

**MASSACHUSETTS WATER RESOURCES AUTHORITY IRREVOCABLE
OPEB TRUST**

Financial Statements

June 30, 2018 and 2017

(With Independent Auditors' Report Thereon)

MASSACHUSETTS WATER RESOURCES AUTHORITY IRREVOCABLE OPEB TRUST

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CliftonLarsonAllen

Independent Auditors' Report

The Board of Trustees
Massachusetts Water Resources Authority Irrevocable OPEB Trust

Report on the Financial Statements

We have audited the accompanying financial statements of the Massachusetts Water Resources Authority Irrevocable OPEB Trust (the Trust), as of and for the years ended June 30, 2018 and 2017, and the related notes to the 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 an opinion on these financial statements based on our audits. We conducted our audits 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 Trust as of June 30, 2018 and 2017, and the change in net position for the fiscal years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis (located on pages 3 and 4) and certain other postemployment benefits information (located on pages 14 through 17) be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

A handwritten signature in cursive script that reads "CliftonLarsonAllen LLP".

CliftonLarsonAllen LLP

Boston, Massachusetts
August 20, 2018

MASSACHUSETTS WATER RESOURCES AUTHORITY IRREVOCABLE OPEB TRUST

Management's Discussion and Analysis

June 30, 2018 and 2017

(Unaudited)

This section of the financial report presents our discussion and analysis of the Massachusetts Water Resources Authority (MWRA) Irrevocable Other Post-Employment Benefits (OPEB) Trust (the Trust) financial performance during the fiscal years ended June 30, 2018 and 2017. Please read it in conjunction with the Trust's financial statements, which immediately follow this section.

Overview of the Financial Statements

The financial section of this annual report consists of four parts: management's discussion and analysis (this section), the financial statements and related notes to the financial statements, and required supplementary information.

The financial statements provide both long-term and short-term information about the Trust's overall financial status. The financial statements also include notes that explain some of the information in the financial statements and provide more detailed data. The statements are followed by a section of required supplementary information that further explains and supports the information in the financial statements.

Financial Analysis of the Trust

Net Position and Change in Net Position

The Trust's total net position at June 30, 2018 was approximately \$29.8 million, a \$7 million increase from June 30, 2017. The change in net position is comprised of the actuarially determined employer contributions to the Trust of \$10.1 million and net investment income of \$2 million, less deductions for actuarially determined benefit payments of \$5.1 million. Actual cash contribution by the Authority to the Trust was \$5.0 million in fiscal year 2018.

Other Post-Employment Benefits (OPEB) Irrevocable Trust

In April 2015, the Authority established the MWRA Irrevocable Other Post-Employment Benefits (OPEB) Trust. The Trust was established for the sole purpose of providing for the advance funding of future costs of retired employee health insurance and other benefits provided to retirees. It is intended that the Trust shall constitute a "Qualified OPEB Trust" according to the standards set forth in GASB Statement No. 43, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions* and the standards of GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*. The OPEB Trust Agreement establishes a five-member Board of Trustees, made up of Authority senior managers, to control and manage the trust.

An initial deposit of \$10.8 million was made to the trust upon establishment of the trust in April 2015. The balance of the trust at June 30, 2018 and 2017 was \$29.8 million and \$22.8 million, respectively.

MASSACHUSETTS WATER RESOURCES AUTHORITY IRREVOCABLE OPEB TRUST

Management's Discussion and Analysis

June 30, 2018 and 2017

(Unaudited)

Investments

The Board of Trustees has prepared an Investment Policy to manage the growing portfolio of trust assets. For the periods ended June 30, 2018 and 2017, investment income was \$2 million and \$1.8 million, respectively.

Contacting the Trust's Financial Management

This report is designed to provide all interested parties with a general overview of the Trust's finances. If you have questions about this report or need additional information, contact the Massachusetts Water Resources Authority, Finance Division, 100 First Avenue, Boston, MA 02129.

MASSACHUSETTS WATER RESOURCES AUTHORITY IRREVOCABLE OPEB TRUST

Statements of Fiduciary Net Position

June 30, 2018 and 2017

(Dollars in 000s)

	Assets	2018	2017
Cash and cash equivalents (note 3)		\$ 5,113	4,935
Investments		24,661	17,847
Total assets		<u>29,774</u>	<u>22,782</u>
	Liabilities		
Accounts payable and accrued liabilities		<u>—</u>	<u>—</u>
Total liabilities		<u>—</u>	<u>—</u>
Net position restricted for OPEB		<u>\$ 29,774</u>	<u>22,782</u>

See accompanying notes to financial statements.

MASSACHUSETTS WATER RESOURCES AUTHORITY IRREVOCABLE OPEB TRUST

Statements of Changes in Fiduciary Net Position

Years Ended June 30, 2018 and 2017

(Dollars in 000s)

	<u>2018</u>	<u>2017</u>
Additions:		
Employer contributions	\$ 10,093	9,723
Investment income:		
Net increase in fair value of investments	2,062	1,860
Interest	18	9
Less investment expense	<u>(124)</u>	<u>(86)</u>
Net investment income	<u>1,956</u>	<u>1,783</u>
Total additions	<u>12,049</u>	<u>11,506</u>
Deductions:		
Benefits paid	<u>5,057</u>	<u>4,847</u>
Change in net position restricted for OPEB	6,992	6,659
Net position restricted for OPEB, beginning of the period	<u>22,782</u>	<u>16,123</u>
Net position restricted for OPEB, end of period	<u>\$ 29,774</u>	<u>22,782</u>

See accompanying notes to financial statements.

MASSACHUSETTS WATER RESOURCES AUTHORITY IRREVOCABLE OPEB TRUST

Notes to Financial Statements

June 30, 2018 and 2017

(Dollars in 000s)

(1) Organization and Nature of Activities

The Massachusetts Water Resources Authority (MWRA) Irrevocable OPEB Trust (Trust) was established in April, 2015 as a single-employer other post-employment benefits (OPEB) plan, for the purpose of accumulating and investing assets to fund certain post-retirement medical and life insurance for retirees of the Massachusetts Water Resources Authority (the Authority). The Trust is not a component unit of another governmental entity.

The Trust's Board of Trustees has fiduciary responsibility for the investment of monies and administration of the Trust pursuant to the Trust Agreement. The Board of Trustees is currently composed of five members including the following MWRA employees: Executive Director, Director of Finance, Treasurer, Budget Director and Director of Human Resources. The Trustees term of service shall continue for as long as each is willing to perform the duties and obligations of the position.

The Authority provides OPEB for retired employees through the Group Insurance Commission (GIC). The GIC is a quasi-independent state agency that administers an agent multi-employer defined benefit OPEB plan. The benefits, benefit levels, employee contributions and employer contributions are governed by the Authority and can be amended by the Authority. The Authority provides medical, prescription drug, mental health/substance abuse and life insurance to retirees and their covered dependents. All active employees who retire from the Authority and meet the eligibility criteria will receive these benefits.

(2) Summary of Significant Accounting Policies

(a) Basis of Presentation

The accompanying basic financial statements of the Trust are presented in conformity with the U.S. generally accepted accounting principles as prescribed by the Governmental Accounting Standards Board (GASB).

The Trust has implemented GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*. This statement requires, among other things, additional disclosures and descriptive information about classes of plan members, plan investments and significant assumptions used to measure the total OPEB liability.

The Trust has also implemented GASB Statement No. 85, *Omnibus 2017*. This statement addressed various topics, including requirements related to presenting payroll measures in required supplementary information related to OPEB plans.

(b) Basis of Accounting

The financial statements of the Trust are presented as a fiduciary fund type. The economic resources measurement focus and the accrual basis of accounting are used in the preparation of the financial statements.

MASSACHUSETTS WATER RESOURCES IRREVOCABLE OPEB TRUST

Notes to Financial Statements

June 30, 2018 and 2017

(Dollars in 000s)

Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits paid represents the gross up of amounts paid directly by the plan sponsor, the MWRA, for retiree OPEB costs and the implicit rate subsidy associated with such costs. The implicit rate subsidy is the inherent subsidy of retiree healthcare costs by active employee healthcare costs when healthcare premiums paid by both actives and retirees are the same. Benefits paid are recognized when due and payable in accordance with the terms of the employer/sponsor's plan.

(c) *Use of Estimates*

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities, at the date of the financial statements and the reported amounts of revenues and expenditures during the reporting period. Actual results could differ from those estimates.

(3) **Cash and Cash Equivalents**

Cash and cash equivalents are checking, savings and money market accounts, or highly liquid investments with a maturity of three months or less.

The Trust does comply with GASB Statement No. 40, *Deposit and Investment Risk Disclosures* related to its deposits. The deposits are covered by \$250 of FDIC insurance.

The bank deposits at June 30, 2018 and 2017 were \$5,113 and \$4,935, respectively. Of these amounts, \$4,863 and \$4,685 were exposed to custodial credit risks as uninsured and uncollateralized.

The custodial credit risk for deposits is the risk that, in the event of a bank failure, the Trust's deposits may not be recovered. The deposits in the bank in excess of the insured amount are uninsured and uncollateralized.

(4) **Investments**

The Trustees have adopted a formal cash and investment policy. All funds will be invested with the Commonwealth of Massachusetts Pension Reserves Investment Trust (PRIT) fund.

The investment in the PRIT fund is not subject to custodial or concentration risk. The PRIT fund is unrated.

Investments are recorded at fair value. The Trust categorizes its fair value measurements with the fair value hierarchy established by generally accepted accounting principles. Debt securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. The Trust has no securities classified in Level 3.

The Trust's investment in the PRIT fund is classified as Level 2.

MASSACHUSETTS WATER RESOURCES AUTHORITY IRREVOCABLE OPEB TRUST

Notes to Financial Statements

June 30, 2018 and 2017

(Dollars in 000s)

(5) Other Postemployment Benefits under GASB 74

(a) Plan Description

Plan Administration. The Massachusetts Water Resources Authority Irrevocable OPEB Trust (the Trust) administers the MWRA other postemployment benefits plan – a single-employer defined benefit plan that is used to provide postemployment benefits other than pensions (OPEB) for all permanent employees of the Authority.

Management of the Trust is vested in the Trust’s Board of Trustees, which consists of five members, all of whom are current MWRA employees.

Plan Membership. At June 30, 2018, plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefits	746
Inactive plan members entitled to but not yet receiving benefits	41
Active plan members	<u>960</u>
Total	<u><u>1,747</u></u>

Benefits Provided. The Trust provides healthcare and life insurance benefits for retirees and their dependents. Benefits are provided through a third-party insurer, and the full cost of benefits is covered by the plan.

Contributions. The Authority’s Board of Directors approves the annual employer contribution to the Trust. Plan members contribute between 10% and 20% of the premium cost and the Authority pays the balance.

(b) Investments

Investment policy. The Trust’s assets are invested with the Commonwealth of Massachusetts Pension Reserves Investment Trust (PRIT) fund. The Trust’s Board of Trustees may vote to approve a different investment vehicle, at its discretion. The following was the PRIT fund’s asset allocation at June 30, 2018:

<u>Asset Class</u>	<u>Target Allocation</u>
Global Equity	39 %
Fixed Income	22
Private Equity	12
Real Estate	10
Other	<u>17</u>
Total	<u><u>100 %</u></u>

MASSACHUSETTS WATER RESOURCES AUTHORITY IRREVOCABLE OPEB TRUST

Notes to Financial Statements

June 30, 2018 and 2017

(Dollars in 000s)

Concentrations. No investment in any one organization represented 5% or more of the Trust's fiduciary net position.

Rate of return. For the year ended June 30, 2018, the annual money-weighted rate of return on investments, net of investment expense, was 8.58%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

(c) Net OPEB Liability of the Authority

The components of the net OPEB liability of the Authority at June 30, 2018 and 2017, were as follows:

	<u>June 30, 2018</u>	<u>June 30, 2017</u>
Total OPEB liability	\$ 150,978	\$ 154,254
Plan fiduciary net position	<u>(29,774)</u>	<u>(22,782)</u>
Net OPEB liability	<u>\$ 121,204</u>	<u>\$ 131,472</u>
Plan fiduciary net position as a percentage of the total OPEB liability	<u>19.7%</u>	<u>14.8%</u>

Actuarial assumptions. The total OPEB liability was determined by an actuarial valuation as of December 31, 2017, and update procedures were used to roll forward the total OPEB liability to June 30, 2018. The following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	3.0	percent
Salary increases	5.75	percent, decreasing over 9 years to an ultimate level of 4.0 percent
Investment rate of return	7.0	percent, net of OPEB plan investment expense, including inflation
Healthcare cost trend rates	8.0	percent for 2018, decreasing 0.5 percent per year to an ultimate rate of five percent

Mortality rates were based on the RP-2014 Blue Collar Mortality Table for Employees projected using generational mortality and scale MP-2017 for active employees, the RP-2014 Blue Collar Mortality Tables for Healthy Annuitants projected using generational mortality and scale MP-2017 for retirees and the RP-2014 Blue Collar Mortality Tables for Healthy Annuitants projected using generational mortality and scale MP-2017 set forward one year for the disabled.

MASSACHUSETTS WATER RESOURCES IRREVOCABLE OPEB TRUST

Notes to Financial Statements

June 30, 2018 and 2017

(Dollars in 000s)

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 expense 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 June 30, 2018 (see discussion of the Trust’s investment policy) are summarized in the following table:

<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>
Global Equity	6.15 - 9.41 %
Fixed Income	1.68 - 4.13
Private Equity	10.28
Real Estate	4.90
Other	3.94 - 4.71

Discount rate. The discount rate used to measure the total OPEB liability was 7.0%. The projection of cash flows used to determine the discount rate assumed that Authority contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability. The discount rate used in the prior actuarial valuation was 7.0%.

Sensitivity of the net OPEB liability to changes in the discount rate. The following presents the net OPEB liability of the Authority, as well as what the Authority’s net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.0%) or 1-percentage-point higher (8.0%) than the current discount rate:

	<u>1% Decrease (6.0%)</u>	<u>Discount Rate (7.0%)</u>	<u>1% Increase (8.0%)</u>
Net OPEB Liability	\$ 142,517	\$ 121,204	\$ 103,608

MASSACHUSETTS WATER RESOURCES AUTHORITY IRREVOCABLE OPEB TRUST

Notes to Financial Statements

June 30, 2018 and 2017

(Dollars in 000s)

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates. The following presents the net OPEB liability of the Authority, as well as what the Authority's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower (7.0%) or 1-percentage-point higher (9.0%) than the current healthcare cost trend rates:

	<u>1% Decrease</u> <u>(7.0% - 4.0%)</u>	<u>Base Rate</u> <u>(8.0% - 5.0%)</u>	<u>1% Increase</u> <u>(9.0% - 6.0%)</u>
Net OPEB Liability	\$ 98,898	\$ 121,204	\$ 146,968

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MASSACHUSETTS WATER RESOURCES AUTHORITY IRREVOCABLE OPEB TRUST

Required Supplementary Information – Schedule of Changes in Net OPEB Liability and Related Ratios (1)

June 30, 2018 and 2017

(Unaudited)

(Dollars in 000s)

	<u>2018</u>	<u>2017</u>
Total OPEB Liability		
Total OPEB Liability - Beginning	154,254	\$146,143
Service Cost	2,820	2,705
Interest	10,821	10,253
Change of Benefit Terms	-	-
Differences between expected and actual experience	(11,860)	-
Change of assumptions	-	-
Benefit Payments	<u>(5,057)</u>	<u>(4,847)</u>
Net Change in total OPEB liability	(3,276)	8,111
Total OPEB Liability - Ending	<u>150,978</u>	<u>154,254</u>
Plan Fiduciary Net Position		
Plan fiduciary net position - beginning	<u>22,782</u>	<u>16,123</u>
Contributions - employer (claims + additional funding)	10,093	9,723
Contributions - employee	-	-
Net Investment Income	1,956	1,783
Benefit Payments	<u>(5,057)</u>	<u>(4,847)</u>
Net Change in plan fiduciary net position	6,992	6,659
Plan fiduciary net position - end	<u>29,774</u>	<u>22,782</u>
Net OPEB Liability	<u>\$121,204</u>	<u>\$131,472</u>
Plan fiduciary net position as a percentage of the total OPEB liability	19.7%	14.8%
Covered-employee payroll	\$94,816	\$86,475
MWRA's net OPEB liability as a percentage of covered employee payroll	127.8%	152.7%

(1) Data is being accumulated annually to present 10 years of the reported information.

See accompanying independent auditors' report.

MASSACHUSETTS WATER RESOURCES AUTHORITY IRREVOCABLE OPEB TRUST

Required Supplementary Information – Schedule of Employer Contributions – Last 10 Fiscal Years

June 30, 2018 and 2017

(Unaudited)

(Dollars in 000s)

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Actuarially determined contribution	\$ 11,400	10,948	14,996	14,564
Contributions in relation to the actuarially determined contribution	<u>10,093</u>	<u>9,723</u>	<u>9,804</u>	<u>14,852</u>
Contribution deficiency (excess)	<u>\$ 1,307</u>	<u>1,225</u>	<u>5,192</u>	<u>(288)</u>
Employee Covered Payroll (1)	\$ 94,816	86,475		
Contributions as a Percentage of Employee Covered Payroll (1)	127.8%	152.7%		

Notes to Schedule

Methods and assumptions used to determine contributions rates:

Actuarial cost method	Entry Age Normal
Amortization method	30 years (closed)
Asset valuation method	Market value of assets
Inflation	3%
Healthcare cost trend rates	8% for 2018, decreasing 0.5% per year to an ultimate rate of 5%
Discount rate	7%
Mortality	<i>Actives:</i> RP-2014 Blue Collar mortality table for employees projected using generational mortality and scale MP-2017
	<i>Retirees:</i> RP-2014 Blue Collar mortality tables for healthy annuitants projected using generational mortality and scale MP-2017
	<i>Disabled:</i> RP-2014 Blue Collar mortality tables for healthy annuitants projected using generational mortality and scale MP-2017. Set forward one

(1) Data is being accumulated annually to present 10 years of the reported information.

See accompanying independent auditors' report.

<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>
15,621	14,482	19,151	17,433	18,896	17,554
<u>3,493</u>	<u>2,813</u>	<u>3,986</u>	<u>3,293</u>	<u>2,151</u>	<u>1,806</u>
<u><u>12,128</u></u>	<u><u>11,669</u></u>	<u><u>15,165</u></u>	<u><u>14,140</u></u>	<u><u>16,745</u></u>	<u><u>15,748</u></u>

MASSACHUSETTS WATER RESOURCES IRREVOCABLE OPEB TRUST

Required Supplementary Information – Schedule of Investments Returns (1)

June 30, 2018

(Unaudited)

(Dollars in 000s)

	<u>2018</u>	<u>2017</u>
Annual money-weighted rate of return, net of investment expense	8.58%	10.58%

(1) Data is being accumulated annually to present 10 years of the reported information

See accompanying independent auditors' report