

METROPOLITAN WATER RECLAMATION
DISTRICT OF GREATER CHICAGO
OTHER POSTEMPLOYMENT BENEFITS PROGRAM

PRELIMINARY GASB 75 DISCLOSURE INFORMATION FOR THE
FISCAL YEAR ENDING DECEMBER 31, 2019

GASB 74/GASB 75 DISCLOSURE INFORMATION FOR THE
FISCAL YEAR ENDING DECEMBER 31, 2018



April 23, 2019

To the Members of the Board of Commissioners
of the Metropolitan Water Reclamation District of Greater Chicago
100 East Erie Street
Chicago, IL 60611

Re: Metropolitan Water Reclamation District – FYE December 31, 2018 GASB 74 Disclosures
and Preliminary FYE December 31, 2019 GASB 75 Disclosures.

Dear Members of the Board:

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 the 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 GASB 74 can be found in Appendix 1. The Crossover Test supporting the single discount rate calculation can be found in Appendix 2.

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 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); 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.

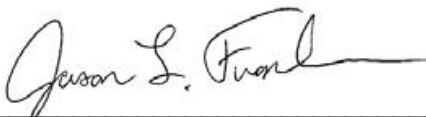
The undersigned actuaries are familiar with the immediate and long-term aspects of OPEB valuations, are members of the Society of Actuaries and the American Academy of Actuaries and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" related to 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.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact either Jason or Aimee at 630 620-0200.

Respectfully submitted,

Foster & Foster, Inc.

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

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

By: 
Matt Plachta, ASA, MAAA

Enclosures

Table of Contents

SECTION 1 – EXECUTIVE SUMMARY.....	1
SECTION 2 – NOTES TO THE FINANCIAL STATEMENTS	3
SECTION 3 – GASB 75 DISCLOSURE SCHEDULES	10
SECTION 4 – EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES	14
SECTION 5 – PER CAPITA CLAIMS COSTS AND CONTRIBUTION AMOUNTS	20
SECTION 6 – MEMBER STATISTICS	21
STATISTICAL DATA	21
AGE AND SERVICE DISTRIBUTION.....	22
SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO/FROM ROLLS.....	23
BREAKDOWN OF BENEFIT PLAN ENROLLMENT	23
SECTION 7 – ACTUARIAL ASSUMPTIONS AND FUNDING METHODS.....	24
SECTION 8 – SUMMARY OF PLAN PROVISIONS	29
APPENDIX 1 – GASB 74 DISCLOSURES FOR PLAN YEAR 2018	30
APPENDIX 2 – GASB 74 & 75 CROSSOVER TEST	40

SECTION 1 – Executive Summary

SECTION 1 – EXECUTIVE SUMMARY

The results presented in this report have been prepared in accordance with the Government Accounting Standards Board Statement 75 (GASB 75) for the Metropolitan Water Reclamation District's Other Postemployment Benefits (OPEB) Program, based on the actuarial valuation performed as of December 31, 2017. For purposes of this valuation, Medical and Prescription Drug Insurance OPEBs were taken into consideration.

The results of this valuation are based on a Measurement Date of December 31, 2018 and are applicable to the fiscal year ending December 31, 2019. The following table shows the key components of the District's OPEB valuation for fiscal year 2019 under GASB 75.

Total OPEB Liability as of the Measurement Date	\$	321,502,904
Plan Fiduciary Net Position as of the Measurement Date		<u>188,317,255</u>
District's Net OPEB Liability as of the Measurement Date	\$	<u>133,185,649</u>
OPEB Expense for the Fiscal Year ending December 31, 2019	\$	14,554,090
Covered Employee Payroll (Projected)	\$	192,661,666
District's Net OPEB Liability as a percentage of Covered Employee Payroll		69.13%
Census Information as of December 31, 2017:		
Active Participants		1,835
Retirees, Beneficiaries, and Disabled Members		1,943
Inactive Plan Members Entitled to But Not Yet Receiving Benefits		41
Covered Spouses		<u>854</u>
Total Participants		4,673

FY 2019 Covered Employee Payroll projected based on FY 2018 Covered Employee Payroll.

SECTION 1 – Executive Summary

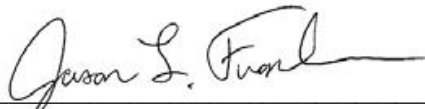
District Funding Policy:

There is currently no legal requirement for the District to partially or fully fund the OPEB Plan. It is our understanding that the Board of Commissioners adopted an advance funding policy (last amended October 2, 2014) with a goal of fully funding the Plan over a period of 12 years. The funding amount is currently targeted at \$5 million in each of the ten years 2017 through 2026, with no further advance funding contributions required after 2026. The Trust is expected to begin paying retiree claims and premiums beginning in 2027, with a goal of maintaining a funded level of 100% for all future years.

The balance of this report presents additional details of the actuarial valuation and the general operation of the Fund. The undersigned would be pleased to meet with the Board of Trustees to discuss the report and any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.

By: 
Jason L. Franken, FSA, MAAA

By: 
Aimee M. Strickland, FSA, MAAA

SECTION 2 – Notes to Financial Statements

SECTION 2 – NOTES TO THE FINANCIAL STATEMENTS (For the Year Ended December 31, 2019)

SUMMARY OF SIGNIFICANT ACCOUNTING POLICES

Postemployment Benefits Other Than Pensions (OPEB):

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

GENERAL INFORMATION ABOUT THE OPEB PLAN

Plan Description:

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

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

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

Benefits Provided:

The benefits provided are the same as those provided for active employees. Spouses and dependents of eligible retirees are also eligible for medical coverage. All full-time employees of the District are eligible to receive postemployment benefits. Coverage for retirees and their eligible spouse is provided for life. Coverage for dependent children is provided in accordance with the eligibility provisions of the District-sponsored health plan. The Trust was established to advance fund benefits provided under the Plan.

SECTION 2 – Notes to Financial Statements

Eligibility for Insurance Coverage:

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

Health Care Insurance:

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

Contributions:

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. Spouses and dependents of eligible retirees are also eligible for medical and prescription drug coverage. All full-time employees of the District are eligible to receive postemployment health care benefits. Lifetime coverage for retirees and their spouses is provided. Coverage for dependent children is also provided in accordance with the eligibility provisions of the District-sponsored health plan. The Trust was established to advance fund benefits provided under the Plan.

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

The retiree contribution rates are set based on prior year claims incurred and become effective January 1st each year. The retiree contribution rate utilized is based on the contribution rate policy established by the Board of Commissioners. This policy calls for a 2.5% increase in the contribution rate on January 1st of each year until the contribution rate reaches 50.0%, projected to be in 2021. The contribution rate for 2019 will be 45.0%.

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

SECTION 2 – Notes to Financial Statements

Investment Policy:

The following was the Board's adopted asset allocation policy as of December 31, 2018.

<u>Asset Class</u>	<u>Target Allocation</u>
BarCap Int Aggregate	20.0%
Core Plus	15.0%
US Large-Cap Core	10.0%
US Large-Cap Value	7.5%
US Large-Cap Growth	7.5%
US Mid-Cap Core	10.0%
US Small-Cap Core	10.0%
Global Low Volatility	5.0%
Non-US Large-Cap Core	15.0%
Total	<u>100%</u>

Concentrations:

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

Rate of Return:

For the year ended December 31, 2018 the annual money-weighted rate of return on investments, net of investment expense, was -13.92 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts invested.

Receivables:

If the OPEB plan reported receivables from long-term contracts with the District for contributions, the OPEB plan should disclose information required by paragraph 34c of this Statement.

Allocated Insurance Contracts:

If the OPEB plan had allocated insurance contracts that are excluded from OPEB plan assets, the OPEB plan should disclose information required by paragraph 34d of this Statement.

SECTION 2 – Notes to Financial Statements

SECTION 2 – NOTES TO FINANCIAL STATEMENTS (For the Year Ended December 31, 2019)

NET OPEB LIABILITY

The measurement date is December 31, 2018.

The measurement period for the OPEB expense is January 1, 2018 to December 31, 2018.

The reporting period is January 1, 2019 through December 31, 2019.

The District's Net OPEB Liability was measured as of December 31, 2018.

Actuarial Assumptions:

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

Inflation	3.00%
Salary Increases	See Section 7
Discount Rate	6.50%
Investment Rate of Return	6.50%
Initial Trend Rate	8.00%
Ultimate Trend Rate	4.50%
Years to Ultimate Rate	6

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

SECTION 2 – Notes to Financial Statements

The Long-Term Expected Rate of Return:

The Long-Term Expected Rate of Return on OPEB Plan investments is determined using a building-block method in which best-estimate rates of expected future real rates of return (expected returns, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of December 31, 2018 are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long Term Expected Real Rate of Return</u>
BarCap Int Aggregate	20.0%	3.10%
Core Plus	15.0%	4.00%
US Large-Cap Core	10.0%	7.40%
US Large-Cap Value	7.5%	7.50%
US Large-Cap Growth	7.5%	7.40%
US Mid-Cap Core	10.0%	7.80%
US Small-Cap Core	10.0%	8.10%
Global Low Volatility	5.0%	6.90%
Non-US Large-Cap Core	15.0%	7.20%
Total	<u>100%</u>	

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

Discount Rate:

The projection of cash flows used to determine the Discount Rate assumed that current Plan Member and District contributions will be made at the current contribution rate (i.e. funding policy). The expected rate of return on trust investments is 6.50%. It is our understanding that 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 that they are following the funding policy completely and will continue to do so. Therefore, the expected return on investments was used to discount projected benefit payments for all future benefit payments, and the single equivalent rate was 6.50%.

SECTION 2 – Notes to Financial Statements

CHANGE IN NET OPEB LIABILITY

	Increase (Decrease)		
	Total OPEB	Plan Fiduciary	Net OPEB
	Liability	Net Position	Liability
	(a)	(b)	(a)-(b)
Reporting Period Ending December 31, 2018	\$ 308,747,257	\$ 195,199,800	\$ 113,547,457
Changes for the Year:			
Service Cost	5,314,432	-	5,314,432
Interest	20,011,894	-	20,011,894
Differences Between Expected and Actual Experience	-	-	-
Changes of Assumptions	-	-	-
Changes of Benefit Terms	-	-	-
Contributions - Employer Trust	-	5,000,000	(5,000,000)
Contributions - Pay-As-You-Go	-	12,570,679	(12,570,679)
Net Investment Income	-	(11,840,345)	11,840,345
Explicit Gross Benefit Payments	(12,570,679)	(12,570,679)	-
Administrative Expense	-	(42,200)	42,200
Net Changes	12,755,647	(6,882,545)	19,638,192
Reporting Period Ending December 31, 2019	\$ 321,502,904	\$ 188,317,255	\$ 133,185,649

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

The following presents the Net OPEB Liability of the District, 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 or one percentage-point higher than the current discount rate:

	Current Discount		
	1% Decrease	Rate	1% Increase
	5.50%	6.50%	7.50%
Net OPEB Liability (asset)	\$ 176,463,310	\$ 133,185,649	\$ 98,322,971

SECTION 2 – Notes to Financial Statements

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

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

	Healthcare Cost		
	1% Decrease 3.00% - 7.50%	Trend Rates 4.00% - 8.50%	1% Increase 5.00% - 9.50%
Net OPEB Liability (asset)	\$ 91,148,614	\$ 133,185,649	\$ 185,690,196

OPEB Plan Fiduciary Net Position:

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

SECTION 3 – GASB 75 Disclosure Schedules

SECTION 3 – GASB 75 DISCLOSURE SCHEDULES

FINAL OPEB EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO OPEB

(For the Year Ended December 31, 2018)

For the year ended December 31, 2018, the District will recognize OPEB Expense of \$10,615,312.

On December 31, 2018, the District reported Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between Expected and Actual Experience	\$ -	\$ -
Changes of Assumptions	-	-
Net Difference Between Projected and Actual Earnings on OPEB Plan Investments	-	11,612,848
Employer Contributions Made Subsequent to the Measurement Date	<u>17,570,679</u>	<u>-</u>
Total	<u>\$ 17,570,679</u>	<u>\$ 11,612,848</u>

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

Year ended December 31:	
2019	\$ (2,903,212)
2020	\$ (2,903,212)
2021	\$ (2,903,212)
2022	\$ (2,903,212)
2023	\$ -
Thereafter	\$ -

Notes to Schedule:

Employer Contributions Made Subsequent to the Measurement Date are actual employer contributions for this fiscal year ending December 31, 2018.

SECTION 3 – GASB 75 Disclosure Schedules

PRELIMINARY OPEB EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO OPEB

(For the Year Ended December 31, 2019)

For the year ended December 31, 2019, the District will recognize OPEB Expense of \$14,554,090.

On December 31, 2019, the District reported Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	\$ -	\$ -
Changes of Assumptions	-	-
Net Difference Between Projected and Actual Earnings on OPEB Plan Investments	11,041,933	-
Employer Contributions Made Subsequent to the Measurement Date	TBD	-
Total	<u>TBD</u>	<u>\$ -</u>

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

Year ended December 31:	
2020	\$ 2,034,680
2021	\$ 2,034,680
2022	\$ 2,034,680
2023	\$ 4,937,893
2024	\$ -
Thereafter	\$ -

SECTION 3 – GASB 75 Disclosure Schedules

SCHEDULE OF CHANGES IN THE DISTRICT'S TOTAL OPEB LIABILITY AND RELATED RATIOS Last 10 Fiscal Years

Reporting Period Ending	12/31/2019	12/31/2018
Measurement Date	12/31/2018	12/31/2017
Total OPEB Liability		
Service Cost	\$ 5,314,432	\$ 5,097,776
Interest	20,011,894	19,260,038
Changes of benefit terms	-	-
Differences between Expected and Actual	-	-
Changes of assumptions	-	-
Benefit Payments	(12,570,679)	(13,430,657)
Net Change in Total OPEB Liability	12,755,647	10,927,157
Total OPEB Liability - Beginning	308,747,257	297,820,100
Total OPEB Liability - Ending (a)	<u>\$ 321,502,904</u>	<u>\$ 308,747,257</u>
Plan 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	(11,840,345)	25,392,250
Benefit Payments	(12,570,679)	(13,430,657)
Administrative Expense	(42,200)	(36,900)
Net Change in Plan Fiduciary Net Position	(6,882,545)	30,355,350
Plan Fiduciary Net Position - Beginning	195,199,800	164,844,450
Plan Fiduciary Net Position - Ending (b)	<u>\$ 188,317,255</u>	<u>\$ 195,199,800</u>
District's Net OPEB Liability - Ending (a) - (b)	<u>\$ 133,185,649</u>	<u>\$ 113,547,457</u>
Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	58.57%	63.22%
Covered Employee Payroll	\$ 192,661,666	\$ 184,807,353
District's Net OPEB Liability as a percentage of Covered Employee Payroll	69.13%	61.44%

Notes to Schedule:

FY 2019 Covered Employee Payroll projected based on FY 2018 Covered Employee Payroll.

The Single Discount Rate used to calculate the District's Net OPEB Liability has been 6.50% since implementation of GASB 75.

SECTION 3 – GASB 75 Disclosure Schedules

SCHEDULE OF DISTRICT CONTRIBUTIONS Last 10 Fiscal Years

	12/31/2018	12/31/2017	12/31/2016	12/31/2015	12/31/2014	12/31/2013	12/31/2012	12/31/2011	12/31/2010	12/31/2009
Actuarially 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 Actuarially 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%

Notes to Schedule:

The fiscal year ending December 31, 2018, the Contributions in relation to the Actuarially Determined Contributions is final and was provided by the District.

Actuarially Determined Contribution rates shown above are calculated as of December 31 for the plan/fiscal year in which contributions are reported.

Contributions in relation to the Actuarially Determined Contributions include Pay-As-You-Go Benefit amounts plus an additional cash contribution to the trust.

Methods and assumptions used to determine contribution rates are the same as those found in Section 8 of this report.

FY 2019 Covered Employee Payroll projected based on FY 2018 Covered Employee Payroll.

SECTION 4 – Expense Development and Amortization Schedules

SECTION 4 – EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

The following information is not required to be disclosed under GASB 75 but is provided for informational purposes.

SECTION 4 – Expense Development and Amortization Schedules

FINAL COMPONENTS OF OPEB EXPENSE

(For the Year Ended December 31, 2018)

	Net OPEB Liability	Deferred Inflows	Deferred Outflows	OPEB Expense
Beginning balance	\$132,975,650	\$ -	\$ 18,430,657	\$ -
Employer Contributions made after December, 31, 2018	-	-	17,570,679	-
Total OPEB Liability Factors:				
Service Cost	5,097,776	-	-	5,097,776
Interest	19,260,038	-	-	19,260,038
Changes in Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience with Regard to Economic or Demographic Assumptions	-	-	-	-
Current Year Amortization of Experience Difference	-	-	-	-
Change in Assumptions About Future Economic or Demographic Factors or Other Inputs	-	-	-	-
Current Year Amortization of Change in Assumptions	-	-	-	-
Benefit Payments	(13,430,657)	-	-	-
Net change	<u>\$ 10,927,157</u>	<u>\$ -</u>	<u>\$ 17,570,679</u>	<u>\$ 24,357,814</u>
Plan Fiduciary Net Position:				
Contributions - Employer Trust	5,000,000	\$ -	\$ (5,000,000)	\$ -
Contributions - Pay-As-You-Go	13,430,657	-	(13,430,657)	-
Projected Net Investment Income	10,876,190	-	-	(10,876,190)
Difference Between Projected and Actual Earnings on OPEB Plan Investments	14,516,060	14,516,060	-	-
Current Year Amortization	-	(2,903,212)	-	(2,903,212)
Benefit Payments	(13,430,657)	-	-	-
Administrative Expenses	(36,900)	-	-	36,900
Net change	<u>30,355,350</u>	<u>11,612,848</u>	<u>(18,430,657)</u>	<u>(13,742,502)</u>
Ending Balance	<u>\$113,547,457</u>	<u>\$ 11,612,848</u>	<u>\$ 17,570,679</u>	<u>\$ 10,615,312</u>

SECTION 4 – Expense Development and Amortization Schedules

PRELIMINARY COMPONENTS OF OPEB EXPENSE

(For the Year Ended December 31, 2019)

	Net OPEB Liability	Deferred Inflows	Deferred Outflows	OPEB Expense
Beginning balance	\$113,547,457	\$ 11,612,848	\$ 17,570,679	\$ -
Employer Contributions made after December, 31, 2018	-	-	TBD	-
Total OPEB Liability Factors:				
Service Cost	5,314,432	-	-	5,314,432
Interest	20,011,894	-	-	20,011,894
Changes in Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience with Regard to Economic or Demographic Assumptions	-	-	-	-
Current Year Amortization of Experience Difference	-	-	-	-
Change in Assumptions About Future Economic or Demographic Factors or Other Inputs	-	-	-	-
Current Year Amortization of Change in Assumptions	-	-	-	-
Benefit Payments	(12,570,679)	-	-	-
Net change	<u>\$ 12,755,647</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 25,326,326</u>
Plan Fiduciary Net Position:				
Contributions - Employer Trust	5,000,000	\$ -	\$ (5,000,000)	\$ -
Contributions - Pay-As-You-Go	12,570,679	-	(12,570,679)	-
Projected Net Investment Income	12,849,116	-	-	(12,849,116)
Difference Between Projected and Actual Earnings on OPEB Plan Investments	(24,689,461)	-	24,689,461	-
Current Year Amortization	-	(2,903,212)	(4,937,892)	2,034,680
Benefit Payments	(12,570,679)	-	-	-
Administrative Expenses	(42,200)	-	-	42,200
Net change	<u>(6,882,545)</u>	<u>(2,903,212)</u>	<u>2,180,890</u>	<u>(10,772,236)</u>
Ending Balance	<u>\$133,185,649</u>	<u>\$ 8,709,636</u>	<u>TBD</u>	<u>\$ 14,554,090</u>

Notes to Schedule:

Employer Contributions made after December 31, 2018 but made on or before December 31, 2019 need to be added.

SECTION 4 – Expense Development and Amortization Schedules

AMORTIZATION SCHEDULE – DUE TO RECOGNITION OF THE EFFECTS OF ASSUMPTION CHANGES

Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of Changes of Assumptions

Measurement		Recognition										
Year	Assumption Changes	Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2017	\$	- 7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018		- 7	-	-	-	-	-	-	-	-	-	-
Net Increase (Decrease) in OPEB Expense			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

SECTION 4 – Expense Development and Amortization Schedules

AMORTIZATION SCHEDULE – DUE TO DIFFERENCES BETWEEN EXPECTED AND ACTUAL EXPERIENCE

Increase (Decrease) in OPEB Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience												
Measurement Year	Differences Between Expected and Actual Experience	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2017	\$ -	7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	-	7	-	-	-	-	-	-	-	-	-	-
Net Increase (Decrease) in OPEB Expense			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

SECTION 4 – Expense Development and Amortization Schedules

AMORTIZATION SCHEDULE – DUE TO DIFFERENCES BETWEEN PROJECTED AND ACTUAL EARNINGS ON OPEB PLAN INVESTMENTS

Increase (Decrease) in OPEB Expense Arising from the Recognition of the of Differences Between Projected and Actual Earnings on OPEB Plan Investments

Measurement Year	Differences Between Projected and Actual Earnings on OPEB Plan Investments	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2017	\$ (14,516,060)	5	\$ (2,903,212)	\$ (2,903,212)	\$ (2,903,212)	\$ (2,903,212)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	24,689,461	5	4,937,892	4,937,892	4,937,892	4,937,892	4,937,893	-	-	-	-	-
Net Increase (Decrease) in OPEB Expense			\$ 2,034,680	\$ 2,034,680	\$ 2,034,680	\$ 2,034,680	\$ 4,937,893	\$ -	\$ -	\$ -	\$ -	\$ -

SECTION 5 – Per Capita Claims Costs and Contribution Amounts

SECTION 5 – PER CAPITA CLAIMS COSTS AND CONTRIBUTION AMOUNTS

2018 Per Capita Annual Claims Costs Per Participant

Age	PPO Plans		HMO Plans	
	Enrolled in Medicare	Not Enrolled in Medicare	Enrolled in Medicare	Not Enrolled in Medicare
40	\$ 6,988	\$ 6,988	\$ 5,107	\$ 5,107
45	8,502	8,502	6,213	6,213
50	10,345	10,345	7,558	7,558
55	12,586	12,586	9,195	9,195
60	15,313	15,313	11,188	11,188
65	-	18,631	-	13,611
70	-	21,599	-	15,780
75	-	25,038	-	18,293
80	-	27,644	-	20,197
85+	-	30,521	-	22,299

2018 Annual Premium Amounts Per Participant (Retiree Portion) ¹

	PPO Plans		HMO Plans	
	Enrolled in Medicare	Not Enrolled in Medicare	Enrolled in Medicare	Not Enrolled in Medicare
Retiree				
Pre-65	\$ 5,314	\$ 5,314	\$ 3,484	\$ 3,484
Post-65	1,556	5,314	1,556	3,484
Spouse				
Pre-65	\$ 5,314	\$ 5,314	\$ 3,038	\$ 3,038
Post-65	1,556	5,314	1,556	3,038

¹ The contributions shown above reflect the increase in the retiree contribution percentage from 2011 (at 25%) to 2018 (42.5%) at 2.5% per year.

SECTION 6 – Member Statistics

SECTION 6 – MEMBER STATISTICS

STATISTICAL DATA

	As of 12/31/2017	As of 12/31/2015
Number of Active Participants		
Eligible for Retiree Health Benefits	590	555
Not Yet Eligible for Retiree Health Benefits	1,245	1,281
Total	1,835	1,836
Average Current Age of Actives	50.0	50.2
Average Age at Employment	36.3	36.1
Average Past Service	13.7	14.2
Covered Payroll	\$ 184,807,353	\$ 176,756,776
Average Salary	100,712	96,273
Number of Inactives Enrolled in Health Care		
Retirees	1,505	1,504
Survivors	438	458
Dependent Spouses	854	813
Total	2,797	2,775
Average Current Age of Inactives	72.7	72.8
Number of Terminated Vested	41	41
Average Current Age of Terminated Vesteds	51.4	51.6

SECTION 6 – Member Statistics

AGE AND SERVICE DISTRIBUTION

AGE	TOTAL PAST SERVICE										Total
	0	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
20 - 24	0	8	0	0	0	0	0	0	0	0	8
25 - 29	9	39	6	1	0	0	0	0	0	0	55
30 - 34	11	66	32	14	0	0	0	0	0	0	123
35 - 39	9	55	37	63	12	0	0	0	0	0	176
40 - 44	5	51	40	62	34	11	0	0	0	0	203
45 - 49	5	50	35	52	68	49	20	2	0	0	281
50 - 54	7	42	38	52	55	44	74	11	0	0	323
55 - 59	6	35	26	68	53	47	81	28	1	0	345
60 - 64	3	19	25	36	52	28	42	9	2	1	217
65+	0	4	4	19	30	18	17	8	2	2	104
Total	55	369	243	367	304	197	234	58	5	3	1,835

SECTION 6 – Member Statistics

SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO/FROM ROLLS

Fiscal Year	Beginning of Year Balance	Number Added to Rolls	Number Removed from Rolls	End of Year Balance	Health Care Annual Benefit Amounts	Average Annual Benefit	% Change in Average Benefit
2007	1,850	150	127	1,873	\$12,333,865	\$6,585	-
2009	1,873	183	156	1,900	\$14,591,543	\$7,680	16.6%
2011	1,900	221	144	1,977	\$15,020,374	\$7,598	-1.1%
2013	1,977	118	131	1,964	\$13,834,831	\$7,044	-7.3%
2015 ¹	1,964	217	178	2,003	\$13,316,713	\$6,648	-5.6%
2017	2,003	172	191	1,984	\$13,430,657	\$6,769	1.8%

BREAKDOWN OF BENEFIT PLAN ENROLLMENT

(RETIREES, BENEFICIARIES, COVERED SPOUSES AND TERMINATED VESTED)

Enrollee Group	PPO	HMO	Total
Benefit Recipient	1,567	417	1,984
Spouse	<u>641</u>	<u>213</u>	<u>854</u>
Grand Total	2,208	630	2,838

¹ Prior rolls adjusted to include vested terminated members excluded in the previous valuation.

SECTION 7 – Actuarial Assumptions and Funding Methods

SECTION 7 – ACTUARIAL ASSUMPTIONS AND FUNDING METHODS

ACTUARIAL ASSUMPTIONS

<u>Valuation Date</u>	December 31, 2017.
<u>GASB 75 Measurement Date</u>	December 31, 2018.
<u>Fiscal Year End</u>	December 31, 2019.
<u>Mortality Rate</u>	RP-2000 Combined Healthy Mortality Table with Generational Mortality Improvements (Scale AA).
<u>End of Year Discount Rate</u>	6.50% per year, based on investment rate of return, compounded annually, net of investment related expenses.
<u>Beginning of Year Discount Rate</u>	6.50% per year, based on investment rate of return, compounded annually, net of investment related expenses.
<u>Retirement Rates</u>	See table below:

<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%

<u>Retirement – Vested Participant</u>	Assumed to retire at first eligibility for commencement of pension benefits.
--	--

<u>Service</u>	<u>Salary Increase Rate</u>
0	7.00%
1	6.25%
2	5.75%
3	5.50%
4	5.25%
5	5.00%
6	4.75%
7	4.50%
8	4.50%
9+	4.25%

SECTION 7 – Actuarial Assumptions and Funding Methods

<u>Payroll Growth</u>	3.60% per year.
<u>Inflation</u>	3.00% per year.
<u>Administrative Expenses</u>	No additional expenses added to Normal Cost.
<u>Marital Status</u>	100% assumed married, with male spouses 3 years older than female spouses.
<u>Health Care Participation</u>	90% participation assumed, with 76% electing spouse coverage. Future retirees are assumed to elect medical plans in the same proportion as the 2017 elections for current enrollees. The current enrollments are 36.6% with HMO and 63.4% with PPO.
<u>Medicare Participation</u>	100% of members are assumed to enroll in Medicare if eligible and hired on or after April 1, 1986. It is assumed that 93% of members will enroll in Medicare if hired before April 1, 1986.
<u>Health Care Inflation</u>	8.0% in Fiscal 2018, decreasing 0.75% each year to Fiscal 2022, then decreasing 0.5% to the ultimate rate of 4.5% in Fiscal 2023. Rates below:

<u>Fiscal Year</u>	<u>Rate</u>
2018	8.00%
2019	7.25%
2020	6.50%
2021	5.75%
2022	5.00%
2023+	4.50%

SECTION 7 – Actuarial Assumptions and Funding Methods

Termination Rates

See table below:

<u>Service</u>	<u>Male Rate</u>	<u>Female Rate</u>
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%

Disability Rates

None assumed.

Medical Aging Factors

4% per year prior to age 65;
 3% per year between ages 65 and 75;
 2% per year between ages 75 and 85;
 0% per year thereafter.

Health Claims

(Medicare and Non-Medicare)

Developed using a 50/50 blend of i) the 2017 medical and prescription claims and enrollment experience; and ii) 2018 age-adjusted premium rates.

Funding Method

Entry Age Cost Method (level percentage of pay)

SECTION 7 – Actuarial Assumptions and Funding Methods

DISCUSSION OF CENSUS DATA AND ASSUMPTIONS

1. Census Data – We received December 31, 2017 census data from District personnel. The data was substantially similar to data used in the previous year’s valuation. No material modifications were made to the data.
2. Medical/Rx Cost and Enrollment Data – District personnel provided claims and enrollment experience for medical and prescription plan cost information for calendar years 2015, 2016 and 2017.
3. Actuarial Assumptions and Methods –
 - a. Demographic Assumptions
 - i. Mortality rates are deemed reasonable and reflect mortality improvements. They are a best estimate given limited plan experience. We will continue to monitor the impact of mortality.
 - ii. Retirement rates and termination rates are the same as the prior valuation, matching those used by the pension plan. They are deemed reasonable and will continue to be monitored to ensure they capture plan experience.
 - iii. The participation rate and spousal coverage election percentage are the same as the previous valuation. They are deemed reasonable and will continue to be monitored.
 - b. Other Assumptions
 - i. The trend rate schedule has been updated previously. The initial health care inflation rate is the 8.0%. The ultimate rate is still 4.5% but has been delayed until 2023. These rates are based on recent healthcare trend rate surveys.
 - ii. The interest rate (i.e. investment return) remains at 6.50% at the request of the District and Board personnel. This rate is supported by the Crossover Test as shown in the Appendix.

SECTION 7 – Actuarial Assumptions and Funding Methods

- c. Funding Method -The valuation results were calculated using the Entry Age cost method (level percentage of pay). This method is required under GASB 74/75.
- d. Excise Tax – The effect of any potential impact due to the 40% excise tax on high cost plans has been ignored for this valuation due to the significant uncertainty surrounding the application of the requirements under the Patient Protection and Affordable Care Act signed into law on March 23, 2010.

SECTION 8 – Summary of Plan Provisions

SECTION 8 – SUMMARY OF PLAN PROVISIONS

Credited Service

Total completed years of employment with the District.

Eligibility for Insurance Coverage

At least 10 years of service with the District. Coverage does not commence until the member starts receiving payments from the District's Retirement Fund. Earliest eligibility is based on the member's hire date as follows:

Hired before June 13, 1997: Age 50

Hired after June 13, 1997 and before January 1, 2011: Age 55

Hired on or after January 1, 2011: Age 62

Health Care Insurance

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

Health Contributions

Retiree

Retirees pay a portion of the premium each year based on the i) adjusted premium developed based on actual claims experience and ii) the contribution rate policy established by the Board of Commissioners. The policy calls for a 2.5% increase in the contribution rate on January 1st or each year until the contribution rate reaches 50.0%, projected to be in 2021. The contribution rate for 2018 is 42.5%.

District

Remaining amount necessary for payment of claims.

APPENDIX 1– GASB 74 Disclosure for Plan Year 2018

APPENDIX 1 – GASB 74 DISCLOSURES FOR PLAN YEAR 2018

STATEMENT OF FIDUCIARY NET POSITION

(For the Year Ended December 31, 2018)

<u>ASSETS</u>	MARKET VALUE
Cash and Short-Term Investments	-
Receivables:	
Accrued Interest	94,728
Total Receivables	94,728
Investments:	
Fixed Income Mutual Funds	69,189,037
Equity Mutual Funds	114,647,697
Balanced Mutual Funds	-
Money Market Funds	4,399,543
Total Investments	188,236,277
Total Assets	188,331,005
<u>LIABILITIES</u>	
Payables:	
Deposit Payable	13,750
Total Liabilities	13,750
NET POSITION RESTRICTED FOR POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS	188,317,255

APPENDIX 1– GASB 74 Disclosure for Plan Year 2018

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

(For the Year Ended December 31, 2018)

ADDITIONS

Contributions:

Employer Contributions 17,570,679

Total Contributions 17,570,679

Investment Income:

Net Decrease in Fair Value of Investments (16,588,686)

Interest & Dividends 4,803,341

Less Investment Expense (55,000)

Net Investment Income (11,840,345)

Total Additions 5,730,334

DEDUCTIONS

Distributions to Members:

Retiree Health Care Benefits 12,570,679

Total Distributions 12,570,679

Administrative Expense 42,200

Total Deductions 12,612,879

Net Increase in Net Position (6,882,545)

NET POSITION RESTRICTED FOR POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS

Beginning of the Year 195,199,800

End of the Year 188,317,255

APPENDIX 1– GASB 74 Disclosure for Plan Year 2018

NOTES TO THE FINANCIAL STATEMENTS (For the Year Ended December 31, 2018)

GENERAL INFORMATION ABOUT THE OPEB PLAN

Plan Description:

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

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

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

Benefits Provided:

The benefits provided are the same as those provided for active employees. Spouses and dependents of eligible retirees are also eligible for medical coverage. All full-time employees of the District are eligible to receive postemployment benefits. Coverage for retirees and their eligible spouse is provided for life. Coverage for dependent children is provided in accordance with the eligibility provisions of the District-sponsored health plan. The Trust was established to advance fund benefits provided under the Plan.

Eligibility for Insurance Coverage:

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

Health Care Insurance:

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

APPENDIX 1– GASB 74 Disclosure for Plan Year 2018

Contributions:

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. Spouses and dependents of eligible retirees are also eligible for medical and prescription drug coverage. All full-time employees of the District are eligible to receive postemployment health care benefits. Lifetime coverage for retirees and their spouses is provided. Coverage for dependent children is also provided in accordance with the eligibility provisions of the District-sponsored health plan. The Trust was established to advance fund benefits provided under the Plan.

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

The retiree contribution rates are set based on prior year claims incurred and become effective January 1st each year. The retiree contribution rate utilized is based on the contribution rate policy established by the Board of Commissioners. This policy calls for a 2.5% increase in the contribution rate on January 1st of each year until the contribution rate reaches 50.0%, projected to be in 2021. The contribution rate for 2019 will be 45.0%.

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

Investment Policy:

The following was the Board’s adopted asset allocation policy as of December 31, 2018.

<u>Asset Class</u>	<u>Target Allocation</u>
BarCap Int Aggregate	20.0%
Core Plus	15.0%
US Large-Cap Core	10.0%
US Large-Cap Value	7.5%
US Large-Cap Growth	7.5%
US Mid-Cap Core	10.0%
US Small-Cap Core	10.0%
Global Low Volatility	5.0%
Non-US Large-Cap Core	15.0%
Total	<u>100%</u>

APPENDIX 1– GASB 74 Disclosure for Plan Year 2018

Concentrations:

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

Rate of Return:

For the year ended December 31, 2018 the annual money-weighted rate of return on investments, net of investment expense, was -13.92 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts invested.

Receivables:

If the OPEB plan reported receivables from long-term contracts with the District for contributions, the OPEB plan should disclose information required by paragraph 34c of this Statement.

Allocated Insurance Contracts:

If the OPEB plan had allocated insurance contracts that are excluded from OPEB plan assets, the OPEB plan should disclose information required by paragraph 34d of this Statement.

APPENDIX 1– GASB 74 Disclosure for Plan Year 2018

NET OPEB LIABILITY OF THE DISTRICT

The measurement date for GASB 74 reporting is December 31, 2018.

The reporting period is January 1, 2018 through December 31, 2018.

The District's Net OPEB Liability was measured as of December 31, 2018.

The Total OPEB Liability used to calculate the Net OPEB Liability was determined as of that date.

The components of the Net OPEB Liability of the District on 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	58.57%

Actuarial Assumptions:

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

Inflation	3.00%
Salary Increases	See Section 7
Discount Rate	6.50%
Investment Rate of Return	6.50%
Initial Trend Rate	8.00%
Ultimate Trend Rate	4.50%
Years to Ultimate Rate	6

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

APPENDIX 1– GASB 74 Disclosure for Plan Year 2018

The Long-Term Expected Rate of Return:

The Long-Term Expected Rate of Return on OPEB Plan investments is determined using a building-block method in which best-estimate rates of expected future real rates of return (expected returns, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of December 31, 2018 are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long Term Expected Real Rate of Return</u>
BarCap Int Aggregate	20.0%	3.10%
Core Plus	15.0%	4.00%
US Large-Cap Core	10.0%	7.40%
US Large-Cap Value	7.5%	7.50%
US Large-Cap Growth	7.5%	7.40%
US Mid-Cap Core	10.0%	7.80%
US Small-Cap Core	10.0%	8.10%
Global Low Volatility	5.0%	6.90%
Non-US Large-Cap Core	15.0%	7.20%
Total	<u>100%</u>	

The Long-Term Expected Rate of Return calculated using the method described above exceeds 6.50% (assuming 3% inflation).

Discount Rate:

The projection of cash flows used to determine the Discount Rate assumed that current Plan Member and District contributions will be made at the current contribution rate (i.e. funding policy). The expected rate of return on trust investments is 6.50%. It is our understanding that 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 that they are following the funding policy completely and will continue to do so. Therefore, the expected return on investments was used to discount projected benefit payments for all future benefit payments, and the single equivalent rate was 6.50%.

APPENDIX 1– GASB 74 Disclosure for Plan Year 2018

Sensitivity of the Net OPEB Liability to changes in the Discount Rate as of December 31, 2018:

The following presents the Net OPEB Liability of the District, 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 or one percentage-point higher than the current discount rate:

	1% Decrease 5.50%	Current Discount Rate 6.50%	1% Increase 7.50%
Net OPEB Liability (asset)	\$ 176,463,310	\$ 133,185,649	\$ 98,322,971

Sensitivity of the Net OPEB Liability to changes in the Healthcare Cost Trend Rates as of December 31, 2018:

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

	1% Decrease 3.00% - 7.50%	Healthcare Cost Trend Rates 4.00% - 8.50%	1% Increase 5.00% - 9.50%
Net OPEB Liability (asset)	\$ 91,148,614	\$ 133,185,649	\$ 185,690,196

OPEB Plan Fiduciary Net Position:

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

APPENDIX 1– GASB 74 Disclosure for Plan Year 2018

SCHEDULE OF CHANGES IN THE DISTRICT'S NET OPEB LIABILITY AND RELATED RATIOS Last 10 Fiscal Years

Reporting Period Ending	12/31/2018	12/31/2017
Total OPEB Liability		
Service Cost	\$ 5,314,432	\$ 5,097,776
Interest	20,011,894	19,260,038
Changes of benefit terms	-	-
Differences between Expected and Actual	-	-
Changes of assumptions	-	-
Benefit Payments	(12,570,679)	(13,430,657)
Net Change in Total OPEB Liability	12,755,647	10,927,157
Total OPEB Liability - Beginning	308,747,257	297,820,100
Total OPEB Liability - Ending (a)	\$ 321,502,904	\$ 308,747,257
 Plan 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	(11,840,345)	25,392,250
Benefit Payments	(12,570,679)	(13,430,657)
Administrative Expense	(42,200)	(36,900)
Net Change in Plan Fiduciary Net Position	(6,882,545)	30,355,350
Plan Fiduciary Net Position - Beginning	195,199,800	164,844,450
Plan Fiduciary Net Position - Ending (b)	\$ 188,317,255	\$ 195,199,800
 District's Net OPEB Liability - Ending (a) - (b)	\$ 133,185,649	\$ 113,547,457
 Plan Fiduciary Net Position as a percentage of the Total OPEB Liability	58.57%	63.22%
 Covered Employee Payroll	\$ 192,661,666	\$ 184,807,353
 District's Net OPEB Liability as a percentage of Covered Employee Payroll	69.13%	61.44%

APPENDIX 1 – GASB 74 Disclosures for Plan Year 2018

SCHEDULE OF DISTRICT CONTRIBUTIONS Last 10 Fiscal Years

	12/31/2018	12/31/2017	12/31/2016	12/31/2015	12/31/2014	12/31/2013	12/31/2012	12/31/2011	12/31/2010	12/31/2009
Actuarially 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 Actuarially 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)	<u>\$ (6,063,856)</u>	<u>\$ (6,923,834)</u>	<u>\$ (7,444,967)</u>	<u>\$ (5,844,820)</u>	<u>\$ (20,504,586)</u>	<u>\$ (20,622,894)</u>	<u>\$ (8,162,531)</u>	<u>\$ 9,243,310</u>	<u>\$ 24,330,056</u>	<u>\$ 25,255,478</u>
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%

Notes to Schedule:

The fiscal year ending December 31, 2018, the Contributions in relation to the Actuarially Determined Contributions is final and was provided by the District.

Actuarially determined contribution rates shown above are calculated as of December 31 for the plan/fiscal year in which contributions are reported.

Contributions in relation to the Actuarially Determined Contributions include Pay-As-You-Go Benefit amounts plus an additional cash contribution to the trust.

Methods and assumptions used to determine contribution rates are the same as those found in Section 8 of this report.

FY 2019 Covered Employee Payroll projected based on FY 2018 Covered Employee Payroll.

APPENDIX 2 – GASB 74&75 Crossover Test

APPENDIX 2 – GASB 74 & 75 CROSSOVER TEST

Metropolitan Water Reclamation District of Chicago Post Retirement Health Care Plan - GASB Statement 74&75 Crossover Projection

50 Year Projection of the Health Care Plan's Fiduciary Net Position

Based on the December 31, 2018 Measurement Date. 6.50% Asset Return

Year	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2019	188,317,255	20,027,641	15,027,641	42,269	12,401,748	205,676,734
2020	205,676,734	21,024,568	16,024,568	42,343	13,530,112	224,164,502
2021	224,164,502	22,354,894	17,354,894	42,384	14,731,815	243,853,934
2022	243,853,934	23,606,016	18,606,016	42,399	16,011,628	264,823,163
2023	264,823,163	24,895,099	19,895,099	42,409	17,374,627	287,155,381
2024	287,155,381	26,045,971	21,045,971	42,382	18,826,222	310,939,221
2025	310,939,221	27,190,109	22,190,109	42,349	20,372,173	336,269,045
2026	336,269,045	28,254,571	23,254,571	42,275	22,018,614	363,245,384
2027	363,245,384	5,742,848	24,289,951	42,172	23,006,799	367,662,908
2028	367,662,908	5,577,804	25,357,644	42,048	23,253,878	371,094,896
2029	371,094,896	5,416,328	26,382,185	41,854	23,438,418	373,525,603
2030	373,525,603	5,263,791	27,204,483	41,624	23,564,739	375,108,026
2031	375,108,026	5,097,455	28,170,172	41,355	23,630,814	375,624,769
2032	375,624,769	4,942,733	29,040,584	41,033	23,631,096	375,116,981
2033	375,116,981	4,786,509	29,735,112	40,641	23,570,453	373,698,191
2034	373,698,191	4,625,107	30,639,335	40,217	23,443,613	371,087,359
2035	371,087,359	4,478,327	31,306,980	39,746	23,247,455	367,466,415
2036	367,466,415	4,325,431	31,915,421	39,227	22,987,367	362,824,566
2037	362,824,566	4,166,330	32,621,244	38,657	22,657,556	356,988,551
2038	356,988,551	4,020,542	32,921,076	38,034	22,263,752	350,313,736
2039	350,313,736	3,858,338	33,369,118	37,373	21,810,078	342,575,660
2040	342,575,660	3,704,233	33,535,718	36,674	21,296,703	334,004,203
2041	334,004,203	3,541,055	33,367,701	35,954	20,739,739	324,881,342
2042	324,881,342	3,361,130	33,443,070	35,176	20,138,481	314,902,707
2043	314,902,707	3,195,661	33,046,460	34,377	19,497,408	304,514,939
2044	304,514,939	3,016,017	32,525,810	33,559	18,833,312	293,804,899
2045	293,804,899	2,834,026	31,841,004	32,742	18,153,528	282,918,707
2046	282,918,707	2,645,514	30,921,995	31,867	17,469,695	272,080,053
2047	272,080,053	2,451,500	29,904,597	30,997	16,791,970	261,387,929
2048	261,387,929	2,259,011	28,769,162	30,091	16,127,658	250,975,345
2049	250,975,345	2,070,006	27,721,737	29,195	15,478,767	240,773,186
2050	240,773,186	1,887,264	26,395,085	28,266	14,852,834	231,089,933
2051	231,089,933	1,696,460	25,169,062	27,328	14,257,098	221,847,102
2052	221,847,102	1,518,252	24,029,788	26,358	13,687,580	212,996,788
2053	212,996,788	1,345,531	22,750,469	25,462	13,148,303	204,714,692

APPENDIX 2 – GASB 74&75 Crossover Test

Year	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expense	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2054	204,714,692	1,176,417	21,301,223	24,515	12,651,602	197,216,973
2055	197,216,973	1,005,671	20,040,480	23,543	12,199,707	190,358,327
2056	190,358,327	857,070	18,921,934	22,661	11,785,447	184,056,249
2057	184,056,249	722,206	17,790,470	21,705	11,408,232	178,374,512
2058	178,374,512	595,412	16,780,234	20,792	11,067,661	173,236,559
2059	173,236,559	484,922	15,862,622	19,866	10,759,955	168,598,949
2060	168,598,949	382,001	15,041,988	18,961	10,481,866	164,401,866
2061	164,401,866	291,093	14,254,665	18,084	10,231,717	160,651,928
2062	160,651,928	208,406	13,514,363	17,204	10,009,373	157,338,139
2063	157,338,139	134,213	12,805,957	16,359	9,814,616	154,464,651
2064	154,464,651	61,912	12,175,868	15,521	9,645,994	151,981,169
2065	151,981,169	28,251	11,622,608	14,691	9,501,482	149,873,602
2066	149,873,602	22,855	11,111,150	13,874	9,380,964	148,152,397
2067	148,152,397	19,568	10,638,821	13,073	9,284,355	146,804,425
2068	146,804,425	17,034	10,205,587	12,293	9,210,760	145,814,339