# EMPLOYEES' RETIREMENT PLAN
# OF THE
# DENVER BOARD OF WATER COMMISSIONERS

Financial Statements

December 31, 2018 and 2017

(With Independent Auditors' Report Thereon)

**EMPLOYEES’ RETIREMENT PLAN**
**OF THE**
**DENVER BOARD OF WATER COMMISSIONERS**

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# INDEPENDENT AUDITORS' REPORT

The Board of Water Commissioners, City and County of Denver, Colorado
Employees' Retirement Plan of the Denver Board of Water Commissioners
Denver, Colorado

## Report on the Financial Statements

We have audited the accompanying statements of fiduciary net position and statements of changes in fiduciary net position of the Employees' Retirement Plan of the Denver Board of Water Commissioners (the Plan), as of and for the years ended December 31, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the Plan'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.

### *Auditors' Responsibility*

Our responsibility is to express an opinion 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 and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' 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 fiduciary net position of the Plan as of December 31, 2018 and 2017, and the respective changes in fiduciary net position for the 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 on pages 3-7 and Schedules of Changes in Net Pension Liability and Related Ratios, Employer Allocations and Investment Returns on pages 24-26 are presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated April 8, 2019, on our consideration of the Plan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the result of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Plan's internal control over financial reporting and compliance.

CliftonLarsonAllen LLP

**CliftonLarsonAllen LLP**

Greenwood Village, Colorado
April 8, 2019

**EMPLOYEES' RETIREMENT PLAN
OF THE
DENVER BOARD OF WATER COMMISSIONERS**

Management's Discussion and Analysis

December 31, 2018 and 2017

(Unaudited)

This is an analysis and overview of the financial activities of the Employees' Retirement Plan of the Denver Board of Water Commissioners (Plan) as of and for the years ended December 31, 2018 and 2017. This information should be read in conjunction with the financial statements and notes which follow.

**Financial Highlights**

As of December 31, 2018 and 2017, $342.8 million and $360.7 million, respectively, were held in trust for the payment of Plan benefits, and to meet the Plan's future obligations to its participants.

For 2018, the fiduciary net position restricted for pension of the Plan decreased by $17.9 million or 5.0%. This compares with a $46.3 million increase or 14.7% in 2017. The decrease in 2018 and the increase in 2017 was primarily due to changes in the fair value of the Plan's investments. Net depreciation in the fair value of investments was $62.2 million or 135.9% in 2018. Comparatively, net appreciation in the fair value of investments increased $27.8 million or 154.1% in 2017.

Additions to the Plan's fiduciary net position restricted for pension in 2018 included employer and employee contributions of $18.0 million and $662 thousand, respectively, offset with a net investment loss of $14.3 million resulting in total additions to the Plan's fiduciary net position restricted for pension of $4.3 million. Additions to the Plan's fiduciary net position restricted for pension in 2017 included employer contributions of $18.0 million and net investment income of $48.3 million resulting in total additions to the Plan's fiduciary net position restricted for pension of $66.3 million.

Deductions from the Plan's fiduciary net position restricted for pension for 2018 and 2017 were $22.2 and $20.0 million, respectively. The majority of the 2018 and 2017 deductions were from retirement benefit payments of $22.0 and $19.9 million, respectively.

The Plan's investment objective is to preserve the actuarial soundness of the Plan by achieving a long-term return of at least the actuarial earnings rate and to prudently manage the inherent investment risks that are related to the achievement of this goal. As of January 1, 2018 and 2017, the dates of the latest actuarial funding valuations, the funded ratio for the Plan was 80.8% and 79.9%, respectively.

**Overview of the Financial Statements**

The following discussion and analysis is intended to serve as an introduction to the Plan's financial statements, which follow. The statements include the following:

1. Statements of Fiduciary Net Position

2. Statements of Changes in Fiduciary Net Position

3. Notes to Financial Statements

4. Required Supplementary Information

The Statements of Fiduciary Net Position include information about Plan assets, liabilities and fiduciary net position restricted for pension, as of December 31, 2018 and 2017. The Statements of Changes in Fiduciary Net Position show the additions to, deductions from, and net increase (or decrease) in the Plan's fiduciary net position restricted for pension during 2018 and 2017.

The above financial statements are presented in accordance with the Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*, which provides guidance for determining a fair value measurement for financial reporting purposes and provides guidance for applying fair value to certain investments and disclosures related to all fair value measurements, Statement No. 67, *Financial Reporting for Pension Plans* (replacing GASB 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans* and GASB 50, *Pension Disclosures*) and GASB Statement No. 34, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments*, and all other applicable GASB pronouncements including GASB Statement No. 40, *Deposit and investment Risk Disclosures*. These pronouncements address the requirements for financial statement presentation and certain disclosures for state and local governmental entities. The Plan's financial statements comply with all material requirements of these pronouncements.

These financial statements provide a snapshot of the Plan's assets and liabilities as of December 31, 2018 and 2017, and the activities that occurred during those years. Both financial statements were prepared using the accrual basis of accounting as required by GASB. All investment activities have been reported based on the trade dates and have been valued by independent outside sources.

Notes to Financial Statements provide additional information that is essential to have a full understanding of the basic financial statements.

Required Supplementary Information prepared in accordance with U.S. generally accepted accounting principles provides additional information about the Plan's progress in its ability to meet its future obligations. It also provides the history of the Denver Board of Water Commissioners (Board) contributions to the Plan and investment returns for the last 10 years.

### Changes in Fiduciary Net Position Restricted for Pension

The Statement of Fiduciary Net Position displays Plan assets, liabilities, and fiduciary net position restricted for pension at year-end. The Statement of Changes in Fiduciary Net Position provide information on the source of the change in fiduciary net position restricted for pension during the year. The decrease in total assets of $17.8 million or 4.9% in 2018 was primarily the result of a decrease in the fair value of investments. Comparatively, in 2017, total assets increased $46.2 million or 14.7%. The increase in 2017 was primarily the result of an increase in the fair value of investments.

As of December 31, 2018, 2017 and 2016, the Plan's fiduciary net position was:

**Fiduciary Net Position Restricted for Pension**
(Amounts expressed in thousands)

| | Years ended December 31 | | | 2018 – 2017 | | 2017 – 2016 | |
|---|---|---|---|---|---|---|---|
| | 2018 | 2017 | 2016 | Increase (decrease) | Percentage change | Increase (decrease) | Percentage change |
| Cash and cash equivalents | $ 4,435 | 3,517 | 4,096 | $ 918 | 26.1% | $ (579) | (14.1)% |
| Dividends, interest, and other receivables | 104 | 410 | 438 | (306) | (74.6) | (28) | (6.4) |
| Investments, at fair value | 338,429 | 356,882 | 310,055 | (18,453) | (5.2) | 46,827 | 15.1 |
| Total assets | 342,968 | 360,809 | 314,589 | (17,841) | (4.9) | 46,220 | 14.7 |
| Total liabilities | 145 | 94 | 172 | 51 | 54.3 | (78) | (45.3) |
| Fiduciary net position restricted for pension | $ 342,823 | 360,715 | 314,417 | $ (17,892) | (5.0)% | $ 46,298 | 14.7% |

Winslow Capital Management, Inc. reported cash and cash equivalents as of December 31, 2018. Cash and cash equivalents are also held in the custodial cash account used for disbursement of benefit payments and administrative expenses. Starting in 2018, the Plan began using a third-party administrator (TPA) for benefit payment services. Cash is transferred monthly from the custodial cash account to the TPA for retiree benefit payments. As of December 31, 2018, $1.8 million was held with the TPA for benefit payments to be paid in January 2019. Many of the other managers have cash holdings from time to time, but do not specifically identify them in their statements of assets.

Liabilities of the Plan for 2018 consisted primarily of unpaid, but earned, investment manager fees of $106,500. In 2017, liabilities consisted primarily of outstanding investment expenses of $94,400. The change in the fiduciary net position restricted for pension is a function of the change in total assets offset by the change in total liabilities. The Plan recorded a decrease in fiduciary net position restricted for pension of $17.9 million in 2018 and an increase of $46.3 million in 2017.

## Additions

The funds needed to pay benefits are accumulated from the contributions approved by the Board, employee contributions, and the income generated from the Plan's investments, including interest, dividends, and proceeds from the sale of individual investments. Earnings on Plan investments are reported separately from fees charged by investment managers. Investment fees are reported using the best information available to Plan management. Board-approved contributions for 2018 and 2017 totaled $18.0 million. The Board has approved contributions of amounts more than the actuarially determined contribution for seven of the last ten years. Effective January 1, 2018, the Plan was amended to require employee contributions to the Plan. Employee contributions for 2018 totaled $662 thousand.

**Additions to Fiduciary Net Position Restricted for Pension**
(Amounts expressed in thousands)

| | Years ended December 31 | | | 2018 – 2017 | | 2017 – 2016 | |
|---|---|---|---|---|---|---|---|
| | 2018 | 2017 | 2016 | Increase (decrease) | Percentage change | Increase (decrease) | Percentage change |
| Employer contributions | $ 18,000 | 18,000 | 14,500 | — | $ —% | $ 3,500 | 24.1% |
| Employee contributions | 662 | — | — | 662 | —% | — | —% |
| Net investment income (loss) | (14,319) | 48,273 | 21,326 | (62,592) | (129.7) | 26,947 | 126.4 |
| Total additions, net | $ 4,343 | 66,273 | 35,826 | (61,930) | $ (93.4)% | $ 30,447 | 85.0% |

## Deductions

Annual Plan expenditures include retirement benefits, death benefits, refunds of employee contributions with associated interest and administrative expenses. The Plan's normal benefit is a single life annuity to retired members, but members may elect to receive benefits in various other forms, including a lump sum or annuities that provide spousal benefits upon the death of the member. Please refer to the Plan document for detailed information regarding the Plan. For the years ended December 31, 2018 and 2017, annual plan deductions totaled $22.2 and $20.0 million, respectively.

**Deductions to Fiduciary Net Position Restricted for Pension**
(Amounts expressed in thousands)

| | Years ended December 31 | | | 2018 - 2017 | | 2017 - 2016 | |
|---|---|---|---|---|---|---|---|
| | 2018 | 2017 | 2016 | Increase (decrease) | Percentage change | Increase (decrease) | Percentage change |
| Retirement benefits | $ 22,022 | 19,824 | 19,808 | $ 2,198 | 11.1% | $ 16 | 0.1% |
| Death benefits | 30 | 80 | 105 | (50) | (62.5) | (25) | (23.8) |
| Refunds of employee contributions | 3 | 23 | 18 | (20) | (87.0) | 5 | 27.8 |
| Administrative expenses | 180 | 48 | 52 | 132 | 275.0 | (4) | (7.7) |
| Total deductions | $ 22,235 | 19,975 | 19,983 | $ 2,260 | 11.31% | $ (8) | (0.04)% |

## Investment Activities

The U.S. real gross domestic product (GDP) increased at an annual rate of 3.4% according to the third quarter estimate released by the Bureau of Economic Analysis (BEA) in 2018. This was slightly lower than the BEA's revised second quarter estimate of 3.5% and well above the 2.2% reported for the first quarter. Stocks were marked by volatility, with the S&P 500 setting a record high in September yet finishing down 6.2% for the year. The volatility was driven by signs of slowing global economies, concerns about monetary policy, geopolitical tension, and inflation fears. In both international developed and emerging markets, stocks declined, with the FTSE All-World Index finishing the year down 12%. The U.S. experienced positive job creation, rising wages and low unemployment. The U.S. economy added 2.6 million new jobs in 2018. U.S. nominal average hourly earnings rose by 3.2% and the unemployment rate ended at 3.9% at the close of 2018. West Texas Intermediate Oil price peaked in October above $75 a barrel and declined below $45 in December amid concerns of oversupply and lower global demand growth. Core inflation in 2018 was contained around the Fed's target of 2%.

Denver Water's Retirement Plan posted a 3.9% loss for the year (-4.1% net of fees), slightly trailing the Plan's customized benchmark return of -3.8% on a gross of fees basis for 2018. The private equity segment was the best absolute and relative performer, posting a 16.1% gain for the year, 18.9 percentage points above the Russell 3000 index + 2.5% custom index return. The second-best performing segment on an absolute basis was the real estate segment, returning 7.1% for the year. The hedge fund segment recorded a 0.8% gain, outperforming its benchmark index, HFR Fund of Funds Composite, by 4.8 percentage points for the year. The fixed income segment returned 0.5% for the year versus the Denver Board of Water Fixed (DBOW) Income Blend Index return of 0.0%. The domestic public equity segment had a -6.5% return, underperforming its Denver Domestic Equity Index by 1.2 percentage points. The international equities segment reported a negative return of 15.2%, which slightly underperformed its DBOW International Equity Index by 1.0 percentage points for the year.

## Requests for Information

This discussion and analysis is designed to provide a general overview of the Plan's financial status as of December 31, 2018 and 2017, and changes in financial status for the years then ended. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

Treasurer
Denver Water
1600 W. 12th Ave.
Denver, CO 80204

**EMPLOYEES' RETIREMENT PLAN**
**OF THE**
**DENVER BOARD OF WATER COMMISSIONERS**

Statements of Fiduciary Net Position

December 31, 2018 and 2017

| | | 2018 | 2017 |
|---|---|---|---|
| Assets: | | | |
| Cash and cash equivalents | $ | 4,434,800 | 3,517,200 |
| Dividends, interest and other receivables | | 103,600 | 410,400 |
| Investments, at fair value: | | | |
| Equities: | | | |
| Common stock funds | | 184,526,800 | 209,316,700 |
| Fixed income: | | | |
| Other fixed income funds | | 73,791,300 | 55,017,500 |
| Real estate | | 51,680,900 | 52,168,600 |
| Hedge funds | | 18,518,600 | 33,981,500 |
| Private equity | | 9,911,600 | 6,397,500 |
| Total investments | | 338,429,200 | 356,881,800 |
| Total assets | | 342,967,600 | 360,809,400 |
| Liabilities: | | | |
| Accrued administrative expense | | 38,100 | — |
| Accrued investment expense | | 106,500 | 94,400 |
| Total liabilities | | 144,600 | 94,400 |
| Fiduciary net position restricted for pension | $ | 342,823,000 | 360,715,000 |

See accompanying notes to financial statements.

**EMPLOYEES' RETIREMENT PLAN**
**OF THE**
**DENVER BOARD OF WATER COMMISSIONERS**

Statements of Changes in Fiduciary Net Position

Years ended December 31, 2018 and 2017

| | | 2018 | 2017 |
|---|---|---|---|
| Additions: | | | |
| Employer contributions | $ | 18,000,000 | 18,000,000 |
| Employee contributions | | 662,000 | — |
| Investment income: | | | |
| Net appreciation (depreciation) in fair value of investments | | (16,431,900) | 45,806,700 |
| Interest | | 1,023,900 | 810,200 |
| Dividends | | 1,889,700 | 2,646,200 |
| Real estate income, net of operating expenses | | 1,421,800 | 1,258,700 |
| | | (12,096,500) | 50,521,800 |
| Less investment expense | | (2,222,600) | (2,248,500) |
| Net investment income (loss) | | (14,319,100) | 48,273,300 |
| Total additions | | 4,342,900 | 66,273,300 |
| Deductions: | | | |
| Retirement benefits | | 22,022,200 | 19,824,300 |
| Death benefits | | 30,000 | 80,000 |
| Refunds of employee contributions | | 3,100 | 23,100 |
| Administrative expenses | | 179,600 | 47,900 |
| Total deductions | | 22,234,900 | 19,975,300 |
| Net increase (decrease) in fiduciary net position | | (17,892,000) | 46,298,000 |
| Fiduciary net position restricted for pension: | | | |
| Beginning of year | | 360,715,000 | 314,417,000 |
| End of year | $ | 342,823,000 | 360,715,000 |

See accompanying notes to financial statements.

## (1) Plan Description

### *(a) Plan Administration*

The Board of Water Commissioners, City and County of Denver, Colorado (the Board), adopted the Employees' Retirement Plan of the Denver Board of Water Commissioners (Plan) in 1944. It is a defined benefit, single-employer plan covering substantially all regular employees of the Board.

The Board is made up of five members appointed by the Mayor of the City and County of Denver for staggered six-year terms. The Board is the sponsor, administrator and trustee of the assets of the Plan. The Board has delegated certain responsibilities regarding the Plan administration through a delegation resolution to the Chief Human Resources Officer and to the Chief Finance Officer. The delegation resolution instructs the CEO/Manager to create an advisory committee, with representation from the Finance, Human Resources, and Legal divisions, for the purpose of making recommendations to the CEO/Manager, the Chief Finance Officer and the Chief Human Resources Officer regarding the Retirement Program. The advisory committee, in and of itself, has no decision-making authority. The Plan is exempt from compliance with the Employee Retirement Income Security Act of 1974, as amended, as it is a governmental plan.

Various asset classes and investment manager styles are used to create a broadly diversified portfolio. The Board develops long-term asset allocation ranges, while the Chief Finance Officer is charged with developing and implementing a current asset allocation and rebalancing strategy, which is designed to reflect, and be consistent with the Board-approved long-term asset allocation ranges. Please refer to the notes of the financial statements under "Investment Policy" for more information on asset allocations.

### *(b) Plan Membership*

All regular and discretionary employees of the Board become participants of the Plan upon completion of the required introductory period. As of January 1, 2018, there were 1,825 Plan participants: 120 were deferred vested participants, 658 participants were retired, 1,034 participants were active and 13 were on long-term disability.

Effective January 1, 2018 the Plan was amended to allow for employee contributions. A first and second tier membership was created to define Plan members as of a specific date of employment. Tier one members are defined as employees hired prior to January 1, 2018, which includes an employee hired prior to January 1, 2018 who is in his or her required introductory period during the first portion of 2018. Tier two members are defined as employees hired or rehired on or after January 1, 2018. These changes are expected to lower the long-term liability of the Plan and help keep the Board's annual contribution stable.

### *(c) Benefits Provided*

Participants become fully vested after five years of employment. The normal retirement age is 65. Tier one members who reach age 55 and have 5 years of service are eligible to receive a reduced early retirement benefit. Unreduced retirement benefits prior to age 65 are provided for Tier one members who are a minimum of age 55, whose age and years of service total 75 on the last day of employment and whose employment ends at age 50 or later.

Tier two members who reach age 60 and have 5 years of service are eligible to receive a reduced early retirement benefit. Unreduced retirement benefits prior to age 65 are provided for employees who are 60 years of age or older and whose age and years of service total 85 on the last day of employment.

The service requirement for entitlement to spousal benefits is 5 years of service with the benefit commencing when the employee would have reached age 55 for Tier one members and age 60 for Tier two members. The Plan also provides for retirement benefits in the event of total and permanent disability, as determined by the Board.

Terminated vested participants or surviving spouses whose severance date occurs before the attainment of age 55 for Tier one members and age 60 for Tier two members, shall be eligible to elect a full single lump sum payment only in lieu of a monthly pension within 90 days of his or her severance date.

Plan benefits for Tier one members are integrated with Social Security benefits and are determined by a formula defined in the Plan document. The minimum normal benefit amount is calculated by multiplying the Plan participant's number of years of credited service times the amount of the participant's average final compensation times 1.5%. Employees with final income exceeding covered compensation receive an additional 0.45% times years of credited service times average final compensation in excess of covered compensation.

Plan benefits for Tier two members are not integrated with Social Security benefits. The minimum normal benefit amount is calculated by multiplying the Plan participant's number of years of credited service times the amount of the participant's average final compensation times 1.75%. For members hired prior to January 1, 2018 who terminate employment and are rehired on or after January 1, 2018, the benefit calculation is determined by using a combination of both Tier one and Tier two formulas.

The Plan also includes a benefit provision in the event a participant dies prior to the date the member quits, retires or is discharged. In general, the participant's spouse or beneficiary will receive 50% of the participant's accrued benefit. The Plan document contains detailed provisions regarding Plan benefits.

Benefits paid by the Plan are adjusted annually by the change in the Consumer Price Index, subject to a minimum payment equal to the amount of the initial benefit and a maximum annual increase of 4.4% for employees retiring on or after September 1, 1995 and 5% for employees who retired before September 1, 1995. Changes in the Consumer Price Index in excess of the amount of the maximum annual adjustment are applied toward future adjustments. Members with Tier one service shall be entitled to the cost-of living adjustment solely for benefits attributable to Tier one service. Tier two members are not entitled to a cost-of-living adjustment.

The Board reserves the right to amend the Plan, including its benefit provisions; however, any major changes (except termination of the Plan) made by the Board for employees hired prior to January 1, 2018 will not become effective until approved by two-thirds of the participants. Any change to the Plan made by the Board for employees hired or rehired on or after January 1, 2018 does not require the approval of employees, and employees hired or rehired on or after January 1, 2018, do not have any right to approval with respect to any changes to the Plan.

### *(d) Contributions*

The Plan was established, and is sponsored and administered by the Board, under authority of Article X, Section 10.1.6 of the Charter of the City and County of Denver, Colorado. The Plan document provides for periodic Board contributions at actuarially determined amounts sufficient to accumulate the necessary assets to pay benefits when due. The Board's funding policy defines the objectives of the Board in funding the benefits to be paid by the Plan. On August 28, 2013, the Board adopted changes to the funding policy effective for 2015 and future years. The changes redefined the funding guidelines by basing the Board's contributions to the Plan on an Actuarially Determined Contribution (ADC) calculated annually by an independent actuary, using agreed upon methods and assumptions in accordance with the Actuarial Standards Board and specified in the funding policy. Subsequently, on June 28, 2017, the funding policy was updated, which modified its objective to include employee contributions to the Plan and modified its determination of the Board's contribution to include the Plan's funding valuation results and any other facts and circumstances relevant to the funding decision. In 2018, the Board and members of the Plan made contributions totaling $18.0 million and $662 thousand, respectively. In 2017, the Board made contributions totaling $18.0 million. Plan contributions were made in accordance with actuarial funding valuations performed as of January 1, 2018 and 2017.

Effective January 1, 2018 employees hired prior to January 1, 2018 will contribute 3% of their compensation that will be phased in over three years with a 1% increase each year beginning in 2018. Employees hired after January 1, 2018 will contribute 3% of their compensation beginning immediately upon hire. All employee contributions on or after January 1, 2018 are credited with an interest rate of 2.5% compounded annually. Non-vested members who leave employment are eligible to receive an actuarial equivalence of a full single lump sum payment that will not be less than the member's contribution plus associated interest. As of December 31, 2018, the total balance of non-vested member contributions plus associated interest was $183,400. There were no refunds of contributions and interest of non-vested members in 2018.

Prior to January 1, 1992, employees were required to contribute to the Plan. The Board amended the Plan to disallow further employee contributions and determined that all amounts previously contributed to the Plan by employees would be refunded, with interest at 5% per annum, upon termination or retirement. Refund of contribution and interest payments of $3,100 and $23,100 were made in 2018 and 2017, respectively, for employees who retired or were terminated during the respective year. As of December 31, 2018 and 2017, for employees that contributed to the Plan prior to 1992, the total remaining employee contributions including accrued interest was $42,500 and $43,600, respectively. These amounts are not accrued as liabilities in the accompanying financial statements.

## (2) Summary of Significant Accounting Policies

### *(a) Basis of Accounting*

The Plan's financial statements are prepared using the accrual basis of accounting and in accordance with generally accepted accounting principles that apply to governmental accounting for defined benefit plans. Employer contributions are recognized when made, because there are no required due dates for contributions. Employee contributions are recognized in the period in which they are due. Other additions are recognized when due. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan document. Plan expenses, other than benefits and refunds are recognized on the accrual basis in accordance with generally accepted accounting principles.

### *(b) Plan Expenses*

Certain expenses are paid from the assets of the Plan and are recorded as administrative expenses on the financial statements. These expenses include actuarial fees, auditing expenses, benefit payment processing fees, legal fees and other miscellaneous expenses.

Additionally, investment manager fees and investment consulting expenses are recorded as investment expenses. Some investment managers assess performance fees that are netted against gains or losses and are not explicitly reported. Management calculates these performance fees based on the contractual agreement between the investment managers and the Plan.

## (3) Investments

### *(a) Investment Policy*

The Plan's investment policy and any changes to the policy are adopted by the Board acting in its capacity as Trustee of the Plan. The most recent version of the policy was approved on April 11, 2018. Revisions to the policy included changes to the language concerning proxy voting responsibilities, addition to the language surrounding the liquidity needs of the Plan, additional language that defines the policy review process, modification to the asset class structure by removing private real estate from the alternative asset class to a separate asset class, and revisions to the long-term asset allocation ranges.

The primary objective of the Board's investment policy is to preserve the actuarial soundness of the Plan by achieving a long-term return of at least the actuarially-assumed rate of return and to prudently manage the inherent investment risks that are related to the achievement of this goal. The Board recognizes that the investment objective is long-term in nature, and that actual year-to-year returns achieved may be above or below the actuarially assumed rate of return.

Long-term asset allocation ranges are developed based on several factors including: the long-term investment goals of the Plan; the Board's tolerance for short-term losses; the Plan's liquidity needs; and any legal or regulatory requirements.

As of December 31, the Plan's long-term asset allocation ranges were as follows:

**Long Term Asset Allocation Ranges**

| Asset segment | Allowable range Years ended December 31 2018 | 2017 |
|---|---|---|
| Public Equities | 40%–65% | 35%–70% |
| Fixed Income | 10–40 | 10–50 |
| Real Estate | 10-20 | - |
| Alternative | 5–20 | 10–40 |

### (b) *Money-Weighted Rate of Return*

For the years ended December 31, 2018 and 2017, respectively, the annual money-weighted rate of return on Plan investments, net of investment expense, was -3.95% and 15.30%. The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of pension plan investments by the proportion of time they are available to earn a return during that period. External cash flows are determined on a monthly basis and are assumed to occur at the end of each month. External cash inflows are netted with external cash outflows, resulting in a net external cash flow in each month. The money-weighted rate of return is calculated net of investment expenses.

### (c) *Custody and Management of Assets*

During 2018 and 2017, the Northern Trust Company served as asset custodian for all Plan assets. The Board has elected to hire professional investment managers to invest the assets of the Plan on a fully discretionary basis, subject to the investment policy of the Board. Each manager is evaluated periodically against the appropriate benchmark for his/her asset class and style. Failure to achieve the desired result does not necessitate, nor does achievement of the desired result preclude, termination of investment managers.

During 2018 and 2017, the Plan assets were managed by the following investment managers:

| | |
|---|---|
| Aberdeen Asset Management Inc. | Since August 2015 |
| Advisory Research Inc. | Terminated in November 2017 |
| AllianceBernstein L.P. | Since May 2018 |
| Barings LLC formerly Babson Capital Management LLC | Since August 2013 |
| BlackRock Alternative Advisors | Since March 2012 |
| BlackRock Institutional Trust Company N.A. | Since May 2016 |
| Dimensional Fund Advisors, LP | Since February 2008 |
| Harbert Management Corporation | Since July 2014 |
| Harding Loevner Funds, Inc. | Since August 2011 |
| Horsley Bridge Venture | Since July 2015 |
| Northern Trust Investments, N.A. | Since July 2006 |
| Principal Global Investors, LLC | Since March 2016 |
| Fidelity Institutional Asset Management | Since July 2011 |
| RREEF America LLC | Since January 2015 |
| UBS Realty Investors, LLC | Since May 1998 |
| Vanguard Group, Inc. | Terminated in May 2017 |
| Winslow Capital Management, LLC | Since August 2011 |

### *(d) Custodial Credit Risk*

Custodial credit risk is the risk that, in the event of a failure of the counterparty, the Plan will not be able to recover its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the Plan, and are held by either the counterparty or the counterparty's trust department or agent but not in the Plan's name.

All securities are held in a bank trust account in the Plan's name by the Plan's custodian except for investments in mutual and commingled funds, and limited partnerships, which by their nature, may have an independent custodian for the fund assets. Investments in short-term investment funds and in a domestic equity index fund are held in a SEC-registered pooled fund managed by the fund's custodian bank. Cash for benefit payments transferred to the benefit payment service provider immediately prior to the payment date is held in an omnibus account held in a commercial bank and not in the Plan's name and therefore, is exposed to custodial risk. As of December 31, 2018 and December 31, 2017, $1.8 and $1.6 million, respectively, was subject to custodial credit risk.

### *(e) Interest Rate Risk*

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the investment. Since the debt investment portfolio may contain holdings with prepayments and variable cash flows, an analysis of interest rate risk using the segmented time distribution method is presented in the schedule below:

**Schedule of Interest Rate Risk – Segmented Time Distribution of Investment Maturities as of December 31, 2018**

| Investment type ($ in thousands) | | Fair value/NAV | Less than 1 year | 1 to 6 years | 6 to 10 years | 10+ years | Maturity not determined** |
|---|---|---|---|---|---|---|---|
| Other fixed income funds | $ | 73,791 | | | | | 73,791 |
| Total | $ | 73,791 | — | — | — | — | 73,791 |

**Amounts represent investments in commingled funds. Maturities of individual securities held by the funds are not reported by the fund.

### *(f) Concentration of Credit Risk*

Concentration of credit risk is the risk of loss attributed to the magnitude of an investment in a single issuer. As of December 31, 2018, the Plan has no single issuer that exceeds 5% of total investments. Investments issued or explicitly guaranteed by the U.S. government and investments in diversified mutual funds, external investment pools, and other pooled investments are excluded.

### *(g) Credit Risk*

Credit risk is the risk that an issuer or other counterparty to a debt instrument will not fulfill its obligations to the Plan. There are no Plan-wide policy limitations for credit risk exposures within the portfolio. Each portfolio is managed in accordance with an investment contract that is specific as to permissible credit quality ranges, the average credit quality of the overall portfolios, and issuer concentration.

The quality ratings of investments in fixed income securities as described by Standard and Poor's and Moody's rating organization as of December 31, 2018 are listed below. For securities with split ratings, the lowest rating is shown.

**Schedule of Credit Risk as of December 31, 2018 ($ in thousands)**

| Investment type | Quality rating | | Fair value | Percentage of asset class |
|---|---|---|---|---|
| Other fixed income funds | NR/NA[1] | $ | 73,791 | 100% |
| Total fixed income securities | | $ | 73,791 | |

[1] NR/NA indicates the securities were either not able to be categorized into any other ratings or the rating was not available to the custodian.

### *(h) Foreign Currency Risk*

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment or a deposit. The Plan holds investments in mutual funds and hedge funds whose underlying securities are invested in multiple foreign currencies and are subject to foreign currency risk.

The following table provides the Plan's maximum exposure to foreign currency risk as a percentage of its total asset class as of December 31, 2018:

**Schedule of Assets in Foreign Currencies**

| | Percentage of asset class invested in foreign currencies |
|---|---|
| Equities | |
| Common stock funds | 27.60% |
| Hedge funds | 47.40 |
| Private equity | 2.30 |

### *(i) Derivatives*

Derivatives are financial instruments whose values depend upon, or are derived from, the value of something else, such as one or more underlying investments, indexes or currencies. Derivatives may be used both for hedging and to enhance returns. Derivatives may be traded on organized exchanges, or individually negotiated transactions with other parties, known as over-the-counter derivatives. Derivatives involve special risks and costs and may result in losses to the Plan. The successful use of derivatives requires sophisticated management, and, to the extent that derivatives are used, the Plan will depend on the investment managers and their advisors to analyze and manage derivatives transactions.

Certain commingled funds held by the Plan at the year-end were permitted through their individual investment guidelines to use derivative instruments, including forwards, futures, swaps, and options. Disclosures about derivative holdings of the commingled fund managers can be found in their respective audited financial statements. The Plan did not directly own any derivatives as of December 31, 2018 and 2017.

### *(j) Fair Value of Investments*

The Plan has the following recurring fair value measurements as of December 31, 2018 and 2017:

**Investments and Derivative Instruments Measured at Fair Value**
**($ in thousands)**

| | | 2018 | | |
|---|---|---|---|---|
| | | Fair Value Measurements Using | | |
| | **December 31, 2018** | **Quoted Prices in Active Markets for Identical Assets (Level 1)** | **Significant Other Observable Inputs (Level 2)** | **Significant Unobservable Inputs (Level 3)** |
| **Investments by fair value level** | | | | |
| Debt securities | | | | |
| Other fixed income funds | $ 73,791 | - | 73,791 | - |
| Total debt securities | 73,791 | - | 73,791 | - |
| Equity securities | | | | |
| Common stock funds | 184,527 | 171,512 | 13,015 | - |
| Total equity securities | 184,527 | 171,512 | 13,015 | - |
| Total investments by fair value level | $ 258,318 | 171,512 | 86,806 | - |
| **Investments measured by the net asset value (NAV)** | | | | |
| Real estate funds | $ 51,681 | | | |
| Hedge funds | 18,519 | | | |
| Private equity funds | 9,912 | | | |
| Total investments measured by the NAV | 80,112 | | | |
| Total investments measured at fair value | $ 338,430 | | | |

| | | | 2017 | | |
|---|---|---|---|---|---|
| | | | Fair Value Measurements Using | | |
| | | December 31, 2017 | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
| **Investments by fair value level** | | | | | |
| Debt securities | | | | | |
| Other fixed income funds | $ | 55,018 | - | 55,018 | - |
| Total debt securities | | 55,018 | - | 55,018 | - |
| Equity securities | | | | | |
| Common stock funds | | 209,317 | 191,058 | 18,259 | - |
| Total equity securities | | 209,317 | 191,058 | 18,259 | - |
| Total investments by fair value level | $ | 264,335 | 191,058 | 73,277 | - |
| **Investments measured by the net asset value (NAV)** | | | | | |
| Real estate funds | $ | 52,169 | | | |
| Hedge funds | | 33,981 | | | |
| Private equity funds | | 6,397 | | | |
| Total investments measured by the NAV | | 92,547 | | | |
| Total investments measured at fair value | $ | 356,882 | | | |

Equity securities, fixed income funds and common stock funds 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 based on evaluated prices using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Level 3 inputs are significant unobservable inputs. Pricing for all securities was provided by a third-party pricing vendor and developed in accordance with the provisions of GASB Statement No. 72. The valuation for investments measured at the net asset value (NAV) per share (or its equivalent) as of December 31, 2018 and 2017 are presented on the following tables.

**Investments Measured at the NAV**
($ in thousands)

| | | 2018 | | | | |
|---|---|---|---|---|---|---|
| | | NAV | | Unfunded Commitments | Redemption Frequency (If Currently Eligible | Redemption Notice Period |
| Real estate funds | $ | 51,681 | $ | 1,519 | Quarterly/None | 45-90 days |
| Hedge funds | | 18,519 | | - | Quarterly | 45-90 days |
| Private equity funds | | 9,912 | | 3,130 | None | N/A |
| Total investments measured at the NAV | $ | 80,112 | $ | 4,649 | | |

| | 2017 | | | |
|---|---|---|---|---|
| | **NAV** | **Unfunded Commitments** | **Redemption Frequency (If Currently Eligible** | **Redemption Notice Period** |
| Real estate funds | $ 52,169 | $ 1,762 | Quarterly/None | 45-90 days |
| Hedge funds | 33,981 | - | Quarterly | 45-90 days |
| Private equity funds | 6,397 | 5,971 | None | N/A |
| Total investments measured at the NAV | $ 92,547 | $ 7,733 | | |

### *Real Estate funds*

This fund category includes three open-end and one closed-end real estate funds. Open-end funds are reported at fair value based upon the NAV of shares/units held at year end, provided by fund managers. The closed-end fund, Harbert United States Real Estate Fund V, L.P., is reported at fair value based upon the net value of the Plan's ownership interest in partners' capital, as provided by the investment manager.

Investments in the open-end real estate funds can be redeemed with the fund managers as of the end of a calendar quarter. Redemption requests are subject to certain restrictions and the availability of cash. Should redemption requests exceed such available cash, the funds prorate available cash among withdrawing investors according to the ratio of the requesting investor's units to the total units of all investors then requesting redemptions. Any redemption request that is not fully honored in any given quarter is deemed effective in following quarters until completed. The funds are not obligated to sell assets, borrow funds, alter investment or capital improvement plans or reduce reserves in order to honor redemption requests.

The investment in the closed-end fund, which represents approximately 18.7% of the value of the investments in this type, cannot be redeemed. Distributions from the fund are received as the underlying investments of the funds are liquidated. It is expected that the fund life of the underlying assets will be 10 years from the initial draw down date with two one-year extension, at the discretion of the manager.

### *Hedge funds*

This fund category includes an investment in one hedge fund that is a multi-strategy fund pursuing a variety of absolute return strategies, investing in a wide range of financial instruments, including, but not limited to, long or short positions in U.S. or non-U.S. publicly traded or privately issued or negotiated common stocks, preferred stocks, stock warrants and rights, corporate or sovereign debt, bonds, notes or other debentures or debt participations, commodities, partnership interests, interests in investment companies, convertible securities, swaps, options (purchased or written), swaptions, futures contracts and other derivative instruments markets and relative value, as well as private investment funds (hedge fund of funds). The fair values of the investments in this category have been determined using the NAV per share of the investments, as provided by the investment manager. The fund limits the amount that can be redeemed each quarter to 25% of each investor's total investment.

***Private Equity Funds***

This fund category includes investments in two private equity fund-of-funds, which invest in private investment funds. Aberdeen U.S. Private Equity VI, L.P., which is a buyout fund-of-funds, offers a concentrated multi-manager approach with 14-16 private equity managers along with selective co-investments and secondary investments and focuses on small-to-medium sized companies. Horsley Bridge Venture XI, L.P., which is a venture capital fund-of-funds, is expected to invest in 15-20 established and emerging private equity managers providing seed and early stage exposure to the technology sector in the United States, Europe and Asia.

Private equity funds are reported at fair value based upon the net asset value of the Plan's ownership interest in partners' capital, as provided by the investment managers.

The investment in the private equity funds of funds can never be redeemed. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the fund life of the underlying assets will be 12 to 15 years from the initial draw down date.

***(k) Income Taxes***

Pursuant to a determination letter received from the Internal Revenue Service (IRS) dated June 11, 2014 for amendments enacted through June 27, 2012, the Plan is exempt from federal income taxes. The IRS no longer issues determination letters and the Plan has been subsequently amended and restated. The Board has retained outside counsel to ensure the Plan's continued compliance to meet IRS requirements and, therefore, believes it remains tax exempt.

***(l) Use of Estimates***

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the Plan's management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and changes therein, disclosure of contingent assets and liabilities, and the actuarial values at the date of the financial statements. Actual results could differ from these estimates.

**(4) Net Pension Liability of Denver Water**

The components of the net pension liability of Denver Water at December 31, 2018 and 2017 were as follows:

| | | Years ended December 31, ($ in thousands) 2018 | 2017 |
|---|---|---|---|
| Total pension liability | $ | 441,036 | 418,036 |
| Plan fiduciary net position restricted for pension | | (342,823) | (360,715) |
| Denver Water's net pension liability | $ | 98,213 | 57,321 |
| Plan fiduciary net position restricted for pension as a percentage of the total pension liability | | 77.73% | 86.29% |

### *(a) Actuarial Assumptions*

The total pension liability was determined by an actuarial valuation as of January 1, 2018 and January 1, 2017 with measurement dates of December 31, 2018 and 2017, and calculated based on the discount rates and actuarial assumptions below.

| | ($ in thousands) 2018 | 2017 |
|---|---|---|
| Inflation | 2.75% | 2.75% |
| Salary increases: Age-based rates from | 6.25 to 3.35 | 6.25 to 3.35 |
| Investment rate of return | 7.00% | 7.00% |

The mortality rates for 2018 and 2017 were determined using the Combined RP-2014 Healthy Employee Mortality Tables projected with scale MP-2016 for pre and post-retirement while the Combined RP-2014 Disabled Annuitant Mortality Tables projected with scale MP-2016 was used for post-disablement.

The actuarial assumptions used in the January 1, 2018 and the January 1, 2017 valuation were based on an actuarial experience study for the period 2011-2014

The long-term expected rate of return on pension 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 pension plan 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 the annualized long-term geometric mean return for each major asset class included in the pension plan's target asset allocation as of December 31, 2018 and 2017 are summarized in the following table.

| | December 31, 2018 | | December 31, 2017 | |
|---|---|---|---|---|
| | Target Allocation | Long-Term Expected Real Rate of Return | Target Allocation | Long-Term Expected Real Rate of Return |
| Asset class: | | | | |
| Domestic fixed income | 17.00% | 1.50% | 17.00% | 0.75% |
| Domestic equity | 30.00 | 4.90 | 30.00 | 4.60 |
| International equity | 20.00 | 5.00 | 20.00 | 4.75 |
| Private equity | 8.00 | 6.25 | 8.00 | 5.10 |
| Real estate | 15.00 | 4.00 | 15.00 | 3.50 |
| Hedge funds | 5.00 | 3.25 | 5.00 | 2.80 |
| Bank loans | 5.00 | 2.12 | 5.00 | 2.10 |
| | 100.00% | | 100.00% | |

### *(b) Discount Rate*

The discount rate used in the 2018 and 2017 actuarial valuation to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed Plan member contributions would be made at the current actuarially determined contribution rate and employer contributions would be made at rates equal to the difference between actuarially determined contribution rates and member rates. Based on these assumptions, the pension plan's fiduciary net position restricted for pension was projected to be available to make all projected future benefit payments of current active and inactive plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

### *(c) Sensitivity of the Net Pension Liability to changes in the Discount Rate*

The following presents the net pension liability of the Plan, calculated using the discount rate of 7.00% for 2018 and 2017 as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher than the current rate.

| **($ in thousands)** | | **1% Decrease** | **Current discount rate** | **1% Decrease** |
|---|---|---|---|---|
| **2018** | | **6.00%** | **7.00%** | **8.00%** |
| Net pension liability | $ | 150,365 | 98,213 | 54,223 |
| **2017** | | | | |
| Net pension liability | $ | 105,633 | 57,321 | 15,564 |

## (5) Related-Party Transactions

An affiliate of the Plan's custodian, Northern Trust Investments, N.A., is an investment manager for the Plan, which managed $72.8 million and $76.1 million of the Plan's investments at December 31, 2018 and 2017, respectively. For the years ended December 31, 2018 and 2017, the Plan incurred approximately $15,700 and $27,700, respectively, in management fees with this investment manager.

## (6) Plan Amendments

On December 5, 2018 the Plan was amended to address necessary Plan changes from transitioning to a third-party administrator for benefit payment services. The changes to the Plan addressed credited service for participants on short-term and long-term disability and on active military leave who return to work, covered compensation for participants on long-term disability, return of employee contributions when deferred vested participants die before receiving benefits, timing of certain elections of lump sum benefits, and timing for elections of benefits.

In December of 2017, the Plan was amended with an effective date of January 1, 2018 to clarify the actuarial table used for actuarial equivalence for the level income option, clarification of which provisions apply to members hired prior to January 1, 2018 and rehired on or after January 1, 2018, and clarification on the non-specific Plan language regarding the partial lump sum calculation so that it is consistent with the full lump sum calculation.

On March 22, 2017 the Plan was amended to add definitions of exempt, non-exempt, and part-time employees to clarify the calculation of the 1,000 hours worked for purposes of determining credited services. In addition, the Board approved needed changes to the Plan in response to amendments to the Plan that occurred in December of 2016. In order to implement these changes, a number of amendments to the Plan were required. The following changes were made:

- The addition of definitions of Tier one and Tier two members.
- Employee contributions from both tiers will be paid from pre-tax dollars.
- Added an election to receive a refund of accumulated contributions for non-vested members.
- The interest rate credited on refunds of employee contributions made on or after January 1, 2018 will be 2.5% compounded annually.
- Eliminate mandatory distributions except for required minimum distributions.
- Require a person rehired on or after January 1, 2018 be placed in Tier two. Credited services are retained by the member if money is left in the Plan or is restored. Benefit is calculated under two formulas for rehired Tier one employees.
- Provide for a time limit on restoration of credited service for reemployed non-vested members who took a refund of contributions. Member must be reemployed within two years of termination. Member must repay the refund of accumulated contributions with 8% interest within 60 days of reemployment otherwise they will forfeit their prior credited services. Can be repaid with after tax dollars or a trustee to trustee transfer from a qualifying plan.

Tier two members

- Changed the retirement formula for Tier two members to 1.75% times their average final compensation times their years of service and will not be integrated with social security.
- Early retirement is at age 60 with 5 years of service with reduced benefit.
- Tier two members cannot vote on major changes to the Plan.
- Changed average final compensation for Tier two members to the highest 60 consecutive months in 10 years.
- A previously vested employee reemployed within two years after receiving a lump sum payment may have previous credited service restored if the employee repays the lump sum within 60 days with 8% interest.

**EMPLOYEES' RETIREMENT PLAN**
**OF THE**
**DENVER BOARD OF WATER COMMISSIONERS**

Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios

(Unaudited)

| Schedule I ($ in thousands) | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|
| Total pension liability: | | | | | | | | | | |
| Service cost | $ 9,070 | 8,523 | 7,330 | 6,757 | 6,071 | 6,046 | | | | |
| Interest on total pension liability | 29,285 | 27,728 | 26,237 | 25,820 | 25,044 | 24,051 | | | | |
| Effect of plan changes | — | — | — | — | — | — | | | | |
| Effect of assumption changes or inputs | | 22,250 | — | 10,152 | — | — | | | | |
| Effect of economic/demographic (gains) or losses | 6,700 | (2,255) | (3,348) | 801 | — | 2,037 | | | | |
| Benefit payments | (22,055) | (19,927) | (19,932) | (20,693) | (20,366) | (17,850) | | | | |
| Net change in total pension liability | 23,000 | 36,319 | 10,287 | 22,837 | 10,749 | 14,284 | — | — | — | — |
| Total pension liability, beginning | 418,036 | 381,717 | 371,430 | 348,593 | 337,844 | 323,560 | | | | |
| Total pension liability, ending (a) | 441,036 | 418,036 | 381,717 | 371,430 | 348,593 | 337,844 | — | — | — | — |
| Plan fiduciary net position: | | | | | | | | | | |
| Employer contributions | 18,000 | 18,000 | 14,500 | 14,500 | 14,500 | 15,000 | | | | |
| Member contributions | 662 | — | — | — | — | — | | | | |
| Investment income net of investment expenses | (14,319) | 48,273 | 21,326 | 2,473 | 18,523 | 39,023 | | | | |
| Benefit payments | (22,055) | (19,927) | (19,931) | (20,694) | (20,365) | (17,851) | | | | |
| Administrative expenses | (180) | (48) | (52) | (44) | (144) | (116) | | | | |
| Net change in plan fiduciary net position | (17,892) | 46,298 | 15,843 | (3,765) | 12,514 | 36,056 | — | — | — | — |
| Fiduciary net position, beginning | 360,715 | 314,417 | 298,574 | 302,339 | 289,825 | 253,769 | | | | |
| Fiduciary net position, ending (b) | 342,823 | 360,715 | 314,417 | 298,574 | 302,339 | 289,825 | — | — | — | — |
| Net pension liability, ending = (a) – (b) | $ 98,213 | 57,321 | 67,300 | 72,856 | 46,254 | 48,019 | — | — | — | — |
| Plan fiduciary net position as a % of total pension liability | 77.73% | 86.29% | 82.37% | 80.38% | 86.73% | 85.79% | | | | |
| Covered payroll | $ 82,151 | 77,159 | 75,740 | 75,990 | 71,847 | 71,940 | — | — | — | — |
| Plan's net pension liability as a% of covered payroll | 119.55% | 74.29% | 88.86% | 95.88% | 64.38% | 66.75% | | | | |

See accompanying independent auditors' report.

This schedule is intended to show 10 years of information. Additional years will be displayed when they become available.

**EMPLOYEES' RETIREMENT PLAN**
**OF THE**
**DENVER BOARD OF WATER COMMISSIONERS**

Required Supplementary Information

Schedule of Employer Contributions
(Unaudited)

**Schedule II ($in thousands)**

| Year ended December 31 | Actuarially determined contribution | Actual employer contribution | Contribution deficiency (excess) | Covered payroll | Contribution as a % of covered payroll |
|---|---|---|---|---|---|
| 2009 | 11,872 | 14,500 | (2,628) | 65,721,304 | 0.02 |
| 2010 | 12,639 | 12,639 | — | 70,372,085 | 0.02 |
| 2011 | 12,414 | 15,400 | (2,986) | 69,926,961 | 0.02 |
| 2012 | 12,256 | 14,300 | (2,044) | 71,172,362 | 0.02 |
| 2013 | 11,958 | 15,000 | (3,042) | 71,940,163 | 0.02 |
| 2014 | 13,532 | 14,500 | (968) | 71,847,268 | 0.02 |
| 2015 | 14,068 | 14,500 | (432) | 75,990,457 | 0.02 |
| 2016 | 14,017 | 14,500 | (483) | 75,740,030 | 0.02 |
| 2017 | 18,089 | 18,000 | 89 | 77,159,061 | 0.02 |
| 2018 | 18,489 | 18,000 | 489 | 82,150,595 | 0.02 |

See accompanying independent auditors' report.

Notes to Schedule:

Valuation date:

Actuarially determined contribution rates are calculated as of January 1

Methods and assumptions used to determine contribution rates:

| | |
|---|---|
| Actuarial cost method | Entry age normal |
| Amortization method | Level dollar |
| Amortization period | Layered |
| Amortization period at 01/01/2014 | 15 years |
| Asset valuation method | 3-year smoothed market |
| Inflation | 2.75 |
| Salary increases | Age-based rates from 6.25% to 3.35% |
| Investment rate of return | 7.00%, net of pension plan investment expenses, including inflation |
| Cost of living adjustments | 2.75% |
| Retirement age | Experience-based table of rates that are specific to the type of eligibility condition |
| Turnover | Table of rates graded by years of service |
| Mortality | Pre-retirement – Combined RP-2014 Healthy Employee Mortality Tables projected with scale MP-2016.<br>Post-retirement – Combined RP-2014 Healthy Annuitant Mortality Tables projected with scale MP-2016.<br>Post-disablement – Combined RP-2014 Disabled Annuitant Mortality Tables projected with scale MP-2016. |

**EMPLOYEES' RETIREMENT PLAN**
**OF THE**
**DENVER BOARD OF WATER COMMISSIONERS**

Required Supplementary Information

Schedule of Investment Returns
(Unaudited)

**Schedule III**

| Fiscal year ending December 31, | Net money-weighted rate of return |
|---|---|
| 2009 | N/A |
| 2010 | N/A |
| 2011 | N/A |
| 2012 | N/A |
| 2013 | 15.35% |
| 2014 | 6.44% |
| 2015 | 0.81% |
| 2016 | 7.16% |
| 2017 | 15.30% |
| 2018 | (4.00)% |

See accompanying independent auditors' report.

This schedule is intended to show 10 years of information. Additional years will be displayed when they become available.

**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS***

The Board of Water Commissioners, City and County of Denver, Colorado
Employees' Retirement Plan of the Denver Board of Water Commissioners
Denver, Colorado

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of fiduciary net position, and the related statements of changes in fiduciary net position of the Employees' Retirement Plan of the Denver Board of Water Commissioners, as of and for the years ended December 31, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements, and have issued our report thereon dated April 8, 2019.

**Internal Control Over Financial Reporting**

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

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

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

**Compliance and Other Matters**

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

**Purpose of this Report**

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

CliftonLarsonAllen LLP

**CliftonLarsonAllen LLP**

Greenwood Village, Colorado
April 8, 2019