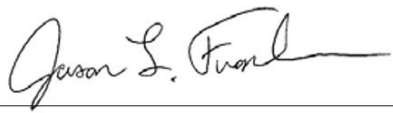
This report does not purport to comply with any other purposes not stated herein. Significantly different results from what is presented in this report may be needed for other purposes.

This document was not intended or written to be used, and it cannot be used, for the purpose of avoiding U.S. federal, state, or local tax penalties. This includes penalties that may apply if the transaction that is the subject of this document is found to lack economic substance or fails to satisfy any other similar rule of law.

The undersigned actuaries are familiar with the immediate and long-term aspects of OPEB valuations, are members of the Society of Actuaries and the American Academy of Actuaries and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" related to postretirement medical and life insurance plans. All the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, the individuals involved in this engagement have no relationship that may impair, or appear to impair, the objectivity of our work.

Respectfully submitted,  
Foster & Foster, Inc.

By:   
Jason L. Franken, FSA, EA, MAAA

By:   
Aimee M. Strickland, FSA, EA, MAAA

By:   
Matt Plachta, ASA, MAAA

April 23, 2019

**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**ACTUARIAL SECTION**

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**INTRODUCTION**

Biennially, the Trust's actuary will prepare a valuation of the liabilities and reserves of the Trust in order to make a determination of the amount of contributions required from the District. These results are then communicated to the District's Board of Commissioners (BOC). The BOC, in turn, has the duty of determining the employer contribution amount it intends to pay to the Trust the following fiscal year.

The information included in this report is based on an actuarial valuation performed as of December 31, 2017. The total OPEB liability for December 31, 2018 is based on an update calculation to roll-forward amounts from the actuarial valuation performed on December 31, 2017. An actuarial valuation is required to be performed biennially for the Trust. For the years in which a valuation is not performed, the total OPEB liability is based on an update calculation to roll-forward amounts from the most recent actuarial valuation for fiscal year-ends when an actuarial valuation is not performed. The next actuarial valuation date is December 31, 2019.

The Board of Commissioners of the District has discretionary authority to determine contribution amounts to be paid into the OPEB Trust Fund. In 2007 the District adopted an initial OPEB advance funding policy meant to (i) improve the District's financial position by reducing the amount of future employer contributions and (ii) serve to establish a reserve to help ensure the financial ability to provide healthcare coverage for District retirees and annuitants in the future. The funding policy was amended on October 2, 2014 to change the target funding level from 50% to 100%; remaining advance funding period from 50 years to 12 years; and, advance funding amount of \$5 million to be contributed in each of the twelve years 2015 through 2026. No further advance funding contributions are expected after 2026. Beginning in 2027, cash is expected to be withdrawn from the Trust to fund claims and insurance premiums will be actuarially determined with a target funding level to be maintained at 100 percent for all future years. Through December 31, 2018, \$132.4 million has been contributed by the District to the OPEB Trust Fund. There is currently no legal requirement for the District to partially or fully fund the Trust and any funding is on a voluntary basis.

Although voluntary in nature, the District intends to accumulate resources sufficient to ease the burden of administering the District's postemployment health care plan. For fiscal year 2018 the District funded an excess of \$6,063,856 of the Trust's Actuarial Determined Contribution amount of \$11,506,823.

**SUMMARY OF ACTUARIAL ASSUMPTIONS, METHODS, AND DATA**

The Trust was established in 2007 and the first actuarial valuation was performed as of January 1, 2007. The actuarial assumptions were recommended by the actuary and have been adopted by the Executive Committee of the OPEB Trust. The actuarial cost method used for this valuation is the Entry Age Normal method. Under this cost method, the actuarial present value of the projected benefits of each member included in the valuation is assumed to be funded by annual installments, equal to a level percent of the member's earnings for each year between entry age and assumed exit age. The normal cost for the member for the current year is equal to the portion of the value so determined, assigned to this year. The normal cost for the Plan for the year is the sum of the normal costs of all active members.

**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**ACTUARIAL SECTION**

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Each year the unfunded actuarial accrued liability is expected to be equal to the sum of the unfunded actuarial accrued liability and normal cost from the prior year, plus interest, less the accumulated value of employer contributions made. The extent to which this expected value differs from the actual value of the unfunded actuarial accrued liability reflects the actuarial experience for the plan year. If the expected value exceeds the actual value, an actuarial gain has occurred. Conversely, if the actual value exceeds the expected value then an actuarial loss has occurred. The unfunded actuarial accrued liability is further modified only for changes in plan provisions, actuarial assumptions or methods. Actuarial gains or losses or changes in the unfunded actuarial liability due to changes in plan provisions, actuarial assumptions or methods are amortized over time. Actuarial gains (losses) will decrease (increase) future costs.

Dates of adoption: The initial cost method and all other actuarial assumptions were adopted January 1, 2007. The mortality table used for post-retirement mortality was the "Unisex Pension 1994 Mortality Table" (set back one year for males and set forward one year for females). Effective December 31, 2015, the actuarial cost method was changed from the Projected Unit Credit method to the Entry Age Normal method to better reflect anticipated experience.

The following outlines the changes since the prior valuation:

- The census data reflects changes in status for the two-year period since December 31, 2015.
- Calculations were modified to capture the impact of moving to the Medicare Advantage plan (MAPD) for post-65 eligible Medicare retirees.
- The annual per capita claims costs have been updated to reflect recent claims experience, along with changes to the health plan for retirees.
- The premium rates have been updated to use the rates effective for 2018.
- The trend rate assumption has been updated to use an initial trend rate of 8.0% in fiscal year 2018, grading down 0.75% per year until reaching an ultimate trend rate of 4.5%.
- The discount rate was decreased from 6.75% to 6.50%.



**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**ACTUARIAL SECTION**

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Below are the most significant actuarial assumptions:

Valuation date	December 31, 2017
Actuarial cost method	Entry Age Normal
Amortization method	Level Percentage of Payroll
Amortization period	30 Years
Asset valuation method	Fair Value
Discount Rate	6.5%
Inflation Rate	3%
Health Care Cost Trend Rate	8.00% for fiscal year 2018, decreasing 0.75% each year to fiscal year 2022, then decreasing 0.5% to the ultimate rate of 4.5% in fiscal year 2023.
Annual Payroll Growth Rate	3.6%
Disability	None assumed
Age of Spouse	Males spouses are assumed to be 3 years older than female spouses.
Coverage at	90% of future eligible service retirees are assumed to elect coverage at retirement. 76% of active employees are assumed to have single plus spouse coverage at retirement.
Dependent children	No children are assumed to be covered at retirement.
Medicare eligibility	100% of members are assumed to enroll in Medicare if eligible and hired on or after April 1, 1986. 93% of members are assumed to enroll in Medicare if eligible and hired prior to April 1, 1986.

**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**ACTUARIAL SECTION**

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Summary of Participant Information

All employees of the District, with at least 10 years of service, are eligible to receive post-retirement medical benefits. The participant data detailed in the following table and used in the actuarial valuations includes all employees that are eligible or may become eligible to receive post-retirement benefits and currently elect medical coverage.

The following table is based on eligibility for post-retirement medical benefits:

	<b><u>Total*</u></b>
Active participants	
Eligible for post-retirement benefits	590
Not yet eligible for post-retirement benefits	<u>1,245</u>
Total	1,835
Retirees, Survivors, and Dependents	
Retirees and Survivors	1,943
Dependent Spouses	<u>854</u>
Total	2,797
Total participants	<u><u>4,632</u></u>
Active participant characteristics	
Average age of actives	50.0
Average age at employment	36.3
Average past service	13.7
Average age of inactive participants	72.7

\*Participant data determined as of December 31, 2017.

Retirees and their dependents that fulfill the eligibility requirements can receive post-retirement medical and prescription drug coverage. Retirees and their dependents are eligible at the earlier of: (a) age 55 and 10 years of service, or (b) age + service greater than or equal to 80. Benefits commence at retirement, provided the eligibility requirements are fulfilled and the coverage is lifetime for retirees and their spouses.

**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**ACTUARIAL SECTION**

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Retiree Annual Contributions

The following annual retiree contribution rates are effective July 1, 2017 through June 30, 2018:

	<b>HMO</b>		<b>PPO</b>	
	<b>Without Medicare</b>	<b>With Medicare</b>	<b>Without Medicare</b>	<b>With Medicare</b>
<b>All Retirees</b>				
Benefit Recipient:				
Pre-65	\$ 3,484	\$ 3,484	\$ 5,314	\$ 5,314
Post-65	3,484	1,556	5,314	1,556
Dependent Spouses:				
Pre-65	3,038	3,038	5,314	5,314
Post-65	3,038	1,556	5,314	1,556

Withdrawal Rates

Employees are assumed to terminate based on age, entry age, and gender. The following tables summarize these rates:

<b>Service</b>	<b>Male Rate</b>	<b>Female Rate</b>
0	4.000%	5.733%
1	3.480	4.973
2	3.089	5.064
3	2.604	4.759
4	2.245	4.518
5	1.780	4.490
6	1.561	4.193
7	1.500	3.945
8	1.500	3.646
9	1.500	2.342
10	1.502	2.054
11	1.391	1.946
12	1.343	1.898
13	1.244	1.859
14	1.189	1.772
15	1.111	1.772
16	0.985	1.772
17+	0.500	1.772

**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**ACTUARIAL SECTION**

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Retirement Rates

Employees are assumed to retire according to the following illustrative schedule:

<u>Age</u>	<u>Retirement Rate</u>
50-59	6%
60-64	13
65	15
66-67	19
68-69	20
70-74	25
75	100

Annual Per Capita Claims

The claims tables for the 2017 valuation have been developed by calculating the weighted average of the 2017 premium rates based on the current enrollment data. These weighed average rates are subsequently expanded to an age-based table using the actuary's proprietary cost curve. The following table summarizes the assumed per capita claims (medical and prescription drugs) at illustrative ages.

<u>Age</u>	<u>HMO</u>		<u>PPO</u>	
	<u>With Medicare</u>	<u>Without Medicare</u>	<u>With Medicare</u>	<u>Without Medicare</u>
40	\$ 5,107	\$ 5,107	\$ 6,988	\$ 6,988
45	6,213	6,213	8,502	8,502
50	7,558	7,558	10,345	10,345
55	9,195	9,195	12,586	12,586
60	11,188	11,188	15,313	15,313
65	—	13,611	—	18,631
70	—	15,780	—	21,599
75	—	18,293	—	25,038
80	—	20,197	—	27,644
85+	—	22,299	—	30,521

**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**ACTUARIAL SECTION**

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Annual Medical Trend Assumptions

Trend rates are used to project current medical claim costs into the future. The derived medical trend rates illustrated below are based on a general per capita gross national product (GNP) growth assumption of 5% and capping the medical component of the GNP at approximately 20% of total GNP.

<u>Year</u>	<u>Trend</u>
2017	8.00%
2018	7.25
2019	6.50
2020	5.75
2021	5.00
2022 and later	4.50

**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**ACTUARIAL SECTION**

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**ANALYSIS OF FUNDING AND FINANCIAL EXPERIENCE**

Reconciliation of the Change in Unfunded Liability

(in thousands)	
Unfunded liability as of December 31, 2015	<u>\$ 137,317</u>
Expected unfunded liability as of December 31, 2017	<u>\$ 129,211</u>
1. Changes in Census Data	(10,630)
2. Impact of MAPD Plan Change	(10,075)
3. Claims Costs and Premiums lower than expected	(5,588)
4. Updated Trend Rate assumption	15,434
5. Discount Rate lowered from 6.75% to 6.50%	9,275
6. Investment Return greater than expected	<u>(14,080)</u>
Net decrease in unfunded liability	<u>(15,664)</u>
Unfunded liability as of December 31, 2017	<u>\$ 113,547</u>

1. The census data reflects changes in the census information the twenty-four month (24) period since December 31, 2015. The decrease in Unfunded Actuarial Accrued Liability (UAAL) over expected can be attributed to a small decrease in the non-vested inactive population. Additionally, while the active population headcounts stayed relatively the same, there were approximately 220 new hires during the 24-month period "replacing" those who left due to retirement, termination, etc. As a result, the average service decreased over expected, which also translates to a lower liability.
2. The MAPD plan change reduced costs for the District both explicitly and implicitly. The subsidized Medicare premium is now about 18% lower than 2 years ago. Also, the new Medicare plan does not generate an implicit rate subsidy. For current and future post-65 members electing Medicare part B, there is no implicit rate subsidy.
3. Medical claims and premiums were lower than expected across the board. Lower than expected claims decreases the net implicit subsidy, but lower premiums increases the subsidy. The majority of this gain, however, is due to the lower explicit subsidy since both the district and the retiree have to pay less in premiums than we would have expected.
4. The update to the trend rate assumption did not change the trending schedule per se. Instead, the trend schedule reflects a shift of the entire schedule back two years, such that the initial year fiscal year 2018 trend is 8.0%. Had the prior schedule continued, the initial trend would have been 6.0%. The ultimate rate remains 4.5%.
5. The discount rate has been lowered from 6.75% to 6.50%, and is believed by the District to be appropriate based on the review of capital market assumptions and other factors regarding actuarial valuation.

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

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**ACTUARIAL SECTION**

**SOLVENCY TEST**

<b>Actuarial Valuation Date</b>	<b>Net Position Restricted for OPEB (a)</b>	<b>Total OPEB Liability (b)</b>	<b>Net OPEB Liability (b-a)</b>	<b>Plan Fiduciary Net Position as a % of the Total OPEB Liability (a/b)</b>
12/31/2018	\$ 188,317	\$ 321,503	\$ 133,186	58.57%
12/31/2017	195,200	308,747	113,547	63.22%

This schedule will show information for ten years as the additional years' information becomes available.

**SCHEDULE OF ACTIVE MEMBER VALUATION DATA**

<b>Actuarial Valuation Date</b>	<b>12/31/2017</b>	<b>12/31/2015</b>	<b>12/31/2013</b>	<b>12/31/2011</b>	<b>12/31/2009</b>
Members in Service	1,835	1,836	1,875	1,893	2,095
% Change	(0.05)%	(2.08)%	(0.95)%	(9.64)%	6.70%
Covered Payroll	\$ 184,807,353	\$ 176,756,776	\$ 164,005,092	\$ 162,853,163	\$ 170,392,445
% Change	4.55 %	7.78 %	0.71 %	(4.42)%	7.30%
Average Salary	\$ 100,712	\$ 96,273	\$ 87,469	\$ 86,029	\$ 81,333
% Change	4.61 %	10.07 %	1.67 %	5.77 %	0.60%
Payroll Growth Assumption	3.60 %	3.60 %	3.60 %	3.60 %	3.60%

**SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS**

<b>Actuarial Valuation Date</b>	<b>12/31/2017</b>	<b>12/31/2015</b>	<b>12/31/2013</b>	<b>12/31/2011</b>	<b>12/31/2009</b>
Beginning of Year Balance	2,003	1,964	1,977	1,900	1,873
Number Added to Rolls	172	217	118	221	183
Benefit Cost	\$ 1,164,268	\$ 1,442,616	\$ 831,192	\$ 1,679,158	\$ 1,405,440
Number Removed from Rolls	191	178	131	144	156
Benefit Cost	\$ 1,292,879	\$ 1,183,344	\$ 922,764	\$ 1,094,112	\$ 1,198,080
End of Year Balance	1,984	2,003	1,964	1,977	1,900
Health Care Annual Benefit	\$ 13,430,657	\$ 13,316,713	\$ 13,834,831	\$ 15,020,374	\$ 14,591,543
Average Annual Benefit	\$ 6,769	\$ 6,648	\$ 7,044	\$ 7,598	\$ 7,680
Increase (Decrease) in Average Benefit	1.82%	(5.62)%	(7.29)%	(1.07)%	16.63%

**STATISTICAL SECTION**



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**STATISTICAL SECTION**

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**DESCRIPTION OF THE STATISTICAL SCHEDULES**

This part of the Trust’s CAFR presents detailed information as a context for understanding what the information in the financial statements, notes disclosures, and the required supplementary information indicate about the Trust’s overall financial health.

Demographics Information

Schedules contain participant information to assist the readers of the financial statements in understanding the demographics of the Plan participants.

Financial Trends

These schedules contain trend information to assist the readers in understanding how the Trust’s financial position, investment performance, revenues, and expenses have changed over time.

Sources: Unless otherwise noted, the information in these schedules is derived from the CAFR for the relevant years.

**MEMBERSHIP STATISTICS**

All employees of the District are eligible to receive post employment health care benefits. The same benefit is available to all participants. The participant data detailed in the following table includes all employees that are eligible or may become eligible to receive benefits and currently elect medical coverage.

**Active Members**

Actuarial Valuation Date	Eligible	Not Yet Eligible	Retirees and Beneficiaries	Total	% Active to Retirees
12/31/2017	590	1,245	1,943	3,778	94%
12/31/2015	555	1,281	1,962	3,798	94%
12/31/2013	528	1,347	1,964	3,839	95%
12/31/2011	479	1,414	1,977	3,870	96%
12/31/2009	493	1,602	1,900	3,995	110%
1/1/2007	685	1,279	1,873	3,837	105%

**Retirees and Beneficiaries**

Actuarial Valuation Date	Employee	Surviving Spouse	Child	Total
12/31/2017	1,505	438	0	1,943
12/31/2015	1,504	458	0	1,962
12/31/2013	1,480	484	0	1,964
12/31/2011	1,471	506	0	1,977
12/31/2009	1,382	518	0	1,900
1/1/2007	1,346	526	1	1,873

Note: An actuarial valuation is required to be performed biennially for the Trust. The next valuation date is December 31, 2019.

**Metropolitan Water Reclamation District Retiree Health Care Trust**  
**A Component Unit of the Metropolitan Water Reclamation District of Greater Chicago**

**STATISTICAL SECTION**

**STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION**  
**Last Ten Years**

	Year Ended 2018	Year Ended 2017	Year Ended 2016	Year Ended 2015	Year Ended 2014
Additions:					
Contributions by Employer	\$ 17,570,679	\$ 18,430,657	\$ 19,916,860	\$ 18,316,713	\$ 33,716,523
Total Contributions	17,570,679	18,430,657	19,916,860	18,316,713	33,716,523
Net Appreciation (Depreciation)					
in Fair Value of Investments	(16,588,686)	21,208,737	6,576,376	(5,301,623)	2,266,999
Interest and Dividends	4,803,341	4,225,263	4,013,404	3,333,594	3,306,458
Total Investment Return (Loss)	(11,785,345)	25,434,000	10,589,780	(1,968,029)	5,573,457
Less Investment Expenses	(55,000)	(41,750)	(42,000)	(42,000)	(42,015)
Net Investment Income (Loss)	(11,840,345)	25,392,250	10,547,780	(2,010,029)	5,531,442
Total Additions	5,730,334	43,822,907	30,464,640	16,306,684	39,247,965
Deductions:					
Retiree Health Care Benefits	12,570,679	13,430,657	14,916,860	13,316,713	13,716,524
Administrative Expenses	42,200	36,900	32,254	35,674	40,249
Total Deductions	12,612,879	13,467,557	14,949,114	13,352,387	13,756,773
Net Increase (Decrease)	(6,882,545)	30,355,350	15,515,526	2,954,297	25,491,192
Net Position Restricted for OPEB					
January 1	195,199,800	164,844,450	149,328,924	146,374,627	120,883,435
December 31	\$ 188,317,255	\$ 195,199,800	\$ 164,844,450	\$ 149,328,924	\$ 146,374,627

**Metropolitan Water Reclamation District Retiree Health Care Trust**  
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**STATISTICAL SECTION**

**STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION (Continued)**  
**Last Ten Years**

	Year Ended 2013	Year Ended 2012	Year Ended 2011	Year Ended 2010	Year Ended 2009
Additions:					
Contributions by Employer	\$ 33,834,831	\$ 35,426,215	\$ 18,020,374	\$ 15,516,965	\$ 14,591,543
Total Contributions	33,834,831	35,426,215	18,020,374	15,516,965	14,591,543
Net Appreciation (Depreciation) in Fair Value of Investments	13,146,950	7,200,445	(1,465,010)	3,540,803	—
Interest and Dividends	1,715,664	1,586,602	1,383,304	797,212	158,828
Total Investment Return (Loss)	14,862,614	8,787,047	(81,706)	4,338,015	158,828
Less Investment Expenses	(42,575)	(45,337)	(45,608)	(46,109)	(45,333)
Net Investment Income (Loss)	14,820,039	8,741,710	(127,314)	4,291,906	113,495
Total Additions	48,654,870	44,167,925	17,893,060	19,808,871	14,705,038
Deductions:					
Retiree Health Care Benefits	13,834,831	13,026,215	15,020,374	15,516,965	14,591,543
Administrative Expenses	38,530	36,068	29,833	29,795	18,720
Total Deductions	13,873,361	13,062,283	15,050,207	15,546,760	14,610,263
Net Increase	34,781,509	31,105,642	2,842,853	4,262,111	94,775
Net Position Restricted for OPEB					
January 1	86,101,926	54,996,284	52,153,431	47,891,320	47,796,545
December 31	\$ 120,883,435	\$ 86,101,926	\$ 54,996,284	\$ 52,153,431	\$ 47,891,320

**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**STATISTICAL SECTION**

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**SCHEDULE OF REVENUES BY SOURCE**

<b>Year Ended</b>	<b>Employer Contributions</b>	<b>Net Investment Income (Loss)</b>	<b>Total Additions</b>
2018	\$ 17,570,679	\$ (11,840,345)	\$ 5,730,334
2017	18,430,657	25,392,250	43,822,907
2016	19,916,860	10,547,780	30,464,640
2015	18,316,713	(2,010,029)	16,306,684
2014	33,716,523	5,531,442	39,247,965
2013	33,834,831	14,820,039	48,654,870
2012	35,426,215	8,741,710	44,167,925
2011	18,020,374	(127,314)	17,893,060
2010	15,516,965	4,291,906	19,808,871
2009	14,591,543	113,495	14,705,038

**SCHEDULE OF RETURN ON INVESTMENTS**

<b>Year Ended</b>	<b>Year-End Investment Balance</b>	<b>Annual Rate of Return</b>
2018	\$ 188,236,277	(5.87)%
2017	195,140,843	15.06 %
2016	164,772,053	6.90 %
2015	149,237,550	(1.39)%
2014	146,317,546	4.87 %
2013	120,681,050	16.29 %
2012	83,849,674	14.63 %
2011	53,605,063	0.18 %
2010	50,960,000	7.47 % (1)
2009	47,902,573	0.29 %

(1) Reflects the portfolio performance from date of investment (March 29, 2010) through December 31, 2010.

**Metropolitan Water Reclamation District Retiree Health Care Trust**  
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**STATISTICAL SECTION**

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**SCHEDULE OF EMPLOYER CONTRIBUTIONS**

<b>Year Ended</b>	<b>Benefit Payments (1)</b>	<b>Contribution to Trust</b>	<b>Total</b>
2018	\$ 12,570,679	\$ 5,000,000	\$ 17,570,679
2017	13,430,657	5,000,000	18,430,657
2016	14,916,860	5,000,000	19,916,860
2015	13,316,713	5,000,000	18,316,713
2014	13,716,524	20,000,000	33,716,524
2013	13,834,831	20,000,000	33,834,831
2012	13,026,215	22,400,000	35,426,215
2011	15,020,374	3,000,000	18,020,374
2010	15,516,965	—	15,516,965
2009	14,591,543	—	14,591,543

(1) Net benefit payments are paid directly by the District. Amounts are not paid through the Trust. The Plan pays a single benefit level and type: post-retirement medical and prescription drug coverage. No dental, life, disability, or child coverage is provided by the Plan.

**HISTORY OF BENEFIT PAYMENTS**

<b>Year Ended</b>	<b>Number of Retirees &amp; Beneficiaries</b>	<b>Retiree Benefit Payments</b>	<b>Average Annual Benefit</b>	<b>Average Monthly Benefit</b>
2018	1,943	\$ 12,570,679	\$ 6,470	\$ 539
2017	1,943	13,430,657	6,912	576
2016	1,962	14,916,860	7,603	634
2015	1,962	13,316,713	6,787	566
2014	1,964	13,716,524	6,984	582
2013	1,964	13,834,831	7,044	587
2012	1,977	13,026,215	6,589	549
2011	1,977	15,020,374	7,598	633
2010	1,900	15,516,965	8,167	681
2009	1,900	14,591,543	7,680	640

**Metropolitan Water Reclamation District Retiree Health Care Trust  
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**STATISTICAL SECTION**

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**SCHEDULE OF EXPENSES BY TYPE**

<b>Year Ended</b>	<b>Investment Advisor Fee</b>	<b>External Audit Fee</b>	<b>Fiduciary Insurance</b>	<b>Custodian Transaction Fees</b>	<b>Total Expenses</b>
2018	\$ 55,000	\$ 35,500	\$ 6,700	\$ —	\$ 97,200
2017	41,750	30,600	6,300	—	78,650
2016	42,000	26,000	6,254	—	74,254
2015	42,000	29,600	6,074	—	77,674
2014	42,000	28,300	11,949	15	82,264
2013	42,000	27,200	11,330	575	81,105
2012	44,222	26,100	9,968	1,115	81,405
2011	45,333	21,000	8,833	275	75,441
2010	45,333	19,815	9,980	776	75,904
2009	45,333	18,720	—	—	64,053