

# 2015 | COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the years ended December 31, 2015 and 2014  
Denver, Colorado



Dillon Reservoir

# 2015 | COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the years ended December 31, 2015 and 2014  
Denver, Colorado

**Prepared by the Accounting Section of the Finance Division**

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# INTRODUCTORY SECTION

May 10, 2016

To the Board of Water Commissioners and Our Customers:

We are pleased to transmit the “Comprehensive Annual Financial Report” (CAFR) of Denver Water for the year ended December 31, 2015.

Management assumes full responsibility for the completeness and reliability of the information contained in this report, based upon a comprehensive framework of internal control that it has established for this purpose. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

CliftonLarsonAllen, Certified Public Accountants, has issued an unmodified opinion on Denver Water’s financial statements for the years ended December 31, 2015 and 2014. The independent auditor’s report is located at the front of the Financial Section of this report.

“Management’s discussion and analysis” (MD&A) immediately follows the independent auditors’ report and provides a narrative introduction, overview, and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

### **The Report**

This report is presented in three sections as follows:

- I. **Introductory Section**, which includes this letter of transmittal, principal officials, organization chart, and the Certificate of Achievement for Excellence in Financial Reporting for the previous year’s report.
- II. **Financial Section**, which includes the independent auditors’ report on the financial statements, Management’s Discussion and Analysis, the basic financial statements, and supplemental capital asset and bond schedules.
- III. **Statistical Section**, which includes financial trends information, revenue capacity information, debt capacity information, demographic and economic information, and operating information generally presented on a multi-year basis.

### **Profile of Denver Water**

The privately owned Denver City Water Company was organized in 1870. It was merged into the Denver Union Water Company in 1894, along with several smaller companies serving various parts of a growing Denver. In 1918, Denver residents voted to create a five-member Board of Water Commissioners and buy the Denver Union Water Company’s water system for about \$14 million,

creating Denver Water. A five-member Board of Water Commissioners (the “Board”) structure is still in existence, governed under the Charter of the City and County of Denver Article X.

Denver Water is a public entity funded by water rates and new tap fees, not taxes. Today, its service area covers more than 335 square miles, including the City and several suburban distributors. The majority of Denver’s water comes from rivers and streams fed by mountain snowmelt. The South Platte River, Blue River, Williams Fork River and Fraser River watersheds are Denver Water’s primary water sources, but it also uses water from the South Boulder Creek, Ralston Creek, and Bear Creek watersheds. A system of reservoirs networked by tunnels and canals provide water to more than a million people. Three major treatment plants – Marston, Moffat, and Foothills - maintain water quality under the watchful eye of the Denver Water Quality Control Laboratory.

The mission of Denver Water is as follows:

*Denver Water will be a responsible steward of the resources, assets and natural environments entrusted to us in order to provide a high-quality water supply, a resilient and reliable system, and excellent customer service.*

Although Denver Water is not legally required to adopt budgetary accounting and reporting, the annual budget serves as the foundation for Denver Water’s financial planning and control. The budget process involves:

- Long Range Planning  
Denver Water maintains long-range capital, operation and maintenance, and financial plans that are updated annually. The Capital Plan projects additions, improvements, and replacements to water system facilities, based on projected demands for water, federal and state regulations, and ongoing system requirements. The Operation and Maintenance Plan includes the ongoing costs of operating and maintaining the water system and the impact of the Capital Plan on operations. The Financial Plan considers compliance with debt covenants and the year-end target cash reserve.
- Annual Work Plan Budgets  
The detailed annual work plan budgets for operation and maintenance activities, debt, and capital projects are developed during the budget process each year. These budgets are substantially based on the budget year projections provided by the long-range plans. These work plans itemize the cost of activities and projects within each program.
- Annual Budget Preparation  
The annual budget is prepared on a program budget basis that follows the flow of water from the sources of raw water to customers’ taps and cuts across organizational boundaries. The focus is first on what Denver Water as a whole is doing (what our resources are used for), then on organizational structure (the divisions and sections expending the resources), and then by type of expenditures (what types of resources – payroll, services, etc., are being used). The intent of this particular format is to facilitate the reader's understanding of how we are accomplishing our mission to serve our customers’ needs in the past, present and future.

## Factors Affecting Economic Condition

The information displayed in the financial statements presents Denver Water's current *financial position*, i.e., its *existing* resources and claims on those resources. The following information is provided to help assess Denver Water's *economic condition*, i.e., both existing and *future* resources and claims on those resources. Stated differently, economic condition reflects not only today's financial position, but also the prospects that today's financial position will improve or decline.

### Local Economy

Denver is the center of economic activity in the region, serving as a business, recreational, higher educational and cultural hub. Major features of the economy include the central business district, state capital, Denver International Airport, extensive library facilities, several professional sports teams, institutions of higher learning, and numerous museums and other cultural facilities. The economy of the metropolitan area generally mirrors that of the state. An overview of the general demographic and economic conditions in the Denver metropolitan area can be found in Section D, *Demographic and Economic Information*, in the Statistical Section.

### Long-Term Financial Planning – Future Initiatives

A representation of capital projects included in the long range planning process are as follows:

- Approximately \$380 million in total project costs for Denver Water's Gross Reservoir Expansion Project, previously known as the Moffat Collection System Project, for the evaluation, permitting, mitigation, and construction process to augment our supply to the northern service area.
- The Board approved the Operations Complex Redevelopment (OCR) project. The campus project will include construction of a new consolidated trades shop, a warehouse, fleet maintenance and operations, a parking structure, and a new administration building. In addition to the new construction, the Three Stone Building, the T & D Warehouse and Credit Union, and Building 5 (or the Shed) will be remodeled. It is expected the project will take approximately 4 years to complete. The projected budget impact for this project is \$195.8 million.

Revenue adjustments identified in the 2016 Financial Plan are set at levels to meet annual revenue requirements, debt service coverage, and target reserves. Revenue requirements include annual operation and maintenance expenses, payments on existing and proposed debt service, and rate-funded capital projects. Denver Water uses a combination of debt and cash reserves to maintain leveled annual revenue adjustments to meet these requirements. The use of debt to fund specific capital projects distributes the annual cost of facilities over time rather than requiring the full amount in any one year. The adopted revenue adjustment for 2016 was effective beginning April 1, 2016. This adjustment is expected to produce 3.8% of additional revenue over a 12-month period, assuming normal weather and consumption. In addition, annual revenue adjustments of 3.8% are projected in 2017 through 2025. The financial plan is updated annually.

## Relevant Financial Policies and Practices – Investment Balance

Denver Water established a comprehensive set of financial policies and practices as a basic framework for the financial management of Denver Water and its planning and budgeting process. These policies and practices are listed in the Budget Book. Two investment balance related policies and practices are as follows:

### Balanced Budget

*The Denver Board of Water Commissioners has not adopted an official policy on a balanced budget. Our practice is to balance the budget by the planned use or contribution to investment balances.*

### Cash Reserves

*The Charter of the City and County of Denver specifically allows the accumulation of reserves “sufficient to pay for operation, maintenance, reserves, debt service, additions, extensions, and betterments, including those reasonably required for anticipated growth of the Denver Metropolitan area and to provide for Denver’s general welfare.”*

Denver Water began 2016 with an actual cash and investment balance of \$241 million, at cost. The 2016 budget projects this balance to increase by receipts of \$378 million and decrease by expenditures of \$388 million, resulting in a projected 2016 ending balance of \$231 million (see page III-55 for details).

Note 2, *Deposits and Investments*, in the Financial Section provides more information on Denver Water’s investments. Investment balances in published financial statements are not directly comparable to the budgeted investment balance because different valuation methods are used.

## Major Initiatives – 2016 Goals and Objectives

After extensive review of our organizational performance related to the Strategic Plan, the Board and Executive Team identified seven, three-year breakthrough objectives. Five of these are a continuation of work initiated in 2015 and two (sustainability and development of a water supply, treatment and delivery strategy for the future) are new. Each breakthrough objective is supported by one or more related goals:

- **Transform to a true culture of safety with no lost-work-day injuries by 2017.**
  - Complete a first pass of the Safety Value Stream.
  - Reduce lost-time accidents to no more than seven in 2016.
  - Reduce total injuries by another 25 percent.
  
- **Improve top-box customer satisfaction score by 10 percent from 2013 scores.**
  - Implement tactics from the 2015 survey with a goal of increasing top-box customer satisfaction 2 percent more by 2017 (from 2015 survey).
  - Conduct a third pass of the Customer Experience Value Stream, focused on customer interaction and education and/or the distributor experience.

- **Become the Employer of the Future**, one that retains and attracts top talent through integrated procedures, policies, benefits and philosophies that create a unique, diverse and energizing culture.
  - Implement Phase II of the HR Roadmap.
  - Solidify the spirit of Employee of the Future and employee engagement in the organization.
- **Redevelop the Operations Complex** in a way that is fiscally responsible, integrates field and administrative staff, creates a public presence, celebrates water and the history of Denver Water, is sustainable, allows for future flexibility, is safe and efficient and promotes retention and recruitment. Complete by 2020.
  - Manage key OCR policy issues like sustainability, scope, schedule and budget.
  - Consider new ways to communicate with employees and keep them engaged.
- **Achieve full alignment of budget development and execution with strategic priorities and True North metrics; incorporate processes to control spending.**
  - Complete ORCA Increment One and begin Increment Two. Implement and demonstrate enhanced financial governance and controls.
  - Conduct an IT review and initiate development of a long-term IT strategy.
- **Create a water supply, treatment and delivery strategy for the future.**
  - Initiate a new Integrated Resource Plan that expands on the prior IRP by:
    - Integrating the planning of our entire system with all stakeholders.
    - Driving capital spending.
    - Embracing a vision for urban water efficiency, including drinking water, wastewater and stormwater.
- **Become a sustainable organization** by continually managing and reducing our environmental impact, measured by recognition as a Gold Leader in the State of Colorado’s Environmental Leadership Program.
  - Develop and begin implementation of a framework for organization-wide sustainability, including goals, metrics and budget.
  - Develop an environmental management system, pursuant to ISO 14001, with a goal to achieve Silver Partner status for treatment plants and Water Quality Lab.

### **SEC Periodic Disclosure Requirements**

Rule 15c2-12 requires Participating Underwriters to determine that the issuer of municipal securities has undertaken in a written agreement for the benefit of holders of such securities to provide annual financial information in a timely manner to the Municipal Securities Rulemaking Board’s Electronic Municipal Market Access (EMMA<sup>®</sup>) system. The Government Finance Officers’ Association of the United States and Canada (“GFOA”) recommends that the disclosure be contained in the CAFR. The disclosure that Denver Water has undertaken to provide in order that participating underwriters may comply with this rule can be found on the following pages:

Budgetary Controls	Page I-2
Audited Financial Statements	Section II - Financial Section
Total Outstanding Indebtedness	Section II - Notes 6, 7, 9, Exhibits III-A through III-D
The Service Area	Page III-13
Number of Customer Accounts	Page III-22
System Development Charges and Participation Receipts	Page III-32
Receipts and Expenditures	Page III-55
Total Treated Water Delivered/Consumption	Page III-78

Information for prior years and information related to the City and County of Denver is available on the Municipal Securities Rulemaking Board's Electronic Municipal Market Access website at <http://www.emma.msrb.org>.

### **Awards, Recognition and Acknowledgements**

#### **Awards**

***Comprehensive Annual Financial Report.*** The GFOA awarded a Certificate of Achievement for Excellence in Financial Reporting to Denver Water for its CAFR for the fiscal year ended December 31, 2014. This was the 27th consecutive year that Denver Water has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized CAFR. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

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

***Annual Budget.*** In addition, Denver Water also received the GFOA's Distinguished Budget Presentation Award for its annual budget document for the fiscal year beginning January 1, 2015. This is the 24th consecutive year Denver Water has received this award. In order to qualify for this award, Denver Water's budget document had to be judged proficient as a policy document, a financial plan, an operations guide, and a communications device.

#### **Recognition**

- Platinum Award for Utility Excellence from the Association of Metropolitan Water Agencies recognized our commitment to effective utility management, effective and efficient operations and continuous improvement.
- Global Water Award for Excellence in Sustainability (runner-up) recognized our sustainability efforts as demonstrated through the WISE project, Colorado River Cooperative Agreement and Colorado River System Conservation Program.
- Excellence in Promoting WaterSense Labeled Products Award from the Environmental Protection Agency.
- Colorado Environmental Leadership Program Bronze Award from the Colorado Department of Public Health and Environment for all four treatment plants.

- American Water Works Association Directors Award recognizing Phase III Partnership for Safe Water status at Moffat Water Treatment Plant.
- Leadership in potable reuse research recognition by CH2M.

### **Acknowledgments**

We wish to express our appreciation to all members of Denver Water who assisted and contributed to the preparation of this report. Credit must also be given to the Board of Water Commissioners for their unfailing support for maintaining the highest standards of professionalism in the management of Denver Water's finances.

Sincerely,



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James S. Lochhead  
CEO/Manager



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Angela C. Bricmont  
Director of Finance

## BOARD OF WATER COMMISSIONERS



**Top from left, Penfield W. Tate III, John R. Lucero;  
Bottom from left, Greg Austin, Thomas A. Gougeon, Paula Herzmark**

Penfield W. Tate III, President  
Attorney, Kutak Rock LLP

*Commissioner since October 18, 2005;  
Term expires July 10, 2017.*

John R. Lucero, First Vice President  
Formerly Deputy Director, Mayor's Office of Economic Dev.  
Currently Principal, Lucero Development Services

*Commissioner since July 18, 2007;  
Term expires July 10, 2021.*

Greg Austin  
Former partner, Holland & Hart LLP.

*Commissioner since July 28, 2009;  
Term expires July 10, 2019.*

Thomas A. Gougeon  
President, Gates Family Foundation

*Commissioner since August 10, 2004;  
Term expires July 10, 2017.*

Paula Herzmark  
Executive Director, Denver Health Foundation

*Commissioner since April 24, 2009;  
Term expires July 10, 2019.*

## LAST 20 COMMISSIONERS

Charles G. Jordan	Sep 26, 1983 to Jun 28, 1985	Ronald L. Lehr	Jul 21, 1993 to Apr 20, 1999
D. Dale Shaffer	Aug 9, 1978 to Jul 8, 1985	Joe Shoemaker	Jul 10, 1995 to Jul 9, 2001
John A. Yelenick	Jul 14, 1969 to Aug 25, 1987	Andrew D. Wallach	Jul 18, 2001 to Aug 5, 2003
Marguerite S. Pugsley	May 10, 1978 to Aug 25, 1987	Daniel E. Muse	Feb 10, 2000 to Nov 13, 2003
Elizabeth A. Hennessey	Nov 4, 1985 to Jul 28, 1989	Richard A. Kirk	Jul 21, 1993 to Oct 18, 2005
Malcolm M. Murray	Aug 25, 1987 to Jul 12, 1993	William R. Roberts	Jul 10, 1997 to Oct 18, 2005
Donald L. Kortz	Aug 25, 1987 to Jul 12, 1993	Harris D. Sherman	Dec 6, 2005 to Feb 16, 2007
Monte Pascoe	Sep 26, 1983 to Jul 10, 1995	Denise S. Maes	Jul 10, 1995 to Jul 10, 2007
Romaine Pacheco	Jul 31, 1989 to Jul 10, 1995	Susan D. Daggett	Nov 6, 2007 to Jan 22, 2009
Hubert A. Farbes, Jr.	Jul 8, 1985 to Jul 14, 1997	George B. Beardsley	Feb 2, 2004 to Mar 13, 2009

## MANAGER AND STAFF



**Top: James S. Lochhead, CEO/Manager;**

**Second row from left: Julie Anderson, Director of Customer Relations; Angela C. Bricmont, Director of Finance; Sally Covington, Director of Public Affairs; Christopher R. Dermody, Director of Information Technology; Gail Cagle, Director of Human Resources; Third row from left: Brian D. Good, Deputy Manager Organizational Improvement; Mike King, Director of Planning; Robert J. Mahoney, Director of Engineering; Thomas J. Roode, Director of Operations & Maintenance; Patricia L. Wells, General Counsel**

## DISCRETIONARY PERSONNEL

(Employees Serving in Executive Discretionary Positions Solely at the Pleasure of the Board)

### Manager and Senior Staff

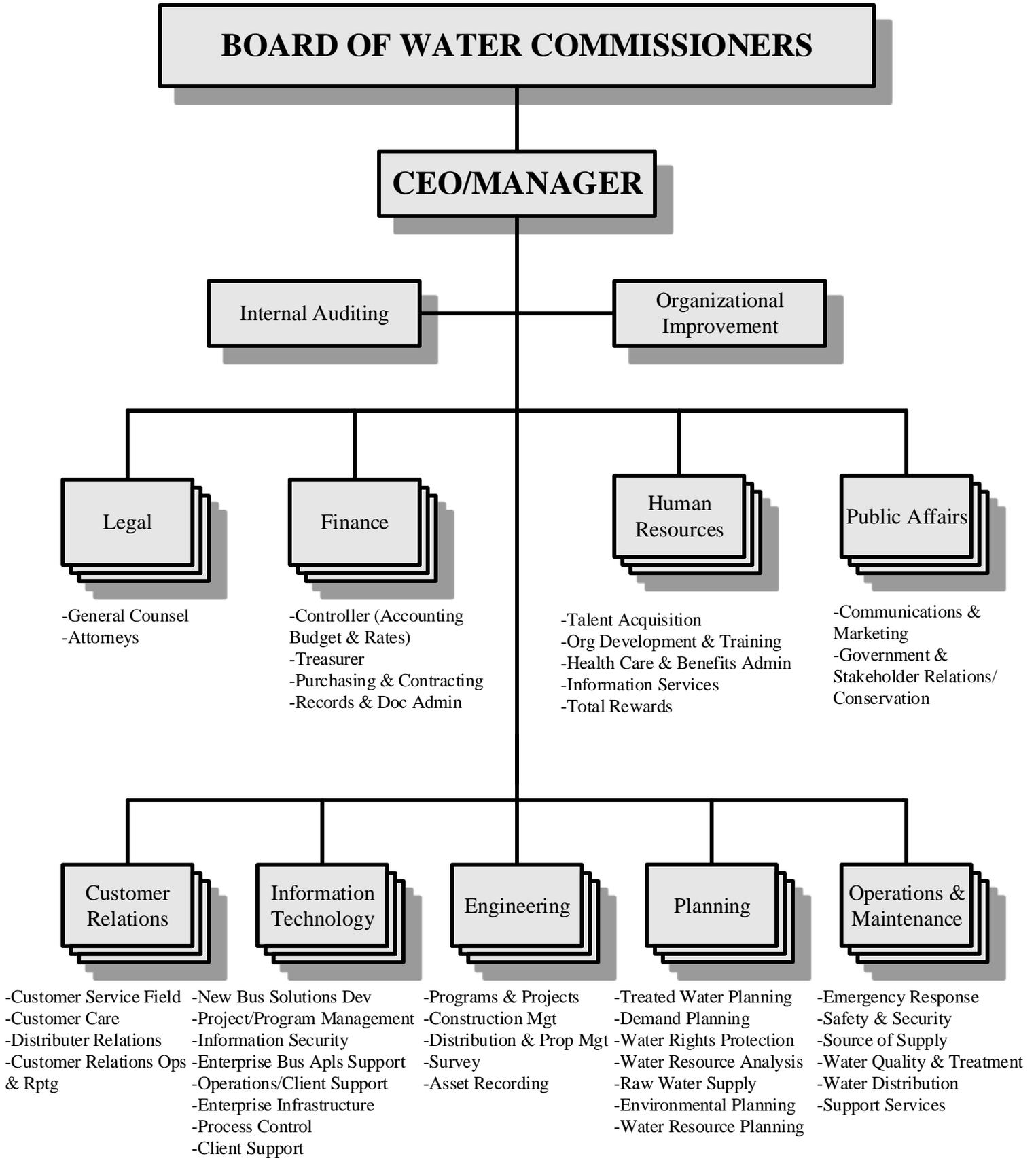
James S. Lochhead, CEO/Manager  
Julie Anderson, Director of Customer Relations  
Angela C. Bricmont, Director of Finance  
Sally Covington, Director of Public Affairs  
Christopher R. Dermody, Director of Information  
Technology  
Gail Cagle, Director of Human Resources  
Brian D. Good, Deputy Manager Organizational  
Improvement  
Mike King, Director of Planning\*  
Robert J. Mahoney, Director of Engineering  
Thomas J. Roode, Director of Operations &  
Maintenance  
Patricia L. Wells, General Counsel

### Other Staff

Teresa Bryant CPA, Controller  
Prescott B. Coleman, Chief Internal Auditor  
Melissa E. Elliot, Asst Dir PA-Gov & Stkhdr Rel & Con  
Trina L. McGuire-Collier, Asst Dir PA-Comm & Mktg  
Stephen Reum, Assistant Chief of Engineering  
Usha Sharma, Treasurer

\* Mike King joined Denver Water in 2016 and replaced David Little who retired in 2015

ORGANIZATION CHART





Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

**Denver Water  
Colorado**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**December 31, 2014**

Executive Director/CEO

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# FINANCIAL SECTION

**BOARD OF WATER COMMISSIONERS  
CITY AND COUNTY OF DENVER, COLORADO**

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## CliftonLarsonAllen

### INDEPENDENT AUDITORS' REPORT

Board of Water Commissioners  
Denver Water  
Denver, Colorado

#### **Report on the Financial Statements**

We have audited the accompanying financial statements of the business-type activities of the Board of Water Commissioners, City and County of Denver, Colorado (the Board), as of and for the year ended December 31, 2015, and the related notes to the financial statements, which collectively comprise the Board'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. 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 Board'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 Board'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.

#### ***Opinions***

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities of the Board of Water Commissioners, City and County of Denver, Colorado as of December 31, 2015, and the respective changes in financial position and cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### ***Emphasis of a Matter***

##### ***Adjustments to Prior Period Financial Statements***

The financial statements of the Board as of December 31, 2014, were audited by other auditors whose report dated April 30, 2015, expressed an unmodified opinion on those financial statements. As discussed in Note 1 (P) to the financial statements, the Board has adjusted its 2014 financial statements to retrospectively adopt the provisions of Governmental Accounting Standards Board (GASB) Statement No. 68 – *Accounting and Financial Reporting for Pensions*, which represents a change in accounting principle.

In addition, the Board adopted the provisions of GASB Statement No. 71 – *Pension Transition for Contributions Made Subsequent to the Measurement Date*. The other auditors reported on the financial statements before the retrospective adjustment.

As part of our audit of the fiscal year 2015 financial statements, we also audited the adjustments to the 2014 financial statements to retrospectively apply the change in accounting as described in Note 1 (P). In our opinion, such adjustments are appropriate and have been properly applied. We were not engaged to audit, review, or apply any procedures to the Board's 2014 financial statements other than with respect to the adjustments and, accordingly, we do not express an opinion or any other form of assurance on the 2014 financial statements as a whole.

### **Other Matters**

#### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, Schedule of Changes in Net Pension Liability and Related Ratios and Schedule of Board Pension Contributions, and Schedule of OPEB Funding Progress as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### *Other Information*

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Board's basic financial statements. The Other Supplemental Information as listed in the table of contents and other information, including the Introductory and the Statistical Section, as listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Other Supplemental Information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Other Supplemental Information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The Introductory Section and Statistical Section have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.



**CliftonLarsonAllen LLP**

Greenwood Village, Colorado  
May 10, 2016

**BOARD OF WATER COMMISSIONERS  
CITY AND COUNTY OF DENVER, COLORADO**

Management's Discussion and Analysis (Unaudited)

December 31, 2015 and 2014

The following is management's discussion and analysis ("MD&A") of the financial activities of the Board of Water Commissioners (the "Board") for the years ended December 31, 2015 and 2014. This information should be read in conjunction with the basic financial statements which follow.

**FINANCIAL HIGHLIGHTS**

The Board's financial position, measured by the change in net position, improved 5% during 2015, compared to 0.2% during 2014. The 2014 financial statements were restated from published due to the implementation of GASB Statement No. 68 *Accounting and Financial Reporting for Pensions*.

- **Operating income** was \$36.2 million in 2015 compared to \$25.6 million in 2014, an increase of 41%.
- **Income before capital contributions** was \$23.0 million in 2015 compared to \$13.0 million in 2014, an increase of 77%.
- **Capital contributions** were \$69.4 million in 2015 and \$55.9 million in 2014, and increase of 24%.
- **Net position** increased \$92.4 million, or 5%, in 2015 compared to \$3.5 million, or 0.2%, for the 2014 financial statements after reducing net position by \$65.4 million for the cumulative effect of the GASB 68 implementation.
- **Capital asset additions** were \$131.1 million in 2015 compared to \$125.4 million in 2014, an increase of 5%.

**OVERVIEW OF THE BASIC FINANCIAL STATEMENTS**

This MD&A is intended to serve as an introduction to the Board's basic financial statements, which are comprised of five components: 1) statements of net position, 2) statements of revenues, expenses, and changes in net position, 3) statements of cash flows, 4) notes to the basic financial statements, and 5) required supplementary information. The Board also provides certain supplemental information which is presented for additional analysis and is not a required part of the basic financial statements.

The **statements of net position** present information on all of the Board's (a) assets and deferred outflows of resources, and (b) liabilities and deferred inflows of resources, with the difference between the two reported as **net position**. "Deferred outflows of resources" is defined as consumption of net assets that is applicable to a future reporting period rather than the current reporting period. "Deferred inflows of resources" is defined as an acquisition of net assets that is applicable to a future reporting period rather than the current reporting period. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Board is improving or declining.

The **statements of revenues, expenses, and changes in net position** present information showing how the Board's net position changed during the years presented. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. This is known as the accrual basis of accounting. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in the future (e.g., unbilled water revenue and earned but unused vacation leave) or that may have occurred in the past (e.g., amortization of debt premiums or

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discount and prepaid contributed capital). This statement measures the financial outcomes of the Board's activities and can be used to determine whether the Board has successfully recovered all its economic costs through its water rates, capital contributions, and other charges.

The **statements of cash flows** report cash receipts, cash payments, and net changes in cash resulting from operating activities, capital and related financing activities, and investing activities for the years presented.

The **notes to the basic financial statements** provide additional information that is essential to a full understanding of the data provided in the basic financial statements, such as the Board's accounting policies, significant account balances and activities, material risks, obligations, commitments, contingencies and subsequent events, if any.

**Required supplementary information** provides the detail in support of the changes in the net pension liability and information pertaining to the Board's actuarially determined contributions to the pension plan.

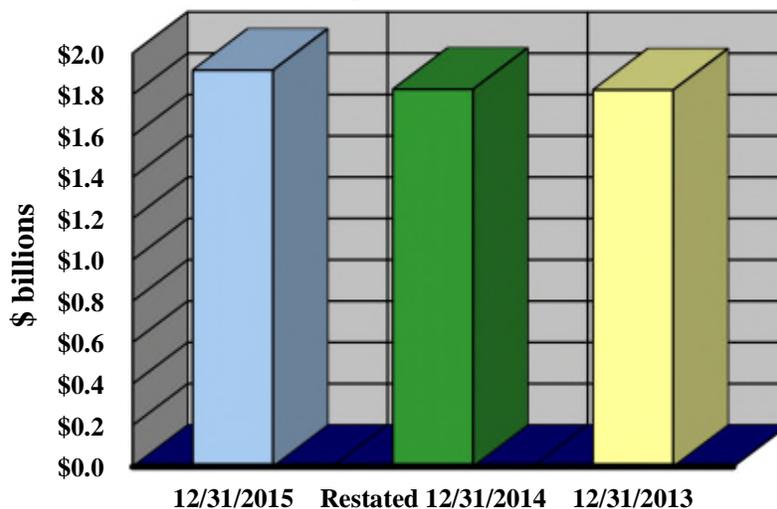
**Supplemental information** provides details of the Board's capital assets and bonded debt.

**FINANCIAL ANALYSIS**

**NET POSITION**

As discussed above, net position may serve over time as a useful indicator of the Board's financial position. The Board's net position was \$1.9 billion at December 31, 2015, an increase of \$92.4 million, or 5%, from December 31, 2014. Net position was \$1.8 billion at December 31, 2014, an increase of \$3.5 million, or 0.2%, from December 31, 2013 (see Figures 1 and 2 and Table 1).

**Figure 1 - Net Position**



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<b>Table 1 - Condensed Statements of Net Position</b> (amounts expressed in thousands)							
	As of December 31,			2015 - 2014		2014 - 2013	
	2015	2014 Restated	2013	Increase (Decrease)	%	Increase (Decrease)	%
Current and other assets	\$ 285,587	\$ 280,894	\$ 283,900	\$ 4,693	2%	\$ (3,006)	(1)%
Capital assets, net	<b>2,146,900</b>	2,069,581	1,997,591	77,319	4	71,990	4
Total assets	<b>2,432,487</b>	2,350,475	2,281,491	82,012	3	68,984	3
Deferred outflows of resources	<b>20,295</b>	20,910	4,801	(615)	(3)	16,109	336
Total assets and deferred outflows	<b>2,452,782</b>	2,371,385	2,286,292	81,397	3	85,093	4
Current liabilities	<b>57,181</b>	67,949	57,927	(10,768)	(16)	10,022	17
Noncurrent liabilities	<b>467,905</b>	461,733	406,237	6,172	1	55,496	14
Total liabilities	<b>525,086</b>	529,682	464,164	(4,596)	(1)	65,518	14
Deferred inflows of resources	<b>9,666</b>	16,079	-	(6,413)	(40)	16,079	-
Total liabilities and deferred outflows	<b>534,752</b>	545,761	464,164	(11,009)	(2)	81,597	18
<u>Net position:</u>							
Net investment in capital assets	<b>1,735,020</b>	1,641,601	1,579,642	93,419	6	61,959	4
Restricted	<b>12,047</b>	12,375	12,327	(328)	(3)	48	0
Unrestricted	<b>170,963</b>	171,648	230,159	(685)	(0)	(58,511)	(25)
Total net position	<b>\$ 1,918,030</b>	\$ 1,825,624	\$ 1,822,128	\$ 92,406	5%	\$ 3,496	0.2%

The largest portion of the Board's net position reflects its investment in capital assets (i.e., utility plant); less any related debt used to acquire those assets. The Board uses these capital assets to provide water; consequently, these assets are not available for future spending. Although the Board's investment in its capital assets is reported net of related debt, the resources to repay this debt must be provided from other sources, since the capital assets themselves are not intended to be liquidated to repay these liabilities.

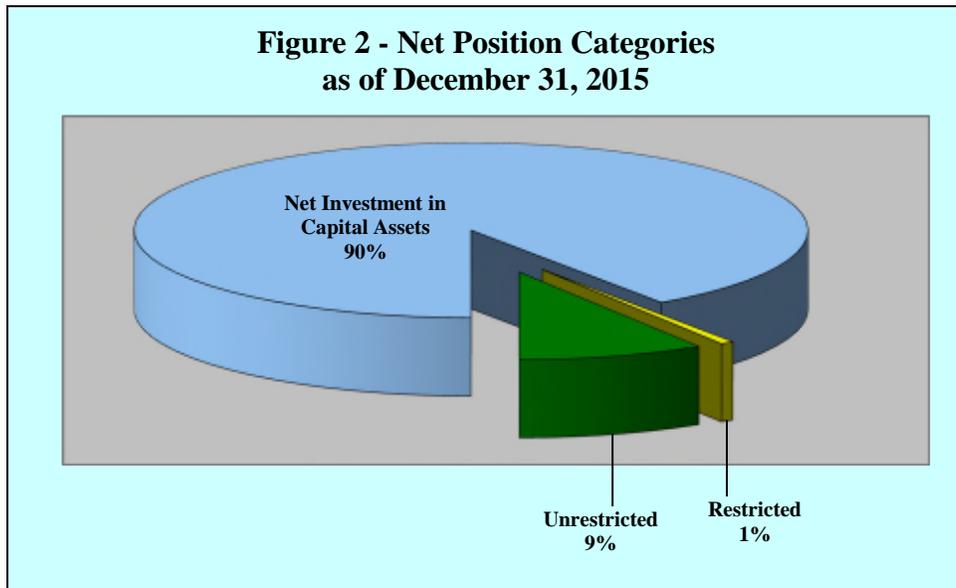
A small portion of the Board's net position represents resources that are subject to external restrictions on how they may be used. The Board's 2015, 2014, and 2013 restricted net positions consisted of debt reserve funds for revenue bonds.

The remaining balance of the Board's net position represents unrestricted net position and may be used to meet the Board's ongoing obligations to creditors.

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The Board's increase in net position during 2015 of \$92.4 million or 5% indicates an improved financial position.

Other changes in the statements of net position were as follows:

- **CURRENT AND OTHER ASSETS** in 2015 increased \$4.7 million, or 2% from 2014. They decreased \$3.0 million, or 1% between 2014 and 2013 (see Table 1). The increase in 2015 was primarily due to prepaid capacity use and an increase in investments. The decrease in 2014 was primarily due to the write off of the prepaid pension asset as part of the implementation of GASB 68, offset by normal operating fluctuations.
- **CAPITAL ASSETS, NET** in 2015 increased \$77.3 million, or 4% from 2014. They increased \$72.0 million, or 4% between 2014 and 2013. The increase in both years was due to additions, offset by increased accumulated depreciation and asset retirements. See Table 8 for current year additions.
- **DEFERRED OUTFLOWS OF RESOURCES** represents the difference between the reacquisition price and the net carrying amount of defeased debt ("deferred amount on refunding") resulting from the Series 2012B and Series 2014A water refunding bonds, economic/demographic losses relating to the calculation of the net pension liability, and amounts contributed to the pension plan after the net pension liability measurement date. They decreased \$0.6 million or 3% in 2015 as a result of the amortization of pension plan economic /demographic losses into pension expense and the amortization of the deferred amount on refunding as a component of interest expense. They increased \$16.1 million or 336% in 2014 primarily as a result of the inclusion of pension related deferred outflows associated with the implementation GASB 68.
- **CURRENT LIABILITIES** in 2015 decreased \$10.8 million, or 16% from 2014. They increased \$10.0 million, or 17% between 2014 and 2013. The decrease in 2015 was primarily a result of a reduction in construction contract accruals and changes in the current portion of revenue bonds payable due to

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varying debt maturities, offset by an increase in accrued payroll. The increase in 2014 was primarily due to increased construction contract and accounts payable accruals.

- **NONCURRENT LIABILITIES** in 2015 increased \$6.2 million, or 1% from 2014. They increased \$55.5 million, or 14% between 2014 and 2013. The increase in 2015 was primarily a result of a line of credit draw offset by a reduction in long-term debt. The increase in 2014 was primarily due to the reporting of the pension liability as part of the implementation of GASB 68 and an increase in revenue bonds due to the Series 2014A bond issue, offset by payment of the \$10.0 million note payable, the partial defeasement of 2005 revenue bonds, and the reclassification of a portion of noncurrent revenue bonds to current.
- **DEFERRED INFLOWS OF RESOURCES** represents net investment gains associated with differences between the expected and actual earnings on pension plan investments used in the calculation of the net pension liability. They decreased \$6.4 million or 40% in 2015 as a result of pension related investment losses and the amortization of pension investment gains or losses as a component of pension expense. They increased \$16.1 million in 2014 due to the inclusion of deferred inflows of resources relating to pensions associated with the implementation of GASB 68.

**CHANGE IN NET POSITION**

While the statements of net position display the Board's assets, liabilities and net position at year-end, the statements of revenues, expenses, and changes in net position provide information on the source of the change in net position during the year. Net position increased \$92.4 million in 2015 consisting of income before capital contributions of \$23.0 million and capital contributions of \$69.4 million. Net position increased \$3.5 million in 2014 consisting of income before capital contributions of \$13.0 million and capital contributions of \$55.9 million, offset by \$65.4 million relating to the cumulative effect of implementing GASB 68 (see Table 2).

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	Years Ended December 31,			2015 - 2014		2014 - 2013	
	2015	Restated 2014	2013	Increase (Decrease)	% Change	Increase (Decrease)	% Change
	Operating revenues	\$ 252,060	\$ 250,668	\$ 242,623	\$ 1,392	1%	\$ 8,045
Nonoperating revenues	7,074	7,695	8,094	(621)	(8)	(399)	(5)
Total revenues	<u>259,134</u>	<u>258,363</u>	<u>250,717</u>	<u>771</u>	<u>0.3</u>	<u>7,646</u>	<u>3</u>
Operating expenses	215,825	225,061	208,915	(9,236)	(4)	16,146	8
Nonoperating expenses	20,268	20,310	18,712	(42)	(0.2)	1,598	9
Total expenses	<u>236,093</u>	<u>245,371</u>	<u>227,627</u>	<u>(9,278)</u>	<u>(4)</u>	<u>17,744</u>	<u>8</u>
Income before capital contributions	23,041	12,992	23,090	10,049	77	(10,098)	(44)
Capital contributions	<u>69,365</u>	<u>55,926</u>	<u>55,885</u>	<u>13,439</u>	<u>24</u>	<u>41</u>	<u>0</u>
Increase in net position	92,406	68,918	78,975	23,488	34	(10,057)	(13)
Beginning net position	<u>1,825,624</u>	1,822,128	<u>1,743,153</u>	<u>3,496</u>	<u>0.2</u>	<u>78,975</u>	<u>5</u>
GASB 68 implementation		(65,422)					
Restated beginning net position		<u>1,756,706</u>					
Ending net position	<u>\$ 1,918,030</u>	<u>\$ 1,825,624</u>	<u>\$ 1,822,128</u>	<u>\$ 92,406</u>	<u>5%</u>	<u>\$ 3,496</u>	<u>0.2%</u>

There was *operating income* (operating revenues less operating expenses—not reflected in Table 2, see *Statements of Revenues, Expenses and Changes in Net Position*) of \$36.2 million in 2015, compared to \$25.6 million in 2014 and \$33.7 million in 2013 (see Figure 3).

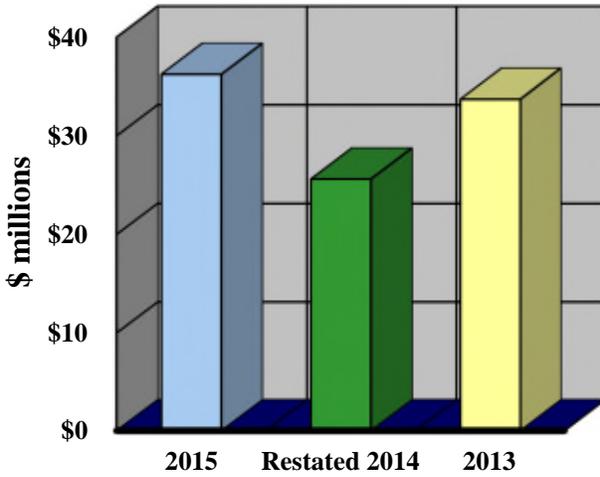
There was *income before capital contributions* of \$23.0 million in 2015 compared to \$13.0 million in 2014 and \$23.1 million in 2013 (see Figure 4).

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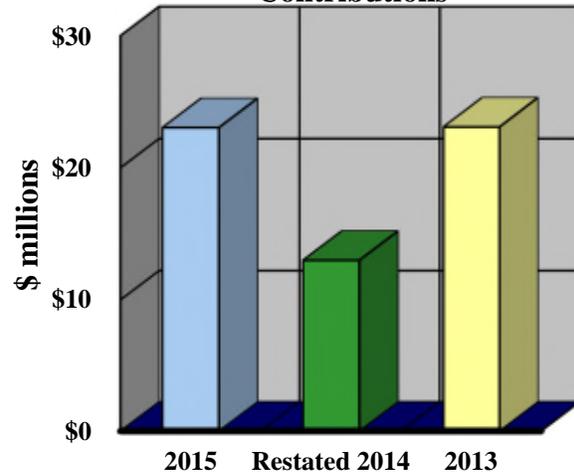
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**Figure 3 - Operating Income**



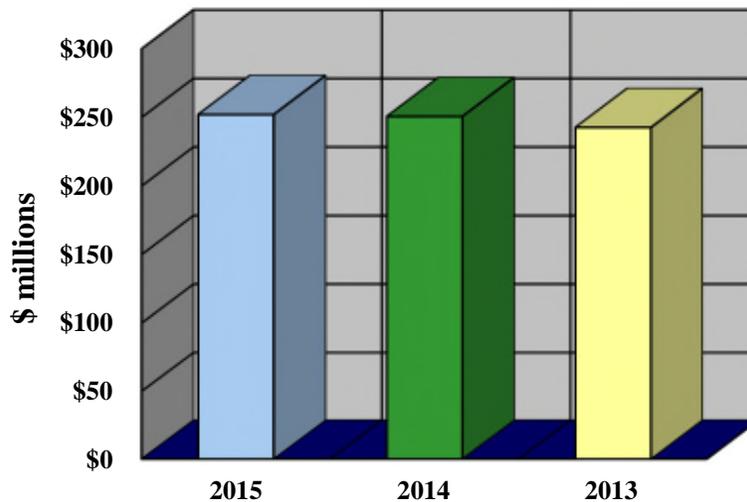
**Figure 4 - Income before Capital Contributions**



Specifically, major changes in the statements of revenues, expenses and changes in net position were as follows:

- **OPERATING REVENUES** in 2015 increased \$1.4 million, or 1% from 2014. They increased \$8.0 million, or 3% between 2014 and 2013 (see Figure 5 and Table 3).

**Figure 5 - Operating Revenues**



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<b>Table 3 - Operating Revenues</b> (amounts expressed in thousands)							
	Years Ended December 31,			2015 - 2014		2014 - 2013	
	<u>2015</u>	<u>2014</u>	<u>2013</u>	Increase (Decrease)	% Change	Increase (Decrease)	% Change
Water:							
Water sales	<b>\$ 241,836</b>	\$ 239,288	\$ 230,482	\$ 2,548	1%	\$ 8,806	4%
Power generation and other:							
Power sales	<b>3,606</b>	4,390	4,263	(784)	(18)	127	3
Special assessments	<b>3,839</b>	4,320	5,959	(481)	(11)	(1,639)	(28)
Other	<b>2,779</b>	2,670	1,919	109	4	751	39
	<b>10,224</b>	11,380	12,141	(1,156)	(10)	(761)	(6)
Total operating revenues	<b>\$ 252,060</b>	\$ 250,668	\$ 242,623	\$ 1,392	1%	\$ 8,045	3%

**Water sales** in 2015 increased due to a rate increase effective February 1, 2015, designed to increase overall total system water rate revenue by 2.2% and a slight increase in water sold (65.6 billion gallons sold in 2015 compared to 65.5 billion gallons sold in 2014). Changes in water consumption from year to year are generally directly related to changes in temperature, and inversely related to changes in precipitation, except for mandatory drought restrictions. Longer term changes in consumption are the result of changes in conservation habits on the part of consumers and changes in the customer base.

Water sales in 2014 increased due to a rate increase effective January 1, 2014, designed to increase overall total system water rate revenue by 3.5%. This was offset by a 1% decrease in water sold (65.5 billion gallons sold in 2014 compared to 66.4 billion gallons sold in 2013).

**Power Sales** consist of sales of electricity to Xcel Energy and Tri-State Generation and Transmission Associates from seven power generating facilities: Dillon, Foothills, Gross, Hillcrest, Roberts Tunnel, Strontia Springs, and Williams Fork. Because power is generated by use of water turbines, differences in power sales from year to year are caused primarily by increases or decreases in water flows due to weather conditions or interruptions of power generating operations for repairs and maintenance.

**Special assessments** consist primarily of delinquent bill charges, hydrant meter revenue, turn-off/turn-on charges, and charges for water violations and exemption permits. Differences from year to year are caused by increases or decreases in one or more of these components.

**Other** consists of inspection fees, material sales, new taps, meter repairs, and miscellaneous fees.

- **NONOPERATING REVENUES** in 2015 decreased \$0.6 million, or 8% from 2014. They decreased \$0.4 million, or 5% between 2014 and 2013 (see Table 4).

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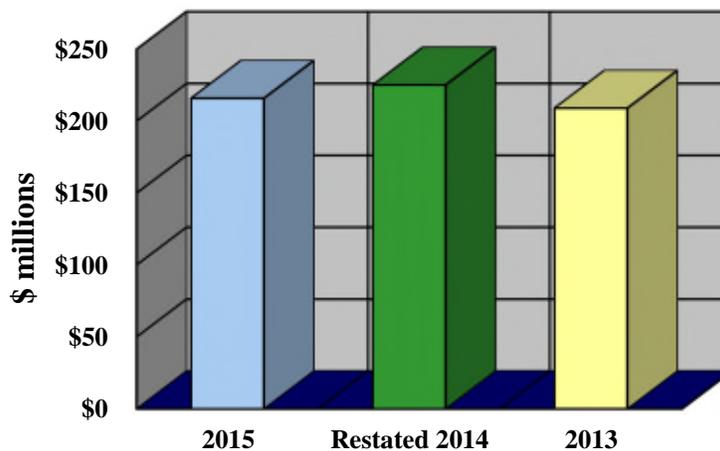
	Years Ended December 31,			2015 - 2014		2014 - 2013	
	2015	2014	2013	Increase (Decrease)	% Change	Increase (Decrease)	% Change
	Investment income	\$ 1,479	\$ 1,552	\$ 1,488	\$ (73)	(5)%	\$ 64
Other nonoperating income	<u>5,595</u>	<u>6,143</u>	<u>6,606</u>	<u>(548)</u>	<u>(9)</u>	<u>(463)</u>	<u>(7)</u>
Total nonoperating revenues	<u>\$ 7,074</u>	<u>\$ 7,695</u>	<u>\$ 8,094</u>	<u>\$ (621)</u>	<u>(8)%</u>	<u>\$ (399)</u>	<u>(5)%</u>

*Investment income* changes from year to year are due to a combination of changes in interest rates earned on assets, changes in fair market values of financial assets, and changes in average investment balances.

*Other nonoperating income* in 2015 decreased \$0.5 million, or 9% from 2014 primarily due to grants received in 2014 in support of expenses incurred as a result of the 2013 flood. It decreased \$0.5 million, or 7% between 2014 and 2013 primarily due to the recognition of a \$1.1 million receivable for flood insurance claims in 2013.

- **OPERATING EXPENSES** in 2015 decreased \$9.2 million, or 4% from 2014. They increased \$16.1 million, or 8% between 2014 and 2013 (see Figures 6, 7, 8 and Table 5).

**Figure 6 - Total Operating Expenses**



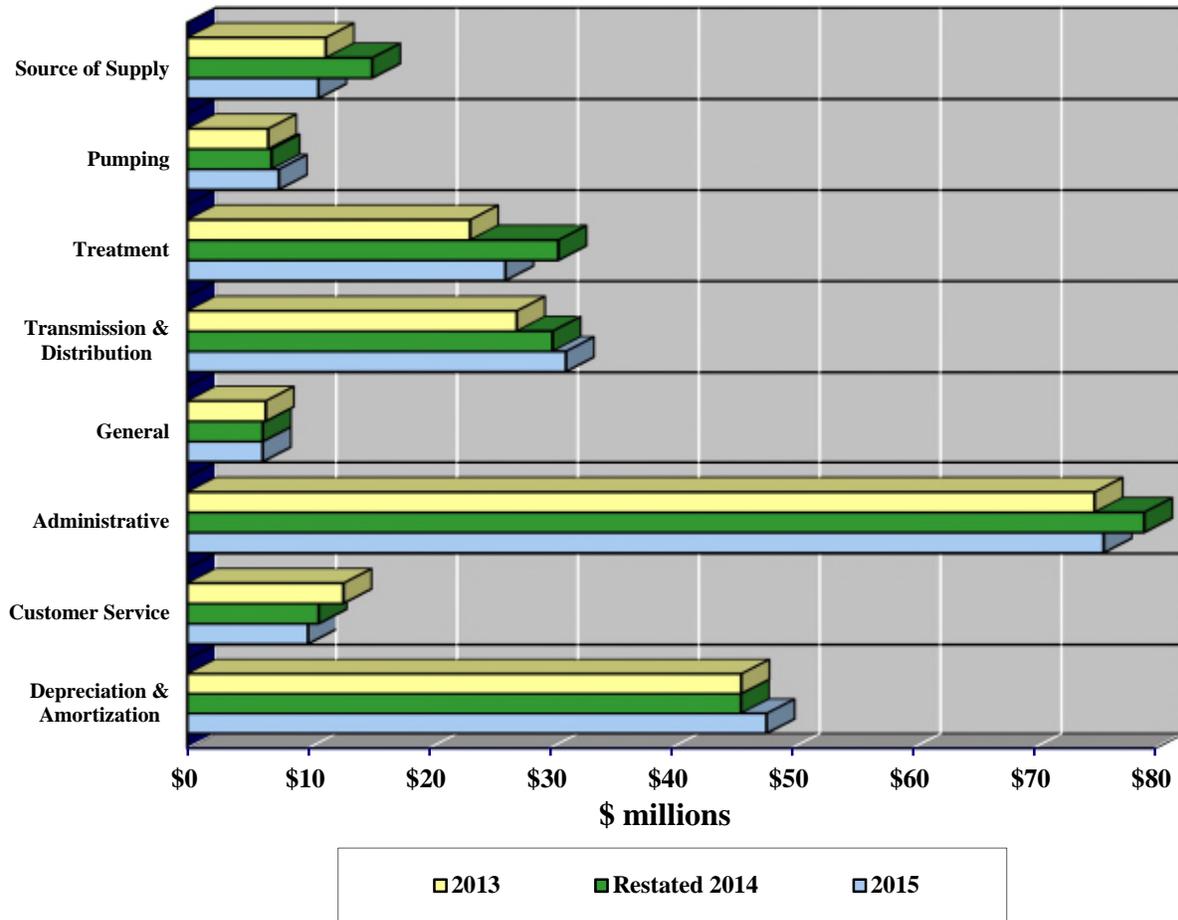
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	Years Ended December 31,			2015 - 2014		2014 - 2013	
	2015	Restated 2014	2013	Increase (Decrease)	% Change	Increase (Decrease)	% Change
	Source of supply (SOS)	\$ 10,820	\$ 15,274	\$ 11,438	\$ (4,454)	(29)%	\$ 3,836
Pumping	7,555	6,944	6,670	611	9	274	4
Treatment	26,294	30,681	23,373	(4,387)	(14)	7,308	31
Transmission & Distribution (T&D)	31,303	30,192	27,241	1,111	4	2,951	11
General	6,214	6,226	6,468	(12)	(0)	(242)	(4)
Administrative	75,780	79,121	75,026	(3,341)	(4)	4,095	5
Customer service	9,962	10,851	12,894	(889)	(8)	(2,043)	(16)
Depreciation and amortization	47,897	45,772	45,805	2,125	5	(33)	(0)
<b>Total operating expenses</b>	<b>\$ 215,825</b>	<b>\$ 225,061</b>	<b>\$ 208,915</b>	<b>\$ (9,236)</b>	<b>(4)%</b>	<b>\$ 16,146</b>	<b>8%</b>

**Figure 7 - Operating Expenses by Category**



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Major changes were as follows:

2015

**Source of Supply** – Decreased primarily as a result of expenses that occurred in 2014 for repairs at Dillon Reservoir and Cheesman Lake, the expenses associated with the removal of sedimentation at Strontia Springs, and other 2014 repair costs associated with the 2013 flood.

**Treatment** – Decreased primarily due to expenses incurred in 2014 for repairs and maintenance at the Foothills Treatment Plant, and the 2014 adjustment of the closure and postclosure costs for the landfill and drying beds resulting from an updated cost study.

**Transmission & Distribution** – Increased primarily due to overall higher engineering and labor expenses associated with ongoing conduits, mains, and hydrants maintenance and repair, and costs associated with the tear down of equipment at the Hillcrest Hydro Plant.

**Administrative** - Decreased primarily as a result of payments in 2014 as part of the Colorado River Cooperative Agreement, offset by an increased payroll accrual in 2015.

2014

**Source of Supply** – Increased primarily due to additional expenses for removing sedimentation at Strontia Springs Reservoir and repairs at Strontia Springs and Dillon Reservoirs.

**Treatment** – Increased primarily due to maintenance and repairs at the Foothills Treatment Plant, increased closure and postclosure care costs for the landfill and drying beds at Foothills and Ralston, and increased chemicals and materials costs at Marston and Foothills, respectively.

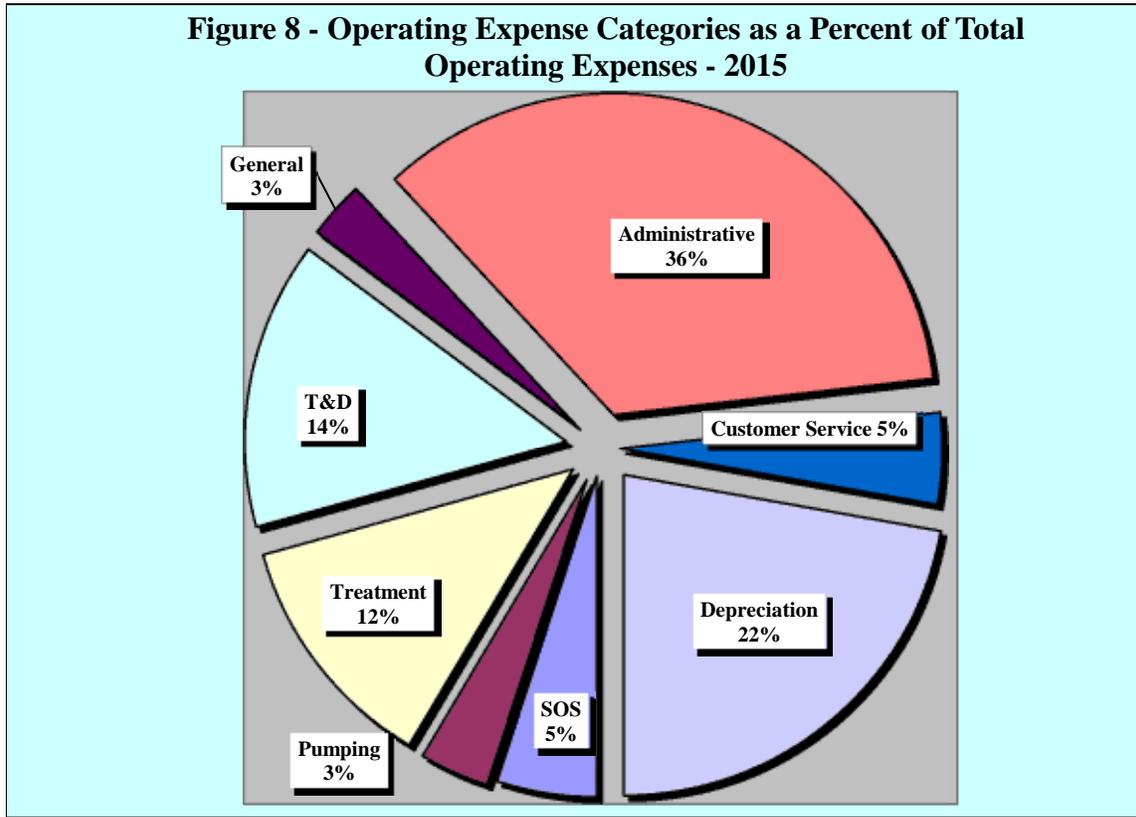
**Transmission & Distribution** – Increased engineering and labor associated with ongoing conduits and mains maintenance, including the installation of a fiber optic monitoring system for conduit 94, which is the conduit that runs from the Moffat Filter Plant to the 56<sup>th</sup> Avenue Pump Station.

**Administrative** – Increased costs in Information Technology and Engineering.

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- **NONOPERATING EXPENSES** in 2015 decreased \$0.04 million, or 0.2% from 2014. They increased \$1.6 million, or 9% between 2014 and 2013 (see Table 6).

**Table 6 - Nonoperating Expenses**  
(amounts expressed in thousands)

	Years Ended December 31,			2015 - 2014		2014 - 2013	
	2015	2014	2013	Increase (Decrease)	% Change	Increase (Decrease)	% Change
Interest expense	\$ 13,049	\$ 12,664	\$ 13,602	\$ 385	3%	\$ (938)	(7)%
Loss on disposition of capital assets	4,720	5,394	2,171	(674)	(12)	3,223	148
Other nonoperating expense	2,499	2,252	2,939	247	11	(687)	(23)
Total nonoperating expenses	<u>\$ 20,268</u>	<u>\$ 20,310</u>	<u>\$ 18,712</u>	<u>\$ (42)</u>	<u>(0.2)%</u>	<u>\$ 1,598</u>	<u>9%</u>

*Interest expense* changes from year to year are due to a combination of differences in the amount of debt, interest rates paid on the debt, and interest expense capitalized for construction projects. When interest is capitalized, the interest is added to the cost of the project and deducted from interest expense.

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*Loss on disposition of capital assets* in 2015 was primarily due to fleet equipment sold and write-offs of mains, hydrants, and assets associated with the Ashland Reservoir tank replacement project. The loss during 2014 was primarily due to the write-off of assets connected with modifying the Elizabeth St. pumping station in order to accommodate both potable and recycled water, plus write-offs of conduits, mains, and hydrants.

*Other nonoperating expense* increased \$0.2 million, or 11% in 2015 primarily as a result of increased maintenance along the Highline Canal. It decreased \$0.7 million, or 23% in 2014 compared to 2013 due to additional costs incurred in 2013 to convert Littleton’s total service contract.

- **CAPITAL CONTRIBUTIONS** in 2015 increased \$13.4 million, or 24% from 2014. They were approximately the same between 2014 and 2013 (see Table 7).

<b>Table 7 - Capital Contributions</b> (amounts expressed in thousands)							
	Years Ended December 31,			2015 - 2014		2014 - 2013	
	2015	2014	2013	Increase (Decrease)	%	Increase (Decrease)	%
				Change	Change	Change	Change
Contributions in aid of construction	\$ 33,256	\$ 23,190	\$ 21,424	\$ 10,066	43%	\$ 1,766	8%
System development charges	36,109	32,736	34,461	3,373	10	(1,725)	(5)
Total capital contributions	<u>\$ 69,365</u>	<u>\$ 55,926</u>	<u>\$ 55,885</u>	<u>\$ 13,439</u>	<u>24%</u>	<u>\$ 41</u>	<u>0%</u>

*Contributions in aid of construction* represent facilities, or cash payments for facilities, conveyed to the distribution system from property owners, governmental agencies, and customers who receive benefit from such facilities. Normally, differences from year to year are caused by the general level of construction activity in the Denver metropolitan area.

*System development charges* (“SDCs”) represent fees charged to customers to connect to the water system. Normally, differences from year to year are also caused by the general level of construction activity in the Denver metropolitan area.

**CAPITAL ASSET ACTIVITY**

The Board’s capital assets at December 31, 2015 and 2014 amounted to \$2.1 billion, net of accumulated depreciation and amortization, respectively. Capital asset additions in 2015 and 2014 were \$131.1 million and \$125.4 million, respectively, an increase of \$5.7 million or 5%. Major projects were as follows (see Table 8):

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<b>Table 8 - Capital Additions</b>	
Year Ended December 31, 2015	
(amounts expressed in thousands)	
Distribution Mains & Hydrants	\$ 41,914
Land & Land Rights	14,622
Marston Reservoir	9,308
Treated Water Conduits	7,777
Ashland Reservoir	6,694
Operations Complex Redevelopment	6,135
Antero Reservoir	6,011
Motor Vehicles and Heavy Equipment	5,278
Cherry Hills Pump Station	5,067
Capitalized Software & IT Projects	4,577
Highlands Reservoir	3,094
Downstream Reservoirs	2,302
Kendrick Pump Station	2,297
Hillcrest Reservoir	2,283
Gross Reservoir	2,180
Recycled Water Conduits	1,687
Moffat Treatment Plant	1,641
Green Mountain Pump Station	1,632
South Boulder Creek Diversion Conduit	1,418
Other	5,137
	<u>\$ 131,054</u>

Information on the Board's capital assets can be found in Note 4 to the basic financial statements and Exhibit II of the supplemental financial information.

**LONG-TERM DEBT ACTIVITY**

On November 20, 2013, the Board executed a credit agreement with Bank of America, N.A., to provide a variable rate revolving note payable for a maximum initial principal amount of \$30.0 million as an interim source of financing for capital improvements to the water works system. The initial line of credit is for three years with an option to renew it for an additional two years and to increase it to \$50.0 million. In 2015, the Board drew \$30.0 million of this line of credit, which is the outstanding balance at December 31, 2015. See Note 6 for further details.

In 2014, the Board issued \$48.7 million in Series 2014A Water Revenue Bonds dated September 16, 2014 to be used to fund capital improvements to the water works system in the amount of \$35.0 million, to pay off notes payable in the amount of \$10.0 million, and to advance refund a portion of the Series 2005 revenue bonds to achieve present value savings.

During 2014, the ratings for Denver Water's revenue bonds were upgraded to Aaa by Moody's, and affirmed AAA by Standard & Poor's and Fitch. Information on the Board's long-term debt can be found in Notes 6, 7 and 9 to the basic financial statements and Exhibits III-A through III-D of the supplemental financial information.

**BOARD OF WATER COMMISSIONERS  
CITY AND COUNTY OF DENVER, COLORADO**

Management's Discussion and Analysis (Unaudited)

December 31, 2015 and 2014

**FLOOD DAMAGE**

Severe storms, flooding, landslides, and mudslides washed through Colorado on September 11, 2013. The rains lasted three days and caused severe damage in multiple jurisdictions within the Board's areas of operation. Damage to the Board's property was approximately \$12 million. The Board is eligible for public assistance through Federal Emergency Management Agency (FEMA) for some of the damages. Funding is cost-shared at a federal share of no less than 75% of eligible costs and State of Colorado share at no less than 12.5%. As of December 31, 2015, the Board had a receivable of \$386,000 relating to FEMA funding.

**REQUESTS FOR INFORMATION**

This financial report is designed to provide a general overview of the Board's finances for all those with an interest in the Board's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

Director of Finance  
Denver Water  
1600 W. 12<sup>th</sup> Ave.  
Denver, CO 80204-3412

**BOARD OF WATER COMMISSIONERS  
CITY AND COUNTY OF DENVER, COLORADO**

Statements of Net Position  
December 31, 2015 and 2014  
(Amounts expressed in thousands)

	2015	Restated 2014
<u>ASSETS</u>		
<b>CURRENT ASSETS:</b>		
Cash	\$ 21,490	\$ 28,112
Short-term investments, at fair value, including accrued interest	172,065	127,375
Restricted investments - debt service	12,047	12,375
Accounts receivable	20,633	21,199
Materials and supplies inventory, at weighted average cost	5,793	6,674
Prepaid expenses	543	434
Total current assets	232,571	196,169
<b>NONCURRENT ASSETS:</b>		
Capital assets:		
Utility plant	2,744,312	2,622,500
Nonutility plant	14,433	9,073
	2,758,745	2,631,573
Less accumulated depreciation and amortization	(806,830)	(765,485)
	1,951,915	1,866,088
Utility plant under capital lease, less accumulated amortization of \$11,261 and \$10,702, respectively	31,719	32,278
Construction in progress	163,266	171,215
Net capital assets	2,146,900	2,069,581
Other noncurrent assets:		
Long-term investments	33,558	66,726
Prepaid expenses and other assets	4,084	3,075
Long-term receivable	15,374	14,924
Total other noncurrent assets	53,016	84,725
Total noncurrent assets	2,199,916	2,154,306
Total assets	2,432,487	2,350,475
<u>DEFERRED OUTFLOWS OF RESOURCES</u>		
Deferred amount on refunding	4,316	4,652
Pension-related deferred outflows of resources	15,979	16,258
Total deferred outflows of resources	20,295	20,910
Total assets and deferred outflow of resources	2,452,782	2,371,385

**BOARD OF WATER COMMISSIONERS  
CITY AND COUNTY OF DENVER, COLORADO**

Statements of Net Position  
December 31, 2015 and 2014  
(Amounts expressed in thousands)

	2015	Restated 2014
<u>LIABILITIES</u>		
CURRENT LIABILITIES:		
Accounts payable	\$ 11,936	\$ 10,556
Accrued payroll, vacation and other employee benefits	14,017	12,570
Construction contracts (including retainages of \$2,911 and \$3,759 respectively)	6,243	14,432
Accrued interest on long-term debt	1,157	1,274
Current portion of revenue bonds payable	21,565	27,000
Current portion of obligation under capital lease	2,263	2,117
Total current liabilities	57,181	67,949
NONCURRENT LIABILITIES:		
Notes payable	30,000	-
Revenue bonds payable, net	353,153	377,605
Obligation under capital lease	9,215	11,478
Customer advances for construction	7,676	3,010
Accrued sick leave	4,577	4,492
Net pension liability	46,255	48,019
Other postemployment benefits	10,799	10,990
Waste disposal closure and postclosure care	6,230	6,139
Total noncurrent liabilities	467,905	461,733
Total liabilities	525,086	529,682
<u>DEFERRED INFLOWS OF RESOURCES</u>		
Pension-related deferred inflows of resources	9,666	16,079
Total deferred inflows of resources	9,666	16,079
Total liabilities and deferred inflows of resources	534,752	545,761
<u>NET POSITION</u>		
Net investment in capital assets	1,735,020	1,641,601
Restricted for debt service	12,047	12,375
Unrestricted	170,963	171,648
Total net position	\$ 1,918,030	\$ 1,825,624

See accompanying notes to basic financial statements.

**BOARD OF WATER COMMISSIONERS  
CITY AND COUNTY OF DENVER, COLORADO**

Statements of Revenues, Expenses, and Changes in Net Position

December 31, 2015 and 2014

(Amounts expressed in thousands)

	<u>2015</u>	<u>Restated 2014</u>
<b>OPERATING REVENUES:</b>		
Water	\$ 241,836	\$ 239,288
Power generation and other	<u>10,224</u>	<u>11,380</u>
Total operating revenues	<u>252,060</u>	<u>250,668</u>
<b>OPERATING EXPENSES:</b>		
Source of supply, pumping, treatment and distribution	75,972	83,091
General and administrative	81,994	85,347
Customer service	9,962	10,851
Depreciation and amortization	<u>47,897</u>	<u>45,772</u>
Total operating expenses	<u>215,825</u>	<u>225,061</u>
<b>OPERATING INCOME</b>	<u>36,235</u>	<u>25,607</u>
<b>NONOPERATING REVENUES (EXPENSES):</b>		
Investment income	1,479	1,552
Interest expense, less capitalized interest of \$3,084 and \$2,940, respectively	(13,049)	(12,664)
Loss on disposition of capital assets	(4,720)	(5,394)
Other income	5,595	6,143
Other expense	<u>(2,499)</u>	<u>(2,252)</u>
Total nonoperating expenses, net	<u>(13,194)</u>	<u>(12,615)</u>
<b>INCOME BEFORE CAPITAL CONTRIBUTIONS</b>	<u>23,041</u>	<u>12,992</u>
<b>CAPITAL CONTRIBUTIONS:</b>		
Contributions in aid of construction	33,256	23,190
System development charges	<u>36,109</u>	<u>32,736</u>
Total capital contributions	<u>69,365</u>	<u>55,926</u>
<b>INCREASE IN NET POSITION</b>	92,406	68,918
<b>NET POSITION:</b>		
Beginning of year	<u>1,825,624</u>	1,822,128
Cumulative effect of GASB 68 implementation		<u>(65,422)</u>
Restated beginning net position		<u>1,756,706</u>
End of year	<u>\$ 1,918,030</u>	<u>\$ 1,825,624</u>

See accompanying notes to basic financial statements.

**BOARD OF WATER COMMISSIONERS  
CITY AND COUNTY OF DENVER, COLORADO**

Statements of Cash Flows  
December 31, 2015 and 2014  
(Amounts expressed in thousands)

	<u>2015</u>	<u>Restated 2014</u>
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Receipts from customers	\$ 252,149	\$ 257,212
Payments to employees	(100,210)	(100,084)
Payments to suppliers	(71,434)	(78,145)
Other receipts	5,622	5,750
Other payments	(4,382)	(2,063)
	<u>81,745</u>	<u>82,670</u>
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:</b>		
Proceeds from contributions in aid of construction ("CIAC") and prepaid CIAC	8,713	6,384
Proceeds from system development charges ("SDC") and prepaid SDC	36,109	32,736
Proceeds from sales of capital assets	1,117	285
Proceeds from notes payable	30,000	-
Proceeds from long-term revenue bonds, plus premium, less issuance costs	-	45,000
Acquisition of capital assets	(106,672)	(97,541)
Principal payments for long-term bonds	(27,000)	(26,090)
Payments of notes payable	-	(10,000)
Principal payments for capital lease obligations	(2,117)	(1,981)
Interest paid (includes capitalized interest of \$3,084 and \$2,940, respectively)	(18,802)	(18,673)
	<u>(78,652)</u>	<u>(69,880)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Proceeds from sales and maturities of investments	122,892	182,216
Interest received from investments	1,648	1,365
Purchases of investments	(134,255)	(185,763)
	<u>(9,715)</u>	<u>(2,182)</u>
<b>NET INCREASE (DECREASE) IN CASH</b>	<b>(6,622)</b>	<b>10,608</b>
<b>CASH, AT BEGINNING OF YEAR</b>	<b><u>28,112</u></b>	<b><u>17,504</u></b>
<b>CASH, AT END OF YEAR</b>	<b><u><u>\$ 21,490</u></u></b>	<b><u><u>\$ 28,112</u></u></b>

**BOARD OF WATER COMMISSIONERS  
CITY AND COUNTY OF DENVER, COLORADO**

Statements of Cash Flows  
December 31, 2015 and 2014  
(Amounts expressed in thousands)

	2015	Restated 2014
<b>RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:</b>		
Operating income	\$ 36,235	\$ 25,607
Adjustments to reconcile operating income to net cash provided by operating activities-		
Other revenues	5,595	6,143
Other expenses	(2,499)	(38)
Depreciation and amortization of capital assets	47,897	45,772
Change in assets and liabilities-		
Accounts receivable and long-term receivable	116	6,151
Materials and supplies inventory	605	750
Prepaid expenses - current	(109)	(231)
Prepaid expenses and other assets - noncurrent	(1,009)	(313)
Deferred outflows of resources - pension related	279	(1,258)
Accounts payable	1,380	(74)
Accrued payroll, vacation and other employee benefits; and accrued sick leave	1,532	3,249
Net pension liability	(1,764)	(21,773)
Other postemployment benefits	(191)	101
Waste disposal closure and postclosure care	91	2,505
Deferred inflows of resources - pension related	(6,413)	16,079
Net cash provided by operating activities	\$ 81,745	\$ 82,670
<b>NONCASH CAPITAL AND RELATED FINANCING ACTIVITIES:</b>		
Assets acquired through contributions in aid of construction	\$ 24,543	\$ 18,977
Increase (decrease) in fair value of investments	(106)	284
Loss on disposition of capital assets	(4,720)	(5,394)

See accompanying notes to basic financial statements.

**BOARD OF WATER COMMISSIONERS  
CITY AND COUNTY OF DENVER, COLORADO**

Notes to Basic Financial Statements  
December 31, 2015 and 2014

Note

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  - B. Measurement Focus and Basis of Accounting
  - C. Accounting Standards
  - D. Use of Estimates
  - E. Restricted Net Position and Flow Assumption for Restricted Net Position
  - F. Cash
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- 2 Deposits and Investments
  
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(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Reporting Entity

The Board of Water Commissioners (the “Board”) was created under the Charter of the City and County of Denver, Colorado (the “City”) as an independent, nonpolitical board. The Board has complete charge and control of a water works system and plant, which supplies water to customers located within the City and to entities serving other customers located in certain outlying areas in the Denver metropolitan area. Also, as a byproduct of water operations, the Board operates seven hydropower plants which generate power for sale to Xcel Energy and Tri-State Generation and Transmission Association, for internal consumption, and for repayment to the U.S. Department of Energy for power interference.

The Board has a five-member governing body, which is appointed by the Mayor of the City for overlapping six-year terms. In accordance with Governmental Accounting Standards Board (“GASB”) Statements No. 14, *The Financial Reporting Entity*, No. 39, *Determining Whether Certain Organizations Are Component Units, an amendment of GASB Statement No. 14*, and No. 61, *The Financial Reporting Entity: Omnibus*, the Board is classified as a special-purpose “other stand-alone government.” A special-purpose other stand-alone government is defined as a legally separate governmental organization that (a) does not have a separately elected governing body and (b) does not meet the definition of a component unit because it does not have a financial benefit or burden relationship with a primary government.

The Board is a “related organization” in the City’s financial reporting entity. A related organization is defined as an organization for which a primary government is not financially accountable (because it does not impose its will or have a financial benefit or burden relationship) even though the primary government appoints a voting majority of the organization’s governing board.

The Board has no component units as defined in GASB Statements No. 14, 39, and 61.

B. Measurement Focus and Basis of Accounting

The Board, as a business type activity, is accounted for in an enterprise fund, which is used to report any activity for which a fee is charged to external users for goods or services. The Board’s basic financial statements are accounted for on the flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets and liabilities associated with operations are included on the statements of net position, revenues are recorded when earned, and expenses are recorded at the time liabilities are incurred. Under the terms of grant agreements, the Board funds certain programs using a combination of cost-reimbursement grants and general revenues. It is the Board’s policy to first apply cost-reimbursement grant resources to such programs, followed by general revenues.

C. Accounting Standards

The Board applies all applicable pronouncements of the GASB.

D. Use of Estimates

The preparation of basic financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions. These estimates may affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the basic financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

E. Restricted Net Position and Flow Assumption for Restricted Net Position

Restricted net position consists of both the revenue bonds debt reserve fund and the revenue bonds debt service account included in cash and short-term investments. The revenue bonds debt service account is used to pay principal and interest on the revenue bonds as they become due. The revenue bonds debt reserve fund is set aside to pay bondholders in the event that funds are not available at the time the debt payment is due. These restricted funds are used for their intended purpose before unrestricted funds.

F. Cash

The definition of cash for purposes of the statements of cash flows is cash on deposit in the Water Works Fund, cash in lock box, and cash on hand.

G. Investments

The Board's investments consist of money market investments (commercial paper and money market mutual funds) and U.S. Treasury, agency, and corporate notes and bonds. The money market investments are measured at amortized cost which is generally equivalent to fair value. U.S. Treasury, agency, and corporate notes and bonds investments are fair value based on quoted market prices (see Note 2, *Deposits and Investments*).

H. Materials and Supplies Inventory

Materials and supplies inventory is valued at weighted average cost, which approximates lower of cost or market.

I. Capital Assets

Purchased and constructed capital assets are recorded at cost. Donated capital assets are recorded at their estimated fair market value on the date received. Assets are capitalized if they have a cost of \$50,000 or more and have a useful life of more than one year.

Land and water rights are also recorded at cost. Land is not depreciated and water rights are granted in perpetuity and not amortized.

Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the respective depreciable or amortizable asset classes as follows:

<u>Depreciation Lives by Asset Class</u>	
	<u>Years</u>
Buildings and components	10 - 80
Machinery and equipment	5 - 50
Furniture and office equipment	10 - 20
Motor vehicles and motorized equipment	10 - 15

Maintenance and repairs are charged to expense as incurred, whereas major betterments are capitalized and depreciated or amortized. At the time of retirement or disposition of depreciable property, the related cost and accumulated depreciation are removed from the accounts, and the resulting gain or loss is reflected in nonoperating revenues (expenses).

Interest during the construction period is capitalized on major construction projects. Certain applicable general and administrative costs of an overhead nature are allocated to specific projects and capitalized, and such costs are depreciated over the estimated useful lives of the related assets when the related assets are transferred to capital assets.

Beginning in 2015, process or system assets were capitalized rather than individual component units. Because the process or system asset may be made up of many component assets, the capitalization threshold was adjusted from \$5,000 to \$50,000.

#### J. Capital Contributions

Capital contributions consist of contributions in aid of construction ("CIAC") and system development charges ("SDC"). CIAC represent facilities, or cash payments for facilities, received from developers, property owners, governmental agencies, or customers who receive benefit from such facilities. SDC represent fees charged to customers to connect to the water system. Contributions are recognized in the statements of revenues, expenses, and changes in net position, after nonoperating revenues (expenses), when earned. Assets acquired through CIAC are included in capital assets. Depreciation applicable to such assets is computed using the straight-line method over the useful life associated with the contributed asset, and is included in operating expenses (see Note 13, *Capital Contributions*).

#### K. Employee Compensated Absences

The Board's policy is to accrue as an expense and liability employee vacation, sick leave and other compensated absences, including related payroll taxes, using the "vesting method" in accordance with GASB Statement No. 16, *Accounting for Compensated Absences*. The accrual also includes an estimate for employees who have earned sick leave but have not vested.

#### L. Pension Plan

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Employees' Retirement Plan of the Denver Board of Water Commissioners (the "Plan") and additions to and/or deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

#### M. Operating Revenues and Expenses

Operating revenues consist primarily of charges to customers directly or indirectly related to the sale of water and power. Operating expenses consist of the cost of providing water and power, including administrative expenses and depreciation on capital assets. All other revenues and expenses are classified as nonoperating.

The Board accrues for estimated unbilled revenues for water provided through the end of each year from the last reading of the meters, based on the billing cycle.

#### N. Rates and Fees

Under Article X, Section 10.1.9 of the City Charter, the Board is empowered to set rates for all of its customers. These rates "...may be sufficient to pay for operation, maintenance, reserves, debt service, additions, extensions, betterments, including those reasonably required for the anticipated growth of the Denver metropolitan area, and to provide for Denver's general welfare...."

### Consumption and Service Charges

On December 16, 2015, the Board approved a water rate increase and rate structure change, effective April 1, 2016. The rate increase is designed to increase overall total system water rate revenue by 3.8%. The rate structure change is designed to make water rate revenues more stable and better reflect modern demands.

On October 8, 2014, the Board approved a water rate increase, effective February 1, 2015, designed to increase overall total system water rate revenue by 2.2%.

On September 25, 2013, the Board approved a water rate increase, effective January 1, 2014, designed to increase overall total system water rate revenue by 3.5%.

### System Development Charges (“SDC”)

There was no SDC adjustment made in 2014 or 2015.

#### O. 2014 Reclassifications

A reclassification of \$3.2 million was made between accounts payable and accrued payroll for 2014.

#### P. Recently Issued Accounting Standards

In 2015, the Board implemented GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, and GASB Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date*, and restated the 2014 financial statements. The primary effect was to record the Board’s net pension liability of \$46.3 million and \$48.0 million on the Statements of Net Position as of December 31, 2015 and 2014, respectively. The cumulative effect of applying these statements was reported as a restatement of beginning 2014 net position in the amount of \$65.4 million. See Note 10, *Pension Plan*. Below is a reconciliation of the restated net position for the implementation of GASB 68 and GASB 71.

<b>Reconciliation of Net Position for GASB 68 Implementation</b>		
Beginning 2014 net position as published		\$ 1,822,128
Implementation of GASB 68 adjustments:		
Net pension liability measured as of 12/31/12	(69,792)	
Write off of prepaid pension asset under GASB 27	(10,630)	
Deferred outflows of resources for contributions after measurement date	<u>15,000</u>	
Cumulative effect of GASB 68 implementation		<u>(65,422)</u>
Restated 2014 beginning net position		1,756,706
2014 change in net position as published		62,668
Change in pension expense from GASB 27		<u>6,250</u>
Restated change in net position		<u>68,918</u>
2014 restated ending net position		<u>\$ 1,825,624</u>

In 2015, the Board early implemented GASB Statement No. 72, *Fair Value Measurement and Application*. Because the Board was already reporting investments at fair value, the primary effect of the implementation was additional note disclosures. See Note 2, *Deposits and Investments*.

There were no new GASB statements that impacted the Board in 2014.

(2) DEPOSITS AND INVESTMENTS

A. Cash Deposits with Financial Institutions

Custodial Credit Risk - Deposits

Custodial credit risk for deposits is the risk that in the event of a bank failure, the Board’s deposits may not be returned to it. All of the Board’s cash deposits are either insured by FDIC or covered by the Colorado Public Deposit Protection Act (“PDPA”) (C.R.S., 11-10.5-101). Under the PDPA all deposits exceeding the amount insured by the FDIC are required to be fully collateralized at 102% of the deposits with specific approved securities identified in the act. Deposits collateralized under the PDPA are considered collateralized with securities held by the pledging financial institutions’ trust department or agent in the Board’s name. All of the deposits of the Board at December 31, 2015 and 2014 were either insured by FDIC or collateralized under the Colorado Public Depository Act and are therefore not exposed to custodial credit risk.

B. Investments

A reconciliation of cash and investments reported on the *Statements of Net Position* as of December 31, is as follows:

	<u>Cash and Investments</u>	
	<u>(amounts expressed in thousands)</u>	
	December 31,	
	2015	2014
Cash	\$ 21,490	\$ 28,112
Short-term investments, at fair value, including accrued interest	172,065	127,375
Restricted investments - debt service	12,047	12,375
Long-term investments	33,558	66,726
Total investments	<u>217,670</u>	<u>206,476</u>
Total cash and investments	<u>\$239,160</u>	<u>\$234,588</u>

Colorado statutes and the City Charter authorize the Board to expend funds for the operation of the Board, including the purchase of investments. It is the policy of the Board to invest funds in priority order to preserve principal, provide sufficient liquidity, and to obtain a market rate of return within the constraints of the Board’s investment policy. Operational needs and prevailing market conditions affect the investment portfolio allocation at year-end. The table below identifies the investment types that are authorized by the

Board's investment policy, as well as certain provisions of the investment policy that address interest rate risk, credit quality risk and concentration of credit risk.

<u>Investments Authorized by the Board's Investment Policy</u>				
<u>December 31, 2015 and 2014</u>				
<u>Authorized Investment Type</u>	<u>Maximum Maturity</u>	<u>Minimum Issuer Credit Quality<sup>1</sup></u>	<u>Maximum in Portfolio<sup>2</sup></u>	<u>Maximum Investment One Issuer<sup>2</sup></u>
U.S. Treasury securities	5 years	Not applicable	No limit	No limit
U.S. agency securities	4 years	AA- / Aa3	50%	15%
Commercial paper	270 days	A-1 / P-1	25% <sup>3</sup>	5% <sup>4</sup>
Corporate fixed income securities	3 years	AA- / Aa3	25% <sup>3</sup>	5% <sup>4</sup>
Money market mutual funds	Not applicable	AAAm	25%	5%
Local government investment pools	Not applicable	AAAm	10%	5%
Certificates of deposit	180 days	AA- / Aa3	15%	10%
Bankers' acceptances	180 days	A-1 / P-1	25% <sup>3</sup>	5% <sup>4</sup>
Repurchase agreements	Overnight	AA- / Aa3	25%	25%
Municipal bonds	5 years	AA- / Aa3	15%	5%

<sup>1</sup>Investments must meet minimum credit quality at time of purchase. Investments that fall below minimum credit quality may be sold or held to maturity at the discretion of the Board. Ratings are S&P first and Moody's second.

<sup>2</sup>Calculated as a percentage of book value of the aggregate cash & investment portfolio at purchase.

<sup>3</sup>Maximum concentration in aggregate for commercial paper, corporate bonds and bankers' acceptances.

<sup>4</sup>Maximum concentration in a single issuer of commercial paper, corporate fixed income securities and bankers' acceptances.

### Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Normally the longer the maturity of an investment the greater the sensitivity of its fair value to changes in market interest rates. The Board manages interest rate risk by purchasing investments with varying maturities, continuously investing a portion of the portfolio in readily available funds, limiting total investments maturing in more than 3 years to 25% of the portfolio and limiting the maximum maturity of investments by type of investment.

Investments with call features increase the sensitivity of their fair values to increasing interest rates. The Board's portfolio of U.S. agency securities includes callable securities. At December 2015 and 2014, the Board owned callable securities with a fair value of \$2.0 million and \$10.5 million, respectively. The Board's callable securities are categorized in accordance with their final maturity dates in the tables below.

The Board's cash and investments at December 31, 2015 and 2014, and their maturities were as follows:

<u>Cash, Current and Long-Term Investments</u>					
<u>December 31, 2015</u>					
<u>(amounts expressed in thousands)</u>					
Investment type	Percent of Investment Portfolio	Fair Value	Investment Maturities (in years)		
			1 or less	1 - 3	3 - 5
U.S. Treasury securities	35.7%	\$ 77,613	\$ 60,577	\$ 17,036	\$ -
U.S. agency securities	41.1%	89,570	73,048	16,522 <sup>1</sup>	-
Commercial paper	4.1%	8,996	8,996	-	-
Corporate fixed income securities	1.2% <sup>2</sup>	2,510	2,510	-	-
Money market funds	17.9%	38,981	38,981	-	-
Total investments	<u>100.0%</u>	217,670	<u>\$ 184,112</u>	<u>\$ 33,558</u>	<u>\$ -</u>
Cash		<u>21,490</u>			
Total cash and investments		<u>\$ 239,160</u>			

<sup>1</sup> \$2.0 million in agency securities are callable beginning in 2016.

<sup>2</sup> The Board's investment policy established maximum concentrations based on total cash, cash equivalents, and investments at the time of purchase. There is no requirement to sell investments if the concentration changes at a later date due to market factors.

<u>Cash, Current and Long-Term Investments</u>					
<u>December 31, 2014</u>					
<u>(amounts expressed in thousands)</u>					
<u>Investment type</u>	Percent of Investment Portfolio	Fair Value	Investment Maturities (in years)		
			<u>1 or less</u>	<u>1 - 3</u>	<u>3 - 5</u>
U.S. Treasury securities	46.6%	\$ 96,191	\$ 68,593	\$ 23,579	\$ 4,019
U.S. agency securities	35.3%	72,974	36,354	36,620 <sup>1</sup>	-
Commercial paper	2.7%	5,496	5,496	-	-
Corporate fixed income securities	10.9% <sup>2</sup>	22,576	20,068	2,508	-
Money market funds	4.5%	9,239	9,239	-	-
Total investments	<u>100.0%</u>	<u>206,476</u>	<u>\$ 139,750</u>	<u>\$ 62,707</u>	<u>\$ 4,019</u>
Cash		<u>28,112</u>			
Total cash and investments		<u>\$ 234,588</u>			

<sup>1</sup> \$10.5 million in agency securities are callable beginning in 2015.

<sup>2</sup> The Board's investment policy established maximum concentrations based on total cash, cash equivalents, and investments at the time of purchase. There is no requirement to sell investments if the concentration changes at a later date due to market factors.

### Credit Risk

Credit risk is the risk that the issuer of a debt security will not fulfill its obligations to the holder of the obligation. National rating agencies assess this risk and assign a credit quality rating for most investments. U.S. agency securities held in the portfolio are securities issued by government sponsored enterprises. These securities are not explicitly guaranteed by the federal government. Presented below are the lowest credit ratings at December 31, 2015 and 2014, for each investment type.

<u>Investment Ratings</u>						
<u>December 31, 2015</u>						
<u>(amounts expressed in thousands)</u>						
S&P/Moody's Ratings <sup>1</sup>	U.S. Treasury Securities	U.S. Agency Securities	Commercial Paper	Corporate Fixed Income Securities	Money Market Mutual Funds	Total
AAAm	\$ -	\$ -	\$ -	\$ -	\$ 38,981	\$ 38,981
A-1/P-1	-	55,441	8,996	-	-	64,437
AA/Aa	77,613	34,129	-	2,510	-	114,252
A/A	-	-	-	-	-	-
	<u>\$ 77,613</u>	<u>\$ 89,570</u>	<u>\$ 8,996</u>	<u>\$ 2,510</u>	<u>\$ 38,981</u>	<u>\$ 217,670</u>

<sup>1</sup> Actual credit ratings as of the year end for each investment type. For securities with split ratings the lowest rating is shown. Securities that fall below the minimum credit quality may be sold or held at the discretion of the Board.

<u>Investment Ratings</u>						
<u>December 31, 2014</u>						
<u>(amounts expressed in thousands)</u>						
<u>S&amp;P/Moody's</u> <u>Ratings<sup>1</sup></u>	<u>U.S. Treasury</u> <u>Securities</u>	<u>U.S.</u> <u>Agency</u> <u>Securities</u>	<u>Commercial</u> <u>Paper</u>	<u>Corporate</u> <u>Fixed Income</u> <u>Securities</u>	<u>Money</u> <u>Market</u> <u>Mutual Funds</u>	<u>Total</u>
AAAm	\$ -	\$ -	\$ -	\$ -	\$ 9,239	\$ 9,239
A-1/P-1	-	29,732	5,496	-	-	35,228
AA/Aa	96,191	43,242	-	19,056	-	158,489
A/A	-	-	-	3,520	-	3,520
	<u>\$ 96,191</u>	<u>\$ 72,974</u>	<u>\$ 5,496</u>	<u>\$ 22,576</u>	<u>\$ 9,239</u>	<u>\$ 206,476</u>

<sup>1</sup>Actual credit ratings as of the year end for each investment type. For securities with split ratings the lowest rating is shown. Securities that fall below the minimum credit quality may be sold or held at the discretion of the Board.

### Concentration of Credit Risk

The Board's investments comply with the requirements of the investment policy. Specific limitations of the investment policy are displayed in the schedule titled *Investments Authorized by the Board's Investment Policy*. Generally accepted accounting principles require disclosure of certain investments in any one issuer that exceed five percent concentration of total investments. The following investments represent five percent or more of the Board's total investments at December 31, 2015 and 2014:

<u>Concentration of Credit Risk</u>		
<u>(amounts expressed in thousands)</u>		
<u>Issuer</u>	<u>December 31,</u>	
	<u>2015</u>	<u>2014</u>
	<u>Fair Value</u>	<u>Fair Value</u>
Federal Farm Credit Bank - (FFCB)	\$14,552	\$18,588
Federal Home Loan Bank - (FHLB)	12,999	10,666
Federal Home Loan Mortgage Corporation - (FHLMC)	27,493	23,629
Federal National Mortgage Association - (FNMA)	34,526	20,091

Fair Value

The Board categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted process; Level 3 inputs are significant unobservable inputs.

The Board has the following recurring fair value measurements as of December 31, 2015 and 2014:

<u>Investments Measured at Fair Value</u>				
<u>December 31, 2015</u>				
<u>(amounts expressed in thousands)</u>				
	<u>12/31/2015</u>	<u>Fair Value Measurements Using</u>		
		<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
Investments by fair value level:				
U.S. Treasury securities	\$ 77,613	\$ 77,613	\$ -	\$ -
U.S. agency securities	89,570	-	89,570	-
Commercial paper	8,996	-	8,996	-
Corporate fixed income securities	2,510	-	2,510	-
Total investments by fair value level	<u>178,689</u>	<u>\$ 77,613</u>	<u>\$ 101,076</u>	<u>\$ -</u>
Money market funds (measured at net asset value)	<u>38,981</u>			
Total investments	<u>\$ 217,670</u>			

<u>Investments Measured at Fair Value</u>				
<u>December 31, 2014</u>				
<u>(amounts expressed in thousands)</u>				
	<u>12/31/2014</u>	<u>Fair Value Measurements Using</u>		
		<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
Investments by fair value level:				
U.S. Treasury securities	\$ 96,191	\$ 96,191	\$ -	\$ -
U.S. agency securities	72,974	-	72,974	-
Commercial paper	5,496	-	5,496	-
Corporate fixed income securities	22,576	-	22,576	-
Total investments by fair value level	<u>197,237</u>	<u>\$ 96,191</u>	<u>\$ 101,046</u>	<u>\$ -</u>
Money market funds (measured at net asset value)	<u>9,239</u>			
Total investments	<u>\$ 206,476</u>			

(3) ACCOUNTS RECEIVABLE

Current and long-term accounts receivable at December 31, 2015 and 2014 were as described below. Other receivables include receivables for contributions in aid of construction, system development charges, nonpotable and hydrant water sales, and power sales. Long-term receivables represent financing arrangements with the City and County of Denver and various suburban water districts for the sale of water. In 2014, the City's Wastewater Management Division paid the remaining balance of their long-term receivable related to billing system development costs from 2005. The Board has no allowance for doubtful accounts since nonpayment of receivables may result in a discontinuation of service that attaches to the property location.

<u>Accounts Receivable</u>				
(amounts expressed in thousands)				
	December 31,			
	2015		2014	
<u>Total Accounts Receivable</u>				
<u>Current</u>				
Water sales	\$ 16,412	80%	\$ 16,170	76%
Other	4,221	20	5,029	24
<i>Total Current</i>	<u>\$ 20,633</u>	<u>100%</u>	<u>\$ 21,199</u>	<u>100%</u>
<u>Long-term</u>	<u>\$ 15,374</u>		<u>\$ 14,924</u>	
<u>From the City and County of Denver (included above)</u>				
<u>Current</u>				
Water sales	\$ 284		\$ 251	
Other	9		9	
<i>Total Current</i>	<u>293</u>		<u>260</u>	
<u>Long-term</u>	<u>-</u>		<u>-</u>	
Total from City and County of Denver	<u>\$ 293</u>		<u>\$ 260</u>	

(4) CAPITAL ASSETS

Capital asset activity for the years ended December 31, 2015 and 2014 were as follows:

<u>Capital Assets</u>					
<u>Year Ended December 31, 2015</u>					
<u>(amounts expressed in thousands)</u>					
	<u>December 31,</u>	<u>Additions</u>	<u>Sales &amp;</u>	<u>Category</u>	<u>December 31,</u>
	<u>2014</u>	<u>&amp; Transfers</u>	<u>Retirements</u>	<u>Reclass<sup>1</sup></u>	<u>2015</u>
<u>Capital assets not being depreciated:</u>					
Land and land rights	\$ 115,291	\$ 14,042	\$ -	\$ (30,235)	\$ 99,098
Water rights and other	75,550	-	-	30,235	105,785
Construction in progress	171,215	(7,949)	-	-	163,266
Total capital assets not being depreciated	<u>362,056</u>	<u>6,093</u>	<u>-</u>	<u>-</u>	<u>368,149</u>
<u>Capital assets being depreciated:</u>					
Buildings and improvements	281,772	442	(184)	(80,492)	201,538
Improvements other than buildings	1,955,572	106,645	(4,858)	(55,062)	2,002,297
Machinery and equipment	246,368	17,874	(6,789)	135,554	393,007
Total capital assets being depreciated	<u>2,483,712</u>	<u>124,961</u>	<u>(11,831)</u>	<u>-</u>	<u>2,596,842</u>
<u>Less accumulated depreciation:</u>					
Buildings and improvements	(76,257)	(4,056)	138	32,803	(47,372)
Improvements other than buildings	(578,572)	(31,684)	2,252	37,899	(570,105)
Machinery and equipment	(121,358)	(14,040)	5,486	(70,702)	(200,614)
Total accumulated depreciation	<u>(776,187)</u>	<u>(49,780)</u>	<u>7,876</u>	<u>-</u>	<u>(818,091)</u>
Total capital assets being depreciated, net	<u>1,707,525</u>	<u>75,181</u>	<u>(3,955)</u>	<u>-</u>	<u>1,778,751</u>
Total capital assets, net	<u>\$ 2,069,581</u>	<u>\$ 81,274</u>	<u>\$ (3,955)</u>	<u>\$ -</u>	<u>\$ 2,146,900</u>

<sup>1</sup>In 2015, assets were transferred between previous asset categories into functional program asset categories.

<u>Capital Assets</u>				
<u>Year Ended December 31, 2014</u>				
<u>(amounts expressed in thousands)</u>				
	<u>December 31,</u> <u>2013</u>	<u>Additions</u> <u>&amp; Transfers</u>	<u>Sales &amp;</u> <u>Retirements</u>	<u>December 31,</u> <u>2014</u>
<u>Capital assets not being depreciated:</u>				
Land and land rights	\$ 115,304	\$ 21	\$ (34)	\$ 115,291
Water rights and other	75,550	-	-	75,550
Construction in progress	<u>124,244</u>	<u>46,971</u>	<u>-</u>	<u>171,215</u>
Total capital assets not being depreciated	<u>315,098</u>	<u>46,992</u>	<u>(34)</u>	<u>362,056</u>
<u>Capital assets being depreciated:</u>				
Buildings and improvements	279,280	2,662	(170)	281,772
Improvements other than buildings	1,890,470	72,238	(7,136)	1,955,572
Machinery and equipment	<u>246,433</u>	<u>3,482</u>	<u>(3,547)</u>	<u>246,368</u>
Total capital assets being depreciated	<u>2,416,183</u>	<u>78,382</u>	<u>(10,853)</u>	<u>2,483,712</u>
<u>Less accumulated depreciation:</u>				
Buildings and improvements	(72,278)	(4,088)	109	(76,257)
Improvements other than buildings	(549,357)	(31,860)	2,645	(578,572)
Machinery and equipment	<u>(112,055)</u>	<u>(11,849)</u>	<u>2,546</u>	<u>(121,358)</u>
Total accumulated depreciation	<u>(733,690)</u>	<u>(47,797)</u>	<u>5,300</u>	<u>(776,187)</u>
Total capital assets being depreciated, net	<u>1,682,493</u>	<u>30,585</u>	<u>(5,553)</u>	<u>1,707,525</u>
Total capital assets, net	<u>\$ 1,997,591</u>	<u>\$ 77,577</u>	<u>\$ (5,587)</u>	<u>\$ 2,069,581</u>

Depreciation and amortization for the years ended December 31, 2015 and 2014 were as follows:

<u>Depreciation and Amortization</u>		
<u>(amounts expressed in thousands)</u>		
	<u>Years Ended December 31,</u>	
	<u>2015</u>	<u>2014</u>
Operating expenses, water service	\$ 47,897	\$ 45,772
Nonoperating expenses	130	126
Other, as allocated	<u>1,753</u>	<u>1,899</u>
Total depreciation and amortization	<u>\$ 49,780</u>	<u>\$ 47,797</u>

Major retirements during 2015 were primarily the result of fleet equipment sold and write-offs of mains, hydrants, and assets associated with the Ashland Reservoir tank replacement project. Major retirements during 2014 were primarily the result of the write-off of assets connected with the Elizabeth St. pumping station conversion, plus write-offs of conduits, mains, and hydrants.

(5) RISK MANAGEMENT

The Board is exposed to various risks of losses including torts, general liability, property damage (all limited under the Colorado Governmental Immunity Act to \$350,000 per person and \$990,000 per occurrence), and employee life, medical, dental, and accident benefits. The Board has a risk management program that includes self-insurance for liability, employee medical (including stop-loss coverage), dental, and vision. The Board carries commercial property insurance for catastrophic losses, including floods, fires, earthquakes and terrorism, for scheduled major facilities including the Westside Complex, Marston Treatment Plant and Lab, Moffat Treatment Plant, Foothills Treatment Plant, the Recycling Plant, and water turbines. It carries limited insurance for other nonscheduled miscellaneous locations. The Board also carries commercial insurance for life, accident, short and long term disability, employee dishonesty, and fiduciary exposure. Workers' compensation insurance is a large deductible policy whereby the Board is responsible for the first \$250,000 per claim with an aggregate cost of \$2.7 million. In addition, the Board is at times party to pending or threatened lawsuits under which it may be required to pay certain amounts upon their final disposition.

In December, 2015 the Board approved transitioning to self-insurance for workers compensation and purchasing a stop-loss policy for individual claims exceeding \$500,000. This program will start in February 2016.

Claims expenses and liabilities are reported when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. These losses include an estimate of claims that have been incurred but not reported. At December 31, 2015 and 2014, claims liabilities consisting of medical, dental and vision benefits were \$1.0 million and \$919,000, respectively. There were no legal claims outstanding at year-end. Changes in the balances of these liabilities during 2015 and 2014 were as follows:

<u>Claims Liabilities</u> <u>(amounts expressed in thousands)</u>				
	<u>Beginning- of-Year Liability</u>	<u>Current-Year Claims and Changes in Estimates</u>	<u>Claim Payments</u>	<u>Balance at Year-End</u>
2015	\$ 919	\$ 11,778	\$ (11,656)	\$ 1,041
2014	1,316	10,761	(11,158)	919

Medical claims liabilities are reported in *Accrued Payroll, Vacation, and other Employee Benefits*; and legal claims, if any, are reported in *Accounts Payable* on the *Statements of Net Position*. It is expected the claims will be paid in the next twelve months.

(6) NOTES AND BONDS PAYABLE

A. Notes Payable

On November 20, 2013, the Board executed a credit agreement with Bank of America, N.A., to provide a variable rate revolving note payable for a maximum initial principal amount of \$30.0 million as an interim source of financing for capital improvements to the water works system. It is the intention of the Board to periodically pay down the line of credit by issuing revenue bonds. The credit facility is payable solely from

net revenue and is subordinate to the lien on the Board's outstanding revenue bonds. The initial line of credit is for three years with an option to renew it for an additional two years and to increase it to \$50.0 million. The funds drawn on the line of credit are classified as long-term liabilities because the debt provisions permit refinancing the note on a long-term basis. Notes Payable activity for the years ended December 31, 2015 and 2014 was as follows:

	<u>Notes Payable</u>			
	<u>(amounts expressed in thousands)</u>			
	<u>Beginning</u>			<u>Ending</u>
	<u>Balance</u>	<u>Draws</u>	<u>Repayments</u>	<u>Balance</u>
2015	\$ -	\$30,000	\$ -	\$30,000
2014	10,000	-	10,000	-

#### B. Revenue Bonds Payable

Revenue Bonds payable consists of water revenue improvement and refunding bonds of the Board. The Board has pledged to repay the bonds and related interest from net revenues, and to maintain adequate rates to ensure its ability to do so. Coupon rates for the revenue bonds outstanding at December 31, 2015 and 2014 ranged from 0.75% to 6.15% each year. The weighted average yield to maturity at issue for outstanding bonds was 3.15% and 3.12% for the years ended December 31, 2015 and 2014, respectively. The weighted average yield is calculated net of Build America Bond subsidy of 35% for the Series 2009A and Series 2010B revenue bonds adjusted in 2015 by 6.8% and in 2014 by 7.3% for the congressional sequester. In accordance with the Official Statements, the Board has established a reserve fund for the revenue bonds totaling \$12.0 and \$12.4 million at December 31, 2015 and 2014, respectively.

The Board issued the Series 2014A master resolution water revenue bonds on September 16, 2014 in an aggregate principal amount of \$48.7 million at a true interest cost at sale of 3.74%. The proceeds from the sale of the Series 2014A master resolution bonds were used to finance additions and improvements to the water system operated by the Board, pay down the Bank of America credit agreement and advance refund a portion of the Series 2005 revenue bonds. The proportionate share of proceeds for the advance refunding, together with cash funds of \$28,000 provided by the Board, were placed in an irrevocable trust with an escrow agent to defease \$4.4 million in aggregate principal of the Series 2005 revenue bonds.

As a result of placing the above funds in an escrow account to purchase Treasury securities sufficient to pay all future principal and interest payments and to redeem the bonds on their respective call dates, the bonds discussed above are considered to be defeased and the liability for these bonds has been removed from the Board's *Statements of Net Position*. The aggregate principal amount of all bonds considered defeased is \$0.0 million and \$18.4 million at December 31, 2015, and 2014, respectively. The difference represents bonds that were called and paid during 2015.

The advance refunding resulted in a difference between the reacquisition price and the net carrying amount of the old debt ("deferred amount on refunding") of \$174,000. This difference, reported in the accompanying basic financial statements as a *Deferred Outflow of Resources*, is being amortized using the straight line method as a component of interest expense through 2025. The remaining unamortized amount on refunding of all bonds considered defeased is \$4.3 million and \$4.7 million at December 31, 2015 and 2014, respectively.

The Board completed the advance refunding to reduce its total debt service payments and to obtain an economic gain (difference between the present values of the old and new debt service payments). The reduction in total debt service requirements over the next 25 years is \$1.7 million, with an economic gain of \$431,000.

A summary of debt maturity for the revenue bonds as of December 31, 2015 is as follows:

<u>Revenue Bonds</u>			
<u>December 31, 2015</u>			
<u>(amounts expressed in thousands)</u>			
<u>Year of Maturity:</u>	<u>Principal</u>	<u>Interest<sup>1</sup></u>	<u>Total</u>
Current:	\$ 21,565	\$ 16,689	\$ 38,254
Long-term:			
2017	15,790	15,669	31,459
2018	12,830	14,954	27,784
2019	10,935	14,376	25,311
2020	11,810	13,909	25,719
2021-2025	65,865	60,706	126,571
2026-2030	59,355	46,777	106,132
2031-2035	70,680	32,591	103,271
2036-2040	62,915	15,503	78,418
2041-2045	36,380	3,703	40,083
	346,560	218,188	564,748
Plus premium	6,593	-	6,593
Total long-term	353,153	218,188	571,341
	<u>\$ 374,718</u>	<u>\$ 234,877</u>	<u>\$ 609,595</u>

<sup>1</sup>Excludes Build America Bonds interest subsidy. Amounts received during 2015 and 2014 were \$2,179,000 and \$2,174,000, respectively. The Board is eligible to receive approximately \$35.5 million over the remaining life of the bonds, subject to appropriations by Congress.

(7) LEASES

A. Capital Lease

On July 21, 1992, the Board entered into an agreement amending the lease agreement of March 3, 1987 with the Colorado River Water Conservation District ("District") whereby the District was required to construct Ritschard Dam and Wolford Mountain Reservoir ("Wolford") on Muddy Creek, a tributary of the Colorado River north of Kremmling, Colorado. In consideration of quarterly and semiannual lease payments for 27 years beginning after issuance of a notice of award for construction and payments of 40% of the annual operating costs of Wolford beginning after the end of the lease term, the District will convey to the Board at the end of the lease term ownership, use and control of 40% of the storage capacity of

Wolford and 40% of the water rights. The present value of the minimum lease payments at the beginning of the lease term, including a \$2.4 million nonrefundable deposit, was \$43.0 million, and the Board recorded an asset and obligation under capital lease of that amount in 1992. The project was completed in the fall of 1995. The assets under the Wolford capital lease by major asset class, recorded in Utility Plant under Capital Lease, are as follows:

<u>Assets Under Capital Lease - Wolford Mountain</u>		
<u>(amounts expressed in thousands)</u>		
	December 31,	
	2015	2014
Improvements other than buildings	\$ 42,980	\$ 42,980
Less: accumulated amortization	<u>(11,261)</u>	<u>(10,702)</u>
	<u>\$ 31,719</u>	<u>\$ 32,278</u>

Minimum capital lease payments were \$3.0 million during both 2015 and 2014. The following is a schedule by year of future minimum lease payments, together with the present value of the minimum lease payments as of December 31, 2015:

<u>Obligation Under Capital Lease - Wolford Mountain</u>	
<u>As of December 31, 2015</u>	
<u>(amounts expressed in thousands)</u>	
<u>Year Ending December 31:</u>	
2016	\$ 3,000
2017	3,000
2018	3,000
2019	3,000
2020	<u>1,500</u>
Total minimum lease payments	13,500
Less interest at 6.75%	<u>(2,022)</u>
Present value of minimum lease payments (obligation under capital lease)	11,478
Less current portion	<u>(2,263)</u>
Total long-term	<u>\$ 9,215</u>

#### B. Operating Leases

The Board is committed under various cancellable operating leases for property and equipment. Lease expenses for the years ended December 31, 2015 and 2014 were \$1.0 million and \$1.7 million, respectively. The Board expects these leases to be replaced in the ordinary course of business with similar leases. Future lease payments should approximate the amount expensed in 2015.

(8) WASTE DISPOSAL CLOSURE AND POSTCLOSURE CARE

The Board operates a landfill and residuals drying beds at the Foothills Water Treatment Plant for disposal of aluminum sulfate solids/residuals generated as a by-product of the potable water treatment process at the Foothills and Marston Water Treatment Plants. It also operates residuals drying beds near the Ralston Reservoir and at West 41<sup>st</sup> Avenue and Independence Court for dewatering of aluminum sulfate solids/residuals generated as a by-product of the potable water treatment process at the Moffat Water Treatment Plant. These sites have been in operation since 1995. State and federal laws and regulations require the Board to perform certain closing functions on these disposal sites when they stop accepting residuals, including placing a final cover on the Foothills landfill and performing certain maintenance and monitoring functions at the Foothills landfill for thirty years after closure.

Although these sites are not municipal solid waste landfills, and are outside the scope of GASB Statement No. 18, *Accounting for Municipal Solid Waste Landfill Closure and Postclosure Care Costs*, (“GASB No. 18”), the Board voluntarily implemented the provisions of that statement in 2000 to meet State of Colorado and federal financial assurance requirements discussed below.

During 2013, Colorado revised its Solid Waste regulations to require reporting for the Foothills and 41<sup>st</sup> and Independence drying beds, which were previously not required to be reported. Also, the change in regulations no longer requires recording a liability for postclosure care costs for drying beds if they are “clean closed,” which means that all residuals are removed upon closure. Despite this, the postclosure care liability for Ralston drying beds of \$760,000 and \$749,000, respectively, has been included in 2015 and 2014 pending receipt of a revised Certificate of Designation from Jefferson County.

As required by GASB No. 18, although closure and postclosure care costs will be paid only near or after the date that the disposal sites stop accepting waste, the Board reports a portion of the Foothills closure and postclosure care costs as an operating expense and liability in each year based on landfill capacity used as of each *Statement of Net Position* date. The Board reports the entire liability for closure costs for the Foothills, Ralston, and 41<sup>st</sup> and Independence residual drying beds since they are not “filled” like a landfill, but are reusable.

Approximately \$6.2 million and \$6.1 million was reported as *Waste Disposal Closure and Postclosure Care* liability in the *Statements of Net Position*, at December 31, 2015 and 2014, respectively, for the sites as follows:

<u>Waste Disposal Closure and Postclosure Care Liability</u>				
<u>(amounts expressed in thousands)</u>				
	<u>Foothills</u>	<u>Ralston</u>	<u>41st &amp; Independence</u>	<u>Total</u>
<u>2015</u>				
Closure Costs	\$ 2,446	\$ 2,120	\$ 628	\$ 5,194
Postclosure Care Costs	276	760	-	\$ 1,036
	<u>\$ 2,722</u>	<u>\$ 2,880</u>	<u>\$ 628</u>	<u>\$ 6,230</u>
<u>2014</u>				
Closure Costs	\$ 2,412	\$ 2,091	\$ 619	\$ 5,122
Postclosure Care Costs	268	749	-	1,017
	<u>\$ 2,680</u>	<u>\$ 2,840</u>	<u>\$ 619</u>	<u>\$ 6,139</u>

These costs are based on the use of 24.1% and 23.8% of the active portion of the Foothills landfill at December 31, 2015 and 2014, respectively, and 100% of the Foothills, Ralston, and 41<sup>st</sup> and Independence drying beds. The Board will recognize the remaining estimated cost of the Foothills postclosure care of \$867,000 as the remaining capacity is filled. These amounts are based on what it would cost to perform all closure and postclosure care in 2015. Actual cost may be higher due to inflation, changes in technology, or changes in regulations. The remaining life of the Foothills landfill is estimated to be approximately 73.2 years for the active disposal area of 61.7 acres. In addition, there is expansion capability of 62 acres with an indefinite life. The Foothills, Ralston, and 41<sup>st</sup> and Independence drying beds have an indefinite life.

The Board is required by state and federal laws and regulations to establish financial assurance sufficient to ensure full payment of closure and postclosure care of its disposal sites by selecting one of a variety of financial mechanisms. The Board chose the “Local Government Financial Test” which includes profitability requirements, minimum general obligation bond ratings, unmodified audit opinions, and the implementation of GASB No. 18.

(9) CHANGES IN LONG-TERM LIABILITIES

Long-term liability activity for the years ended December 31, 2015 and 2014 were as follows:

<u>Long-Term Liabilities</u>					
<u>Year Ended December 31, 2015</u>					
<u>(amounts expressed in thousands)</u>					
	December 31,	2015		December 31,	Due Within
	2014	Additions	Reductions	2015	
	(Current and Long-Term)			(Current and Long-Term)	
Notes Payable	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -
Revenue bonds payable, net	404,605	-	(29,887)	374,718	21,565
Obligation under capital lease	13,595	-	(2,117)	11,478	2,263
Customer advances for construction	3,010	11,126	(6,460)	7,676	-
Accrued sick leave	7,417	554	(550)	7,421	2,844 <sup>1</sup>
Net Pension Liability	48,019	-	(1,764)	46,255	-
Other postemployment benefits	10,990	2,722	(2,913)	10,799	-
Waste disposal closure	6,139	91	-	6,230	-
	<u>493,775</u>	<u>\$ 44,493</u>	<u>\$ (43,691)</u>	<u>494,577</u>	<u>\$ 26,672</u>
Less current portion	(32,042)			(26,672)	
Total long-term liabilities	<u>\$ 461,733</u>			<u>\$ 467,905</u>	

<sup>1</sup>Included in Accrued Payroll, Vacation and Other Employee Benefits in the Statements of Net Position.

<u>Long-Term Liabilities</u>					
<u>Year Ended December 31, 2014</u>					
<u>(amounts expressed in thousands)</u>					
	December 31, 2013	2014		December 31, 2014	Due Within One Year
	(Current and Long-Term)	Additions	Reductions	(Current and Long-Term)	
Notes Payable	\$ 10,000	\$ -	\$ (10,000)	\$ -	\$ -
Revenue bonds payable, net	388,437	50,102	(33,934)	404,605	27,000
Obligation under capital lease	15,576	-	(1,981)	13,595	2,117
Customer advances for construction	1,134	5,606	(3,730)	3,010	-
Accrued sick leave	7,415	658	(656)	7,417	2,925 <sup>1</sup>
Net Pension Liability	-	48,019	-	48,019	-
Other postemployment benefits	10,889	2,019	(1,918)	10,990	-
Waste disposal closure	3,634	2,505	-	6,139	-
	<u>437,085</u>	<u>\$ 108,909</u>	<u>\$ (52,219)</u>	<u>493,775</u>	<u>\$ 32,042</u>
Less current portion	<u>(30,848)</u>			<u>(32,042)</u>	
Total long-term liabilities	<u>\$ 406,237</u>			<u>\$ 461,733</u>	

<sup>1</sup>Included in Accrued Payroll, Vacation and Other Employee Benefits in the Statements of Net Position.

#### (10) PENSION PLAN

The Board implemented GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, and GASB Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date* in 2015 and restated 2014 financial statements.

#### General Information about the Pension Plan

##### Plan Description

The Board sponsors and administers a trustee, single-employer defined benefit pension plan, (the "Plan"). The Plan provides retirement benefits with limited annual cost-of-living adjustments to retired members and, if elected by the member, to his or her surviving spouse. Members of the Plan include substantially all regular and discretionary full-time and part-time employees of the Board. Article X, Section 10.1.6 of the Charter of the City assigns the authority to establish and amend benefit provisions to the Board. The Plan contains provisions regarding amendments, including a provision for employee voting on amendments in specifically described situations. The Plan issues a publicly available financial report that includes financial statements and required supplementary information for the Plan. That report may be obtained by writing to: Treasurer, MC 210, Denver Water, 1600 West 12th Avenue, Denver, CO 80204-3412. It can also be obtained from the Denver Water website.

Benefits Provided

The Plan provides retirement benefits with limited annual cost-of-living adjustments to retired members and, if elected by the member, to his or her surviving spouse. It also provides retirement service in the event of disability, and a \$5,000 death benefit to retirees receiving monthly payments from the plan. Retirement benefits are calculated based on the employee's (a) average final compensation during the 36 consecutive months out of the last 120 completed calendar months of employment with the Board that produce the highest average; (b) the "Covered Compensation" for Social Security tax purposes; (c) years of credited service; (d) age when pension benefit begins; and (e) the form chosen to receive pension benefits. The basic monthly benefit from the Plan for the normal retirement age of 65 will equal the sum of the following amounts: (1) .015 times the average final compensation times the number of years of credited service, and (2) .0045 times the amount by which the average final compensation exceeds the covered compensation times the number of years of credited service. There are also early retirement options beginning at age 55. Monthly pension benefits are automatically adjusted at the beginning of each year to reflect the annual rate of change in the Consumer Price Index from the previous year, limited to no more than 4.4%.

Employees Covered by Benefit Terms

At January 1, 2014, the valuation date, the following employees were covered by the benefit terms:

<u>Employees Covered by Pension Plan Benefit Terms</u>	
<u>As of January 1, 2014</u>	
Inactive employees or beneficiaries currently receiving benefits	558
Inactive employees entitled to but not yet receiving benefits	91
Active employees	1,023
	<u>1,672</u>

Contributions

Article X, Section 10.1.6 of the Charter of the City assigns the authority to establish and amend the contribution requirements to the Board. The Board's funding policy is established and may be amended by the Board, which acts as trustee of the Plan. The Board reserves the right to suspend, reduce, or permanently discontinue all contributions at any time, pursuant to the termination provisions of the Plan.

On August 28, 2013, the Board adopted the Employees' Retirement Plan Funding Policy effective for 2014 and future years. The Policy defines the objectives of the Board in funding the Plan. In accordance with the policy, the Board will base its contributions to the Plan on Actuarially Determined Contributions ("ADC") calculated annually by an independent actuary using agreed upon methods and assumptions developed by the Actuarial Standards Board and specified in the funding policy. The primary objective of the Policy is to provide sufficient assets to pay all benefits promised under the Plan and to minimize the volatility of contribution payments from year to year. Plan members are not allowed to make contributions. For the years ended December 31, 2015 and 2014, the Board contributed \$14.5 million to the Plan.

Net Pension Liability

The Board has elected a measurement date for the current year-end as of the prior year-end. Therefore, the net pension liability reported as of December 31, 2015 was measured as of December 31, 2014, and the net

pension liability reported as of December 31, 2014 was measured as of December 31, 2013. The total pension liability used to calculate the net pension liability for both years was determined by an actuarial valuation performed as of January 1, 2014.

#### Actuarial Assumptions

The Entry Age Normal actuarial cost method was used to measure the total pension liability. The actuarial assumptions included (a) 7.5% investment rate of return, (b) projected salary increases ranging from 3.6% to 6.1% per year for funding and 3.5% for the total pension liability, and (c) 3.0% per year cost-of-living adjustments and inflation factor. The actuarial value of Plan assets was determined using techniques that smooth the effects of short-term volatility in the market value of investments over a three-year period. Effective January 1, 2014, the Plan's unfunded actuarial accrued liability will be amortized in level dollar amounts over 15 years on a layered basis, which more closely reflects the average period of active service of Plan members.

Mortality rates were based on the RP-2000 Combined Healthy Mortality Table, blended 50% blue collar adjusted and 50% white collar adjusted, and projected to 2021 using Scale AA.

The actuarial assumptions that determined the total pension liability as of January 1, 2014, were based on the results of an actuarial experience study for the period 2005 through 2009.

#### Discount Rate

The discount rate used to measure the total pension liability was 7.5%. The projection of cash flows used to determine the discount rate assumed that Board contributions will be made at approximately the current actuarially determined contribution rate. Based on this assumption, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. 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.

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. The target allocation and best estimate of the 30-year geometric mean return for each major asset class are summarized in the following table:

<u>Target Asset Allocation and Long-Term Expected Return</u>		
<u>As of January 1, 2014</u>		
<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Geometric Real Rate of Return</u>
Domestic equity	41.5%	4.2%
International equity	18.0%	4.2%
Fixed income	20.0%	2.0%
Hedge Funds	10.0%	2.7%
Real estate	10.5%	3.7%
	<u>100.0%</u>	

*Sensitivity of the Net Pension Liability to Changes in Discount Rate*

The following presents the net pension liability of the Board, calculated using the discount rate of 7.5%, as well as what the Board's net pension liability would be if it were calculated using the discount rate that is one percentage point lower (6.5%) or one percentage point higher (8.5%) than the current rate:

<u>Sensitivity of the Net Pension Liability to Changes in Discount Rate</u>			
<u>As of December 31, 2015</u>			
<u>(amounts expressed in thousands)</u>			
	<u>1% Decrease (6.5%)</u>	<u>Current Discount Rate (7.5%)</u>	<u>1% Increase (8.5%)</u>
Net pension liability	<u>\$ 84,924</u>	<u>\$ 46,255</u>	<u>\$ 13,420</u>

<u>Sensitivity of the Net Pension Liability to Changes in Discount Rate</u>			
<u>As of December 31, 2014</u>			
<u>(amounts expressed in thousands)</u>			
	<u>1% Decrease (6.5%)</u>	<u>Current Discount Rate (7.5%)</u>	<u>1% Increase (8.5%)</u>
Net pension liability	<u>\$ 85,925</u>	<u>\$ 48,019</u>	<u>\$ 15,872</u>

*Pension Plan Fiduciary Net Position*

Detailed information about the Plan's fiduciary net position is available in the separately issued Plan financial report discussed above.

Changes in the Net Pension Liability

<u>Changes in Net Pension Liability</u>			
<u>As of December 31, 2015</u>			
<u>(amounts expressed in thousands)</u>			
	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 12/31/14	\$ 337,844	\$ 289,825	\$ 48,019
Changes for the year:			
Service cost	6,071	-	6,071
Interest on total pension liability	25,044	-	25,044
Effect of plan changes	-	-	-
Effect of economic/demographic gains or losses	-	-	-
Effect of assumptions changes or inputs	-	-	-
Benefit payments	(20,365)	(20,365)	-
Employer contributions	-	14,500	(14,500)
Member contributions	-	-	-
Net investment income	-	18,523	(18,523)
Administrative expenses	-	(144)	144
Net changes	10,750	12,514	(1,764)
Balances at 12/31/15	\$ 348,594	\$ 302,339	\$ 46,255

<u>Changes in Net Pension Liability</u>			
<u>As of December 31, 2014</u>			
<u>(amounts expressed in thousands)</u>			
	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 12/31/13	\$ 323,560	\$ 253,768	\$ 69,792
Changes for the year:			
Service cost	6,046	-	6,046
Interest on total pension liability	24,051	-	24,051
Effect of plan changes	-	-	-
Effect of economic/demographic gains or losses	2,037	-	2,037
Effect of assumptions changes or inputs	-	-	-
Benefit payments	(17,850)	(17,850)	-
Employer contributions	-	15,000	(15,000)
Member contributions	-	-	-
Net investment income	-	39,023	(39,023)
Administrative expenses	-	(116)	116
Net changes	14,284	36,057	(21,773)
Balances at 12/31/14	<u>\$ 337,844</u>	<u>\$ 289,825</u>	<u>\$ 48,019</u>

For the years ended December 31, 2015 and 2014, the Board recognized pension expense of \$6.6 million and \$ 7.5 million, respectively. At December 31, 2015 and 2014, the Board reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

<u>Deferred Outflows and Inflows of Resources Related to Pensions</u>		
<u>As of December 31, 2015</u>		
<u>(amounts expressed in thousands)</u>		
	Deferred Inflows of Resources	Deferred Outflows of Resources
Economic/demographic gains or losses	\$ -	\$ 1,479
Net difference between projected and actual earnings	(9,666)	-
Contributions made subsequent to measurement date	-	14,500
Total	<u>\$ (9,666)</u>	<u>\$ 15,979</u>

<u>Deferred Outflows and Inflows of Resources Related to Pensions</u>		
<u>As of December 31, 2014</u>		
<u>(amounts expressed in thousands)</u>		
	<u>Deferred Inflows of Resources</u>	<u>Deferred Outflows of Resources</u>
Economic/demographic gains or losses	\$ -	\$ 1,758
Net difference between projected and actual earnings	(16,079)	-
Contributions made subsequent to measurement date	-	14,500
Total	<u>\$ (16,079)</u>	<u>\$ 16,258</u>

The \$14.5 million reported as deferred outflows of resources related to pensions, resulting from contributions subsequent to the measurement date, as of December 31, 2014, was recognized as a reduction of the net pension liability in the year ended December 31, 2015. The \$14.5 million reported as deferred outflows of resources related to pensions, resulting from contributions subsequent to the measurement date, as of December 31, 2015, will be recognized as a reduction of the net pension liability in the year ended December 31, 2016.

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

<u>Amortization of Deferred Outflows and Inflows of Resources Related to Pensions</u>	
<u>As of December 31, 2015</u>	
<u>(amounts expressed in thousands)</u>	
Year ended December 31,	
2016	\$ (3,142)
2017	(3,142)
2018	(3,142)
2019	878
2020	279
Thereafter	84

<u>Amortization of Deferred Outflows and Inflows of Resources Related to Pensions</u>	
<u>As of December 31, 2014</u>	
<u>(amounts expressed in thousands)</u>	
Year ended December 31,	
2015	\$ (3,741)
2016	(3,741)
2017	(3,741)
2018	(3,741)
2019	279
Thereafter	363

(11) OTHER RETIREMENT PLANS

The Board sponsors and administers the Denver Water Supplemental Retirement Savings Plan (“SRSP”). The SRSP is a 401(k) defined contribution plan. Article X, Section 10.1.6 of the Charter of the City assigns the authority to establish and amend benefit provisions to the Board. All regular and discretionary employees are eligible to participate in the plan. Under the terms of the plan, the Board will make a matching contribution to the SRSP’s trust fund each year in an amount equal to 100% of each participant’s elective contributions, limited to 3% of the participant’s base salary for the year. During 2015 and 2014, the Board made contributions totaling approximately \$2.0 million in both years, respectively and members contributed approximately \$4.5 million in both years, respectively, to the SRSP. Employee rollovers from other plans to the SRSP were \$1.3 million in 2015 and \$343,000 in 2014.

The Board sponsors and administers a deferred compensation plan that is available for its employees, created in accordance with Internal Revenue Code Section 457. The plan, available to all regular and discretionary employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination, retirement, death, or qualifying unforeseeable emergency. Participation in the plan is voluntary. The Board may make discretionary employer contributions to a qualified participant. Discretionary employer contributions are limited by Treasury Regulations under I.R.S. Code §415, 401(a)(17).

(12) OTHER POSTEMPLOYMENT BENEFITS

Plan Description

The Board provides two types of other postemployment benefits (“OPEB”) as follows:

*a. Postemployment Healthcare Benefits*

For employees hired before January 16, 2012, the Board provides a postemployment healthcare benefit through a single-employer, defined benefit plan. The benefit is in the form of partially subsidized health care costs, until the retiree attains age 65. The benefit is provided through the Board’s self-insured health plan to employees and dependents who meet eligibility requirements of the postemployment healthcare benefit plan. The eligibility requirements include retiring under the Special Early Retirement (Rule of 75) provision of the Board’s defined benefit pension plan, taking an immediate distribution of pension benefits,

and being covered as an employee or dependent under the employee healthcare plan, excluding COBRA coverage, at the time of retirement. The subsidy is separate from the Board's defined benefit retirement plan and is not paid out of retirement plan funds. Currently, 151 retirees are receiving this benefit. The Board provides this benefit under authority of Article X, Section 10.1.6 of the City Charter, which assigns the authority to establish and amend benefit provisions to the Board. In January 2012, the Board discontinued its subsidy for this benefit for employees hired on or after January 16, 2012. However, employees can still access this program upon reaching age 60, at full cost. In January 2014, the Board changed the benefit for those hired after January 16, 2012, by increasing the minimum age from 55 to 60, with some transition options.

#### *b. Long-Term Disability*

A long-term disability ("LTD") plan is provided for each employee who attains regular status. Prior to 2007, this benefit was self-insured. As of the end of 2015, there are three participants receiving benefits from the self-insured LTD plan and no new beneficiaries will be added under this plan. Beginning January 2016, Unum will take over the remainder of the self-insured plan. Any employee who becomes disabled on or after January 1, 2007, is covered under the terms of an insured plan. The insured plan is an 84-day elimination period for LTD benefits with a benefit of 60% of pay to a maximum of \$8,000 per month. Benefits are payable during the first two years if the disabled employee is incapable of employment at his or her own occupation earning at least the LTD benefit amount. Thereafter, benefits are payable provided the disabled employee is incapable of employment at any occupation. Benefit duration depends on age at disability. Benefits are payable to age 65 with a minimum of five years total for disabilities that occur before age 60. Benefit duration decreases for disabilities that occur after age 60 with a maximum benefit duration of five years. Under the insured plan, the obligation for the payment of benefits has been effectively transferred to the insurance company. The Board has guaranteed benefits in the event of the insurance company's insolvency.

Neither OPEB plan issues a separate report.

#### Funding Policy

The Board's funding policy is established and may be amended by the Board. The Board is not required to establish an irrevocable trust fund to accumulate assets for payment of future OPEB benefits, and has elected not to do so. Payments of OPEB benefits are made on a pay-as-you-go basis in amounts necessary to provide current benefits to recipients. For the year ended December 31, 2015, the Board contributed \$2.0 million to the postemployment healthcare benefits plan (approximately 71% of estimated premium equivalent costs). Retirees receiving benefits contributed \$798,000, or approximately 29% of the estimated premium equivalent costs. The Board paid \$28,000 in LTD benefits in 2015 and \$462,000 in LTD insurance premiums. For the year ended December 31, 2014, the Board contributed \$1.9 million to the postemployment healthcare benefits plan (approximately 69% of estimated premium equivalent costs). Retirees receiving benefits contributed \$844,000, or approximately 31% of the estimated premium equivalent costs. The Board paid \$54,000 in LTD benefits in 2014 and \$432,000 in LTD insurance premiums.

#### Annual OPEB Cost and Net OPEB Obligation

The Board's annual OPEB cost (expense) is calculated based on the annual required contribution of the employer ("ARC"), an amount actuarially determined in accordance with the parameters of GASB Statement 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities over a period not to exceed thirty years. The following tables show the components of the Board's annual OPEB costs, the amount actually

contributed to the OPEB plan, and changes in the Board's net OPEB obligation for the years ended December 31, 2015 and 2014:

<u>Annual OPEB Cost and Net OPEB Obligation</u>			
<u>Year Ended December 31, 2015</u>			
<u>(amounts expressed in thousands)</u>			
	<u>Healthcare</u>	<u>LTD<sup>1</sup></u>	<u>Total</u>
Annual required contribution (ARC)	\$ 1,974	\$ 13	\$ 1,987
Interest on net OPEB obligation (asset)	439	(22)	417
Adjustment to ARC	<u>(611)</u>	<u>31</u>	<u>(580)</u>
Annual OPEB cost	1,802	22	1,824
Contributions made	<u>(1,993)</u>	<u>(28)</u>	<u>(2,021)</u>
Increase in net OPEB obligation (asset)	(191)	(6)	(197)
Net OPEB obligation (asset) - beginning of year	10,990	(562)	10,428
Net OPEB obligation (asset) - end of year	<u>\$ 10,799</u>	<u>\$ (568)</u>	<u>\$ 10,231</u>

<sup>1</sup>This is the self-insured portion only. The LTD asset is recorded in *Prepaid Expenses and Other Assets* in the Statements of Net Position.

<u>Annual OPEB Cost and Net OPEB Obligation</u>			
<u>Year Ended December 31, 2014</u>			
<u>(amounts expressed in thousands)</u>			
	<u>Healthcare</u>	<u>LTD<sup>1</sup></u>	<u>Total</u>
Annual required contribution (ARC)	\$ 2,179	\$ 17	\$ 2,196
Interest on net OPEB obligation (asset)	463	(23)	440
Adjustment to ARC	<u>(623)</u>	<u>31</u>	<u>(592)</u>
Annual OPEB cost	2,019	25	2,044
Contributions made	<u>(1,918)</u>	<u>(54)</u>	<u>(1,972)</u>
Increase in net OPEB obligation (asset)	101	(29)	72
Net OPEB obligation (asset) - beginning of year	10,889	(533)	10,356
Net OPEB obligation (asset) - end of year	<u>\$ 10,990</u>	<u>\$ (562)</u>	<u>\$ 10,428</u>

<sup>1</sup>This is the self-insured portion only. The LTD asset is recorded in *Prepaid Expenses and Other Assets* in the Statements of Net Position.

The Board's annual OPEB cost, the percentage of annual OPEB cost contributed to the OPEB plan, and the net OPEB obligation for 2015 and the two preceding years were as follows:

<u>Annual OPEB Cost and Percentage of Required Contribution</u> (amounts expressed in thousands)				
<u>Year Ended December 31,</u>	<u>Annual OPEB Cost</u>	<u>Contributions Made</u>	<u>Percentage of Annual OPEB Cost Contributed</u>	<u>Net OPEB Obligation</u>
2015	\$ 1,824	\$ 2,021	110.8%	\$ 10,231
2014	2,044	1,972	96.5	10,428
2013	1,968	1,898	96.4	10,356

### Funded Status and Funding Progress

As of January 1, 2015 the most recent actuarial valuation date, the plan was 0% funded. The actuarial accrued liability for benefits was \$22.2 million, and the actuarial value of assets was \$0, resulting in an unfunded actuarial accrued liability (UAAL) of \$22.2 million. The covered payroll (annual payroll of active employees covered by the OPEB plan) was \$76.0 million, and the ratio of the UAAL to the covered payroll was 29.2%.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. A schedule of funding progress, presented as required supplementary information, presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits. See Exhibit I-C *OPEB Plan Schedule of Funding Progress*.

### Actuarial Methods and Assumptions

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the January 1, 2015 actuarial valuation, the projected unit credit with 30-year open, level dollar amortization, actuarial cost method was used. The actuarial assumptions included a 4.00 percent investment rate of return (net of administrative expenses and including an inflation component of 2.75%), which is the expected long-term investment return on the Board's investments, and an annual healthcare cost trend rate based on the Getzen Trend Model. The actuarial value of assets was not determined as the Board has not advance funded the obligation. The amortization period of the UAAL is a level dollar amount over 30 years on an open basis.

### (13) CAPITAL CONTRIBUTIONS

Inception-to-date and current year proceeds from contributions in aid of construction ("CIAC") and system development charges ("SDC") were as follows:

<u>Capital Contributions</u>		
<u>Years Ended December 31, 2015 and 2014</u>		
<u>(amounts expressed in thousands)</u>		
	<u>CIAC</u>	<u>SDC</u>
Inception through December 31, 2013	\$ 465,432	\$ 676,066
2014 Additions	<u>23,190</u>	<u>32,736</u>
Inception through December 31, 2014	488,622	708,802
2015 Additions	<u>33,256</u>	<u>36,109</u>
Inception through December 31, 2015	<u>\$ 521,878</u>	<u>\$ 744,911</u>

(14) CONTINGENCIES

In the normal course of business, there are various outstanding legal proceedings, claims, commitments, and contingent liabilities. In the opinion of management, the ultimate disposition of these matters will not have a materially adverse effect on the Board’s financial statements.

(15) CONTRACT COMMITMENTS

Contractual commitments as of December 31, 2015 for construction and other purposes are estimated at \$354.7 million.

Gross Reservoir Expansion

Approximately \$380 million is the projected total cost of the Denver Water’s Gross Reservoir Expansion Project, previously known as the Moffat Collection System Project. This project will increase Gross Reservoir from its current storage capacity of 41,811 acre-feet to approximately 118,811 acre-feet, an increase of approximately 77,000 acre-feet (including the 5,000 acre-foot Environmental Pool). Since four acre-feet of storage are needed for every one acre-foot of supply, the project will result in approximately 18,000 acre-feet of additional supply, enough water to serve about 45,000 households annually. The project entails increasing the current dam height from 340 feet to 471 feet, an increase of 131 feet.

The City of Arvada will participate in this project by paying a percentage of the total costs of the enlargement based on its portion of yield created by the Gross Reservoir Expansion, and paying a System Development Charge. Assuming the enlargement will produce a yield of 18,000 acre-feet of water and Arvada contracts for its maximum allowable amount of 3,000 acre-feet of the new supply, Arvada’s share of the capital costs will be 16.67% and Arvada will pay an SDC of \$33.8M.

The U.S. Army Corps of Engineers released the final environmental impact statement (“EIS”) evaluating the potential effects of this project in April 2014. The final Record of Decision and 404 Permit are anticipated in 2016, and the Federal Energy Regulatory Commission License Amendment is anticipated to be complete in 2017.

## Operations Complex Redevelopment

The Board approved a new campus master plan in 2013. The plan includes new consolidated trade shops, fleet maintenance, a warehouse, a meter shop and parking garage, a wellness building and a new administration building. Design started in 2014, with construction expected to be complete by December 2019. The goal is to build a modern site that improves the efficiency, functionality, security and safety of the Board's operations. Many of the current buildings are more than 50 years old and are no longer adequate for today's demands. The new layout will improve traffic and work flow, while taking advantage of matching functions with building adjacencies. Sustainability is a key factor, as the complex is being designed to incorporate LEED certification, educational demonstrations of net zero energy and leading-edge concepts around the management of all water sources. The projected budget for this project has been set at \$195.8 million.

### (16) SUBSEQUENT EVENTS

The Board has evaluated subsequent events through May 10, 2016 which is the date the basic financial statements were available to be issued and has identified the following subsequent events:

#### Issuance of Revenue Bonds

The Board is currently planning to issue approximately \$100,000 in 2016A capital improvement project revenue bonds (new money issue) on May 10, 2016, with an expected close date of May 24, 2016. Proceeds from this sale will be used for providing the extension, betterment, other improvement and equipment of the water work system and for the payment of the outstanding principal balance of the 2013 revolving line of credit in the amount of \$30,000,000.

The Board is also planning to advance refund \$66,205,000 of the Series 2007A Master Resolution Water Revenue bonds (refunding issue) on the same dates as above. This sale will occur 30 minutes after the new money issue. The proceeds will be used to purchase State and Local Government securities which will be placed in escrow to pay all principal and interest when due on the refunded bonds to the first call date of December 15, 2017.

#### 2016 Rate Structure Change

Denver Water's current rate structure has been in place for 20 years and has been updated to reflect current water-use habits and provide a buffer for more frequent extreme weather fluctuations. These weather fluctuations result in inconsistent revenue, making it harder to plan for and complete repairs and upgrades to our system. The new structure will begin to shift our revenue from such a heavy reliance on usage to a more stable fixed fee over the next few years, which means that future rate increases will be less subject to bigger jumps because of unpredictable weather.

In December 2015, the Denver Board of Water Commissioners adopted its 2016 budget, revenue requirements and rate structure to fund essential repairs and upgrades to Denver Water's system. The new structure was designed to balance three objectives: affordability, conservation and revenue stability. The rate changes will go into effect beginning April 1, 2016.

REQUIRED SUPPLEMENTARY INFORMATION

**BOARD OF WATER COMMISSIONERS  
CITY AND COUNTY OF DENVER, COLORADO**

REQUIRED SUPPLEMENTARY INFORMATION  
Schedule of Changes in the Net Pension Liability and Related Ratios  
2006 - 2015  
(Amounts expressed in thousands)

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
<b>Total pension liability</b>										
Service cost	\$ 6,071	\$ 6,046	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest	25,044	24,051	-	-	-	-	-	-	-	-
Effect of plan changes	-	-	-	-	-	-	-	-	-	-
Effect of economic/demographic (gains) or losses	-	2,037	-	-	-	-	-	-	-	-
Effect of changes of assumptions	-	-	-	-	-	-	-	-	-	-
Benefit payments	(20,365)	(17,850)	-	-	-	-	-	-	-	-
<b>Net change in pension liability</b>	<u>10,750</u>	<u>14,284</u>	-	-	-	-	-	-	-	-
<b>Total pension liability-beginning</b>	<u>337,844</u>	<u>323,560</u>	-	-	-	-	-	-	-	-
<b>Total pension liability-ending (a)</b>	<u><u>348,594</u></u>	<u><u>337,844</u></u>	<u><u>-</u></u>							
<b>Plan fiduciary net position</b>										
Employer contributions	14,500	15,000	-	-	-	-	-	-	-	-
Member contributions	-	-	-	-	-	-	-	-	-	-
Net investment income	18,523	39,023	-	-	-	-	-	-	-	-
Benefit payments	(20,365)	(17,850)	-	-	-	-	-	-	-	-
Administrative expense	(144)	(116)	-	-	-	-	-	-	-	-
<b>Net change in plan fiduciary net position</b>	<u>12,514</u>	<u>36,057</u>	-	-	-	-	-	-	-	-
<b>Plan fiduciary net position-beginning</b>	<u>289,825</u>	<u>253,768</u>	-	-	-	-	-	-	-	-
<b>Plan fiduciary net position-ending (b)</b>	<u><u>302,339</u></u>	<u><u>289,825</u></u>	<u><u>-</u></u>							
<b>Net pension liability-ending (a)-(b)</b>	<u><u>\$ 46,255</u></u>	<u><u>\$ 48,019</u></u>	<u><u>\$ -</u></u>							
<b>Plan fiduciary net position as a percentage of the total pension liability</b>	86.73%	85.79%	-	-	-	-	-	-	-	-
<b>Covered-employee payroll</b>	\$ 71,847	\$ 71,940	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Net position liability as a percentage of covered-employee payroll</b>	64.38%	66.75%	-	-	-	-	-	-	-	-

**Notes to schedule:**

Information prior to 2014 was not available

**BOARD OF WATER COMMISSIONERS  
CITY AND COUNTY OF DENVER, COLORADO**

REQUIRED SUPPLEMENTARY INFORMATION  
Schedule of Board Pension Contributions  
2006 - 2015  
(Amounts expressed in thousands)

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially determined contribution	\$ 14,068	\$ 13,532	\$ 11,958	\$ 12,256	\$ 12,414	\$ 12,639	\$ 11,872	\$ 7,233	\$ 6,982	\$ 8,269
Contributions in relation to the actuarially determined contribution	14,500	14,500	15,000	14,300	15,400	12,639	14,500	7,590	7,277	8,269
Contribution deficiency (excess)	<u>\$ (432)</u>	<u>\$ (968)</u>	<u>\$ (3,042)</u>	<u>\$ (2,044)</u>	<u>\$ (2,986)</u>	<u>\$ -</u>	<u>\$ (2,628)</u>	<u>\$ (357)</u>	<u>\$ (295)</u>	<u>\$ -</u>
Covered-employee payroll	\$ 75,990	\$ 71,847	\$ 71,940	\$ 71,172	\$ 69,927	\$ 70,372	\$ 65,721	\$ 60,347	\$ 58,579	\$ 57,225
Contributions as a percentage of covered-employee payroll	19.08%	20.18%	20.85%	20.09%	22.02%	17.96%	22.06%	12.58%	12.42%	14.45%

**Notes to schedule:**Valuation date:

Actuarially determined contribution rates are calculated as of January 1, the beginning of each fiscal year.

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age normal
Amortization method	Level dollar amount, layered
Remaining amortization period	15 years
Asset valuation method	3-year smoothed market
Inflation	3%
Salary increases	Graded from 6.1% at 1 year of service to 2.6% at 10+ years of service
Cost of living adjustments	3%
Investment rate of return	7.5% investment rate of return (net of administrative expenses and including an inflation component of 3.0%)
Retirement age	Table of rates by age and eligibility
Turnover	Table of rates graded by years of service
Mortality	Mortality rates were based on the RP-2000 Combined Healthy Mortality, blended 50% blue collar adjusted and 50% white collar adjusted, and projected to 2021 using Scale AA.

**BOARD OF WATER COMMISSIONERS  
CITY AND COUNTY OF DENVER, COLORADO**

REQUIRED SUPPLEMENTARY INFORMATION  
Other Post-Employment Benefits Plan Schedule of Funding Progress  
(amounts expressed in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b-a)/c]
1/1/15	\$ -	\$ 22,188	\$ 22,188	-	\$ 75,990	29.2%
1/1/14	-	24,264	24,264	-	71,847	33.8
1/1/13	-	22,847	22,847	-	71,940	31.8

OTHER SUPPLEMENTAL INFORMATION

**BOARD OF WATER COMMISSIONERS  
CITY AND COUNTY OF DENVER, COLORADO**  
Capital Assets<sup>1</sup>  
Year ended December 31, 2015  
(Amounts expressed in thousands)

	Depreciation Life (Years)	Cost				Accumulated Depreciation and Amortization					Cost Less Accumulated Depreciation and Amortization as of December 31, 2015	
		Balance, December 31, 2014	Additions and Transfers	Sales and Retirements	Category Reclass	Balance, December 31, 2015	Balance, December 31, 2014	Provision	Sales, Retirements and Transfers	Category Reclass		Balance, December 31, 2015
<b>UTILITY PLANT IN SERVICE:</b>												
Land and land rights		\$ -	\$ -	\$ -	\$ 99,098	\$ 99,098	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 99,098
Source of supply plant and equipment	10 - 80	669,181	33,985	182	(81,005)	621,979	181,198	9,050	95	(3,795)	186,358	435,621
Water treatment plant and equipment	5 - 80	479,030	14,885	1,984	(11,834)	480,097	142,871	8,958	1,423	(1,675)	148,731	331,366
Transmission and distribution plant and equipment	5 - 80	1,099,327	66,548	3,311	(23,414)	1,139,150	277,021	15,703	1,476	837	292,085	847,065
Pumping plant and equipment	5 - 80	129,721	13,796	1,258	23,482	165,741	30,915	3,127	777	3,758	37,023	128,718
Support services plant and equipment	5 - 75	-	-	-	238,247	238,247	-	-	-	136,633	136,633	101,614
General plant and equipment	5 - 50	159,854	8,741	4,910	(163,685)	-	85,511	8,625	3,965	(90,171)	-	-
Leasehold and other improvements	5 - 30	71,111	-	-	(71,111)	-	44,191	3,628	-	(47,819)	-	-
Land held for future use		14,276	-	-	(14,276)	-	-	-	-	-	-	-
<b>Total utility plant in service</b>		<b>2,622,500</b>	<b>137,955</b>	<b>11,645</b>	<b>(4,498)</b>	<b>2,744,312</b>	<b>761,707</b>	<b>49,091</b>	<b>7,736</b>	<b>(2,232)</b>	<b>800,830</b>	<b>1,943,482</b>
<b>NONUTILITY PLANT IN SERVICE:</b>												
Nonutility plant and equipment	5 - 80	-	-	-	14,433	14,433	-	-	-	6,000	6,000	8,433
Plant	10 - 80	9,036	1,048	186	(9,898)	-	3,755	128	140	(3,743)	-	-
General equipment	5 - 20	37	-	-	(37)	-	23	2	-	(25)	-	-
<b>Total nonutility plant in service</b>		<b>9,073</b>	<b>1,048</b>	<b>186</b>	<b>4,498</b>	<b>14,433</b>	<b>3,778</b>	<b>130</b>	<b>140</b>	<b>2,232</b>	<b>6,000</b>	<b>8,433</b>
<b>UTILITY PLANT UNDER CAPITAL LEASE:</b>												
Wolford Mountain	80	42,980	-	-	-	42,980	10,702	559	-	-	11,261	31,719
<b>CONSTRUCTION IN PROGRESS</b>												
		171,215	(7,949)	-	-	163,266	-	-	-	-	-	163,266
<b>Total property, plant and equipment</b>		<b>\$ 2,845,768</b>	<b>\$ 131,054</b>	<b>\$ 11,831</b>	<b>\$ -</b>	<b>\$ 2,964,991</b>	<b>\$ 776,187</b>	<b>\$ 49,780</b>	<b>\$ 7,876</b>	<b>\$ -</b>	<b>\$ 818,091</b>	<b>\$ 2,146,900</b>

<sup>1</sup>In 2015, assets were transferred between previous asset categories into functional program asset categories. See accompanying independent auditors' report.

**BOARD OF WATER COMMISSIONERS**  
**CITY AND COUNTY OF DENVER, COLORADO**  
Revenue Water Improvement and Refunding Bonds Outstanding  
December 31, 2015  
(Amounts expressed in thousands)

Date of Issue	Interest Rates on Bonds Outstanding as of December 31, 2015	Amount			Bonds Which Are Callable	
		Issued	Retired	Outstanding	Callable Amount	Initial Date Callable
Mar 22, 2007A	4.25-5.00%	\$ 100,000	\$ (8,680)	\$ 91,320	\$ 86,315	Dec 15, 2017
Jun 23, 2008A	0.75%	1,800	(960)	840	-	Not callable
June 2, 2009A	4.65-6.15%	44,000	-	44,000	40,255	Dec 15, 2019
Sep 28, 2010B	2.625-5.17%	90,000	-	90,000	78,990	Dec 15, 2020
May 22, 2012A	3.50-5.00%	36,555	-	36,555	32,040	Dec 15, 2021
Jun 26, 2012B	3.00-5.00%	108,545	(51,805)	56,740	16,315	Dec 15, 2021
Jun 26, 2012C	na	8,665	(8,665)	-	-	Any business day
Sep 16, 2014A	3.00-5.00%	48,670	-	48,670	43,730	Dec 15, 2023
		<u>\$ 438,235</u>	<u>\$ (70,110)</u>	368,125	<u>\$ 297,645</u>	
Plus premium				6,593		
Total Revenue Bonds				<u>\$ 374,718</u>		

See accompanying independent auditors' report.

**BOARD OF WATER COMMISSIONERS**  
**CITY AND COUNTY OF DENVER, COLORADO**  
 Summary of Revenue Bond Debt Service Requirements Outstanding  
 December 31, 2015  
 Years 2016 to 2044, inclusive  
 (Amounts expressed in thousands)

<u>Year</u>	<u>Rev. Bond Retirements (Exhibit II-C)</u>	<u>Rev. Bond Interest<sup>1</sup> (Exhibit II-D)</u>	<u>Total Debt Service</u>	<u>Build America Bonds Interest Subsidy<sup>2</sup></u>
2016	\$ 21,565	\$ 16,689	\$ 38,254	\$ 2,185
2017	15,790	15,669	31,459	2,185
2018	12,830	14,954	27,784	2,143
2019	10,935	14,376	25,311	2,098
2020	11,810	13,909	25,719	2,047
		-		
2021	14,270	13,390	27,660	1,991
2022	14,720	12,775	27,495	1,933
2023	15,465	12,131	27,596	1,871
2024	10,630	11,451	22,081	1,836
2025	10,780	10,959	21,739	1,858
		-		
2026	11,225	10,457	21,682	1,776
2027	11,695	9,935	21,630	1,690
2028	12,195	9,379	21,574	1,651
2029	11,860	8,796	20,656	1,503
2030	12,380	8,210	20,590	1,403
		-		
2031	12,935	7,687	20,622	1,297
2032	13,510	7,136	20,646	1,186
2033	14,110	6,560	20,670	1,069
2034	14,735	5,958	20,693	948
2035	15,390	5,250	20,640	822
		-		
2036	16,050	4,525	20,575	689
2037	16,755	3,757	20,512	550
2038	10,595	2,954	13,549	406
2039	11,010	2,414	13,424	254
2040	8,505	1,853	10,358	97
		-		
2041	8,645	1,455	10,100	-
2042	8,885	1,109	9,994	-
2043	9,240	754	9,994	-
2044	9,610	385	9,995	-
	<u>368,125</u>	<u>234,877</u>	<u>603,002</u>	<u>35,488</u>
Plus premium	<u>6,593</u>	<u>-</u>	<u>6,593</u>	<u>-</u>
	<u>\$ 374,718</u>	<u>\$ 234,877</u>	<u>\$ 609,595</u>	<u>\$ 35,488</u>

<sup>1</sup>Excludes Build America Bonds interest subsidy.

<sup>2</sup>Receipt of Build America Bonds interest subsidy is subject to appropriations by Congress.

See accompanying independent auditors' report.

**BOARD OF WATER COMMISSIONERS**  
**CITY AND COUNTY OF DENVER, COLORADO**  
 Schedule of Bond Retirements for Revenue Bonds Outstanding  
 December 31, 2015  
 Years 2016 to 2044, inclusive  
 (Amounts expressed in thousands)

Year	Series 2007A Improvement	Series 2008A Improvement	Series 2009A Improvement	Series 2010B Improvement	Series 2012A Improvement	Series 2012B Refunding	Series 2014A Improv/Ref	Total
2016	\$ 2,440	\$ 120	\$ -	\$ -	\$ -	\$ 16,730	\$ 2,275	\$ 21,565
2017	2,565	120	1,215	2,670	815	6,035	2,370	15,790
2018	2,690	120	1,245	2,720	860	5,195	-	12,830
2019	2,825	120	1,285	2,780	900	3,025	-	10,935
2020	2,945	120	1,325	2,840	945	3,635	-	11,810
2021	3,070	120	1,370	2,910	995	5,805	-	14,270
2022	3,205	120	1,420	2,980	1,045	5,950	-	14,720
2023	3,345	-	1,475	3,055	1,095	6,200	295	15,465
2024	3,495	-	1,530	3,140	1,140	995	330	10,630
2025	3,655	-	1,595	3,230	1,185	755	360	10,780
2026	3,835	-	1,660	3,330	1,230	780	390	11,225
2027	4,030	-	1,730	3,430	1,280	805	420	11,695
2028	4,230	-	1,805	3,540	1,340	830	450	12,195
2029	4,440	-	1,885	3,660	1,400	-	475	11,860
2030	4,665	-	1,970	3,780	1,460	-	505	12,380
2031	4,900	-	2,065	3,910	1,530	-	530	12,935
2032	5,145	-	2,160	4,050	1,595	-	560	13,510
2033	5,400	-	2,265	4,190	1,670	-	585	14,110
2034	5,670	-	2,370	4,340	1,745	-	610	14,735
2035	5,955	-	2,480	4,495	1,820	-	640	15,390
2036	6,250	-	2,600	4,650	1,885	-	665	16,050
2037	6,565	-	2,720	4,815	1,960	-	695	16,755
2038	-	-	2,850	4,985	2,040	-	720	10,595
2039	-	-	2,980	5,160	2,120	-	750	11,010
2040	-	-	-	5,340	2,205	-	960	8,505
2041	-	-	-	-	2,295	-	6,350	8,645
2402	-	-	-	-	-	-	8,885	8,885
2043	-	-	-	-	-	-	9,240	9,240
2044	-	-	-	-	-	-	9,610	9,610
	<u>\$ 91,320</u>	<u>\$ 840</u>	<u>\$ 44,000</u>	<u>\$ 90,000</u>	<u>\$ 36,555</u>	<u>\$ 56,740</u>	<u>\$ 48,670</u>	<u>368,125</u>
Plus premium								<u>6,593</u>
								<u>\$ 374,718</u>

See accompanying independent auditors' report.

**BOARD OF WATER COMMISSIONERS**  
**CITY AND COUNTY OF DENVER, COLORADO**  
Schedule of Bond Interest for Revenue Bonds Outstanding<sup>1</sup>  
December 31, 2015  
Years 2016 to 2044, inclusive  
(Amounts expressed in thousands)

Year	Series 2007A Improvement	Series 2008A Improvement	Series 2009A Improvement	Series 2010B Improvement	Series 2012A Improvement	Series 2012B Refunding	Series 2014A Improv/Ref	Total
2016	\$ 3,989	\$ 6	\$ 2,588	\$ 4,109	\$ 1,569	\$ 2,519	\$ 1,909	\$ 16,689
2017	3,867	5	2,588	4,109	1,569	1,713	1,818	15,669
2018	3,739	5	2,532	4,039	1,528	1,411	1,700	14,954
2019	3,604	4	2,471	3,961	1,485	1,151	1,700	14,376
2020	3,463	3	2,407	3,867	1,440	1,030	1,699	13,909
2021	3,338	2	2,337	3,768	1,393	853	1,699	13,390
2022	3,184	1	2,262	3,664	1,343	622	1,699	12,775
2023	3,024	-	2,182	3,553	1,291	383	1,698	12,131
2024	2,857	-	2,097	3,431	1,247	134	1,685	11,451
2025	2,682	-	2,009	3,300	1,201	96	1,671	10,959
2026	2,499	-	1,913	3,161	1,154	73	1,657	10,457
2027	2,308	-	1,813	3,015	1,105	49	1,645	9,935
2028	2,106	-	1,709	2,859	1,047	25	1,633	9,379
2029	1,895	-	1,601	2,694	987	-	1,619	8,796
2030	1,673	-	1,488	2,520	924	-	1,605	8,210
2031	1,533	-	1,370	2,337	858	-	1,589	7,687
2032	1,386	-	1,246	2,141	789	-	1,574	7,136
2033	1,231	-	1,116	1,939	718	-	1,556	6,560
2034	1,069	-	980	1,730	642	-	1,537	5,958
2035	821	-	838	1,510	564	-	1,517	5,250
2036	561	-	686	1,283	500	-	1,495	4,525
2037	286	-	526	1,047	425	-	1,473	3,757
2038	-	-	360	800	346	-	1,448	2,954
2039	-	-	183	543	265	-	1,423	2,414
2040	-	-	-	276	180	-	1,397	1,853
2041	-	-	-	-	92	-	1,363	1,455
2042	-	-	-	-	-	-	1,109	1,109
2043	-	-	-	-	-	-	754	754
2044	-	-	-	-	-	-	385	385
	<u>\$ 51,115</u>	<u>\$ 26</u>	<u>\$ 39,302</u>	<u>\$ 65,656</u>	<u>\$ 24,662</u>	<u>\$ 10,059</u>	<u>\$ 44,057</u>	<u>\$ 234,877</u>

<sup>1</sup>Excludes Build America Bonds interest subsidy. See Exhibit III-B.

See accompanying independent auditors' report.

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# STATISTICAL SECTION

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

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*(Continued next page)*

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*These schedules offer demographic and economic indicators to help the reader understand the environment within which Denver Water's financial activities take place.*

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*These schedules contain information about Denver Water's operations and resources to help the reader understand how Denver Water's financial information relates to the services Denver Water provides and the activities it performs.*

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**Sources :** *Unless otherwise noted, the information in these schedules is derived from the comprehensive annual financial reports for the relevant year or internal Denver Water operating groups.*

**Rounding :** *Some columns in the statistical section are totaled according to the precision of the numbers entered rather than the way they are displayed, and may not appear to total correctly.*

STATISTICAL SUMMARY: 2006 - 2015

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Population served <sup>1</sup>	<b>1,210,000</b>	1,172,000	1,161,000	1,147,000	1,135,000	1,125,000	1,111,000	1,093,000	1,077,000	1,064,000
Total treated water consumption (million gallons) <sup>2</sup>	<b>60,115.97</b>	61,185.27	60,212.44	71,968.70	68,260.80	69,695.40	62,106.90	71,975.87	70,479.84	74,724.98
Average daily consumption (million gallons)	<b>164.70</b>	167.63	165.00	196.64	187.02	190.95	170.16	196.66	193.10	204.73
Average daily consumption per capita (gallons) <sup>1</sup>	<b>136</b>	143	142	171	165	170	153	180	179	192
Maximum daily consumption (million gallons)	<b>344.26</b>	335.20	355.00	398.20	366.40	365.81	341.80	426.16	425.70	425.68
Maximum hour treated water use rate (million gallons per day)	<b>499.30</b>	603.60	591.00	628.00	546.80	577.75	516.90	670.00	660.00	671.04
Treated water pumped (million gallons)	<b>27,677.64</b>	36,088.94	34,895.00	39,484.10	36,443.50	41,611.30	38,198.90	50,283.70	44,684.79	44,937.60
Raw water storage capacity (acre-feet) <sup>3</sup>	<b>569,534</b>	569,534	569,534	569,534	569,534	561,883	561,883	561,883	561,883	561,883
Replacement reservoir storage capacity (acre-feet)	<b>122,432</b>	122,432	122,432	122,432	122,432	122,432	122,432	122,432	122,432	122,432
Supply from South Platte River (acre-feet) <sup>4</sup>	<b>166,561</b>	148,680	142,915	85,765	117,559	151,891	138,791	122,255	168,554	113,868
Supply from Blue River/Roberts Tunnel system (acre-feet)	<b>39,801</b>	77,765	111,564	54,394	148,643	74,674	58,468	80,056	65,682	127,074
Supply from Moffat system (acre-feet)	<b>73,016</b>	73,585	141,159	54,523	93,763	76,318	79,636	88,842	85,444	83,022
Treated water pumping capacity (mgd)	<b>1,048.4</b>	1,007.9	1,007.9	1,003.3	1,003.3	1,095.9	1,095.9	1,097.4	1,097.4	1,096.3
Raw water pumping capacity (mgd)	<b>112.2</b>	112.2	112.2	112.2	112.2	112.2	112.2	112.2	112.2	92.2
Treatment plant capacity (mgd)	<b>715.0</b>	715.0	715.0	715.0	715.0	715.0	715.0	715.0	715.0	715.0
Treated water reservoir capacity (million gallons)	<b>351.4</b>	353.3	353.3	381.65	371.65	371.65	371.65	368.65	368.65	368.65
Raw water supply mains in miles (mountain collection system)	<b>77.4</b>	77.4	77.4	77.5	77.5	76.9	77.5	77.5	77.6	77.5
Raw water supply mains in miles (metropolitan Denver area)	<b>55.0</b>	54.0	52.3	47.7	47.7	47.1	46.0	40.7	40.7	40.7
Transmission & distribution mains (miles) - Inside City and Outside City Total Service Contract distributors	<b>3,091.7</b>	3,074.2	3,058.2	3,050.1	3,041	3,037	2,954	2,681	2,657	2,645
Recycled water transmission & distribution mains (miles)	<b>67.2</b>	67.0	63.1	49.0	45.0	44.2	35.3	36.5	36.5	32.6
Total active taps - end of year	<b>312,653</b>	312,908	312,228	310,463	309,269	309,562	310,068	309,373	308,079	306,901
Fire hydrants operated & maintained	<b>20,269</b>	20,030	19,818	19,670	19,553	19,439	19,159	19,185	15,767	15,679
Fire hydrants tested and repaired	<b>18,093</b>	29,506	25,177	25,112	26,760	21,103	18,472	25,577	27,940	30,739
Breaks in mains - Denver	<b>262</b>	191	222	232	313	261	220	274	247	198
Service leaks	<b>542</b>	337	719	402	385	287	329	318	879	1,043
Total employees (actual)	<b>1,057.3</b>	1,064.6	1,064.9	1,082.5	1,069.8	1,089.1	1,095.1	1,055.0	1,010.2	1,004.8
Additions to capital assets (thousands)	<b>\$ 131,054</b>	\$ 125,374	\$ 93,421	\$ 128,277	\$ 113,071	\$ 125,816	\$ 103,146	\$ 101,328	\$ 103,779	\$ 102,458
Total long-term debt <sup>5</sup> (thousands)	<b>\$ 416,196</b>	\$ 418,200	\$ 414,013	\$ 434,945	\$ 415,644	\$ 449,828	\$ 392,659	\$ 381,285	\$ 410,928	\$ 346,114

<sup>1</sup>Population estimated based on treated water customers only. Revised population from 2005 to 2010 is based on 2010 Census information.

<sup>2</sup>Denver Water has three water treatment facilities. See page III-76, "Water Treated Monthly." Total treated water consumption includes both sales of treated water as well as non-revenue water.

See page III-21 "Sales of Treated Water Between Denver and Outside City."

<sup>3</sup>Denver Water has 13 raw water reservoirs. See page III-60, "Source of Supply - Reservoirs and Collection Systems."

<sup>4</sup>Supply includes effluent exchanges.

<sup>5</sup>Long-term debt consists of current and long-term portions of bonds payable and obligations under capital lease, net of discounts and premiums, plus notes payable. Effective in 2012, deferred amounts on refunding are no longer included.

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## A - FINANCIAL TRENDS INFORMATION

*These schedules contain trend information to help the reader understand how Denver Water's financial performance and well-being have changed over time.*

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NET POSITION BY COMPONENT<sup>1,2</sup>: 2006 - 2015  
 (amounts expressed in thousands)

	2015	Restated 2014 <sup>3</sup>	2013	2012	2011	2010	2009	2008	2007	2006
<b>NET POSITION:</b>										
Net investment in capital assets	<b>\$ 1,735,020</b>	\$ 1,641,601	\$ 1,579,642	\$ 1,513,582	\$ 1,454,710	\$ 1,401,820	\$ 1,363,848	\$ 1,319,268	\$ 1,227,499	\$ 1,236,642
Restricted for debt service reserve funds	<b>12,047</b>	12,375	12,327	12,274	13,746	18,912	13,233	9,005	7,661	7,021
Unrestricted	<b>170,963</b>	171,648	230,159	217,297	169,602	162,077	174,279	178,243	199,493	125,988
Total net position	<b><u>\$ 1,918,030</u></b>	<u>\$ 1,825,624</u>	<u>\$ 1,822,128</u>	<u>\$ 1,743,153</u>	<u>\$ 1,638,058</u>	<u>\$ 1,582,809</u>	<u>\$ 1,551,360</u>	<u>\$ 1,506,516</u>	<u>\$ 1,434,653</u>	<u>\$ 1,369,651</u>

<sup>1</sup>Accounting standards require that net position be reported in three components in the financial statements: net investment in capital assets, restricted, and unrestricted.

Net position is considered restricted when constraints placed on net position use are either: (a) externally imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments, or (b) imposed by law through constitutional provisions or enabling legislation.

<sup>2</sup>The above data was extracted from the audited financial statements of the Board of Water Commissioners.

<sup>3</sup>The 2014 financial statements were restated as part of the implementation of GASB Statement No.68 *Accounting and Financial Reporting for Pensions* .

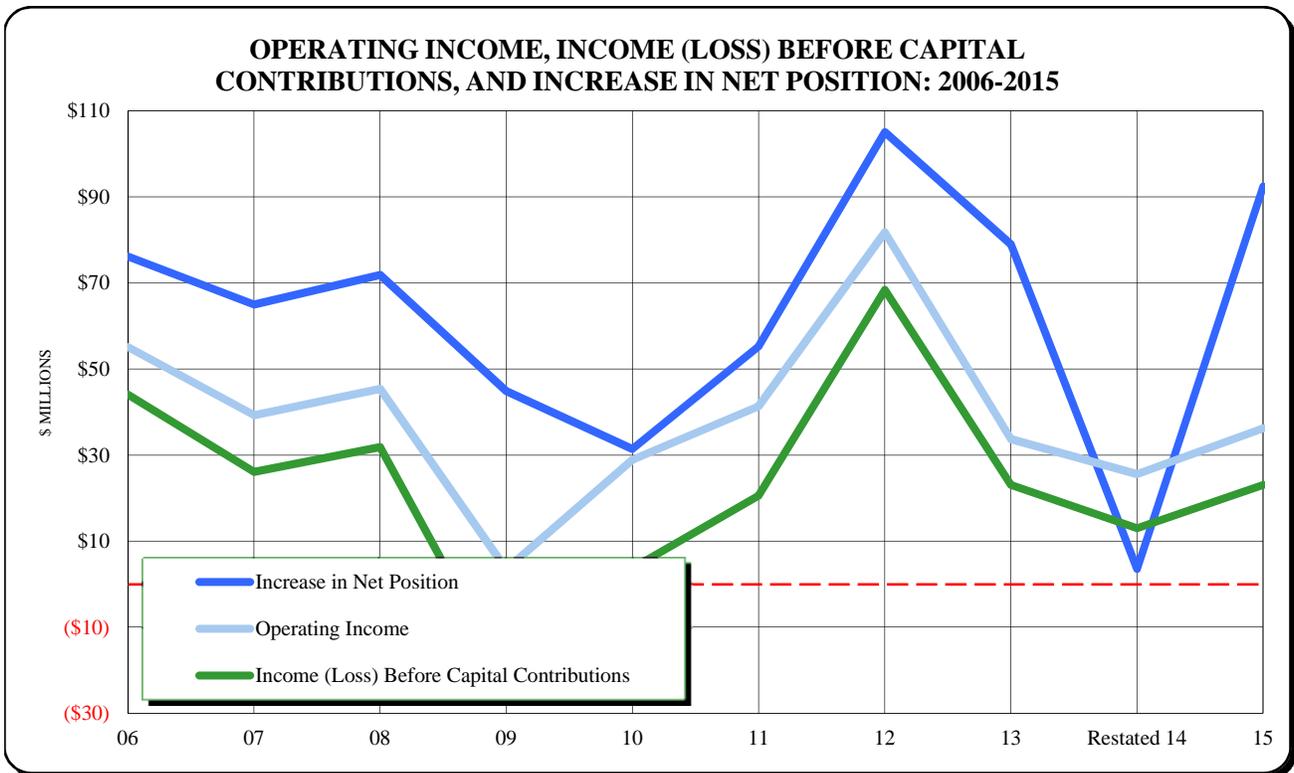
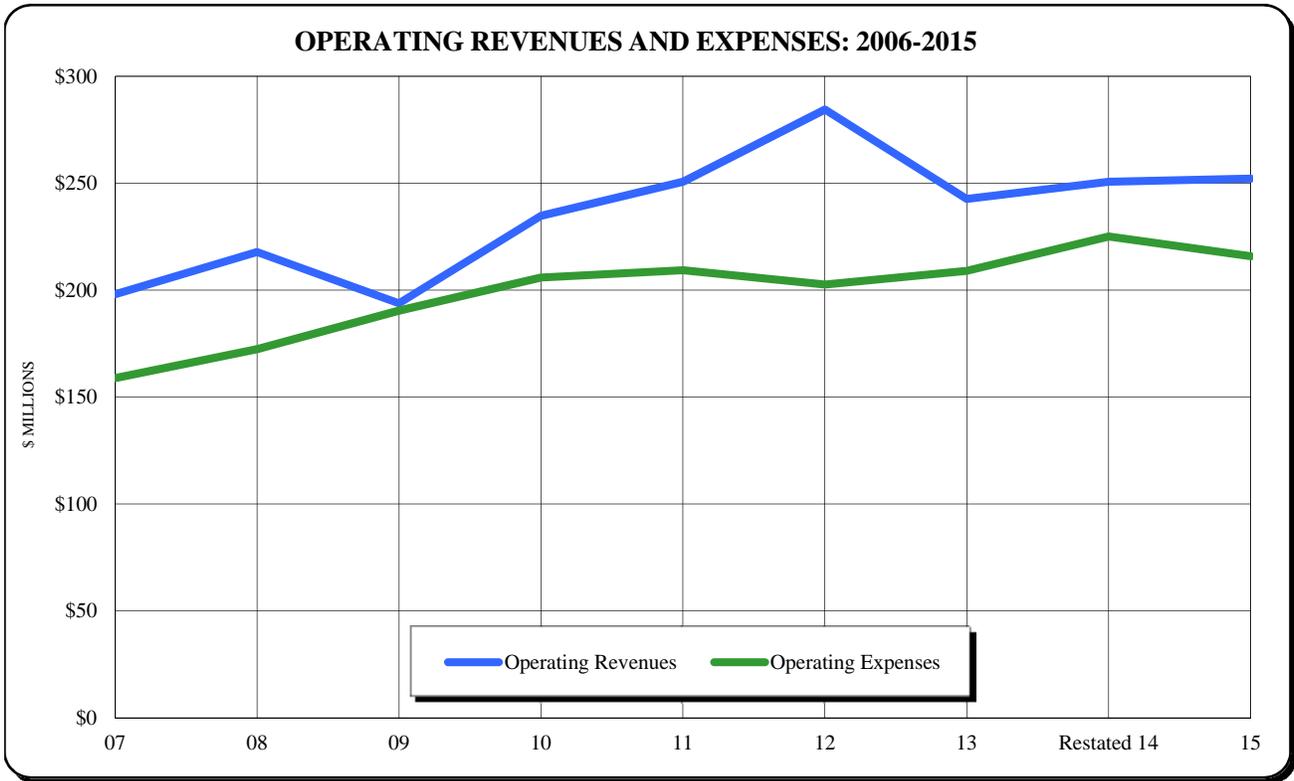
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION<sup>1,2</sup>: 2006 - 2015  
(amounts expressed in thousands)

	2015	Restated 2014 <sup>3</sup>	2013	2012	2011	2010	2009	2008	2007	2006
<b>OPERATING REVENUES:</b>										
Water	\$ 241,836	\$ 239,288	\$ 230,482	\$ 271,575	\$ 239,186	\$ 224,489	\$ 184,396	\$ 205,941	\$ 188,729	\$ 193,743
Power generation and other	10,224	11,380	12,141	12,764	11,481	10,187	9,432	11,791	9,273	8,739
Total operating revenues	252,060	250,668	242,623	284,339	250,667	234,676	193,828	217,732	198,002	202,482
<b>OPERATING EXPENSES:</b>										
Source of supply, pumping, treatment and distribution	75,972	83,091	68,722	75,846	79,881	79,400	68,275	66,629	59,760	60,095
General and administrative	81,994	85,347	81,494	66,433	66,077	73,926	72,487	60,955	54,545	45,439
Customer service	9,962	10,851	12,894	13,929	14,394	14,150	13,022	9,407	10,208	9,196
Depreciation and amortization	47,897	45,772	45,805	46,363	48,961	38,322	36,582	35,382	34,238	32,656
Total operating expenses	215,825	225,061	208,915	202,571	209,313	205,798	190,366	172,373	158,751	147,386
OPERATING INCOME	36,235	25,607	33,708	81,768	41,354	28,878	3,462	45,359	39,251	55,096
<b>NONOPERATING REVENUES (EXPENSES):</b>										
Investment income	1,479	1,552	1,488	1,451	1,201	1,336	948	9,141	12,201	7,491
Interest expense, less capitalized interest	(13,049)	(12,664)	(13,602)	(14,217)	(17,719)	(16,630)	(17,547)	(17,699)	(16,305)	(15,368)
Gain (loss) on disposition of capital assets	(4,720)	(5,394)	(2,171)	(4,331)	(6,011)	(15,533)	(8,168)	(4,426)	(9,144)	(2,922)
Other income	5,595	6,143	6,606	5,882	6,147	7,931	1,881	1,956	1,677	1,459
Other expense	(2,499)	(2,252)	(2,939)	(2,164)	(4,408)	(2,336)	(2,483)	(2,459)	(1,612)	(1,706)
Total nonoperating expenses, net	(13,194)	(12,615)	(10,618)	(13,379)	(20,790)	(25,232)	(25,369)	(13,487)	(13,183)	(11,046)
INCOME (LOSS) BEFORE CAPITAL CONTRIBUTIONS	23,041	12,992	23,090	68,389	20,564	3,646	(21,907)	31,872	26,068	44,050
<b>CAPITAL CONTRIBUTIONS:</b>										
Contributions in aid of construction	33,256	23,190	21,424	17,163	17,239	10,861	41,443	21,492	12,911	11,245
System development charges	36,109	32,736	34,461	19,543	17,446	16,942	25,308	18,499	26,023	20,851
Total capital contributions	69,365	55,926	55,885	36,706	34,685	27,803	66,751	39,991	38,934	32,096
INCREASE IN NET POSITION	92,406	68,918	78,975	105,095	55,249	31,449	44,844	71,863	65,002	76,146
<b>NET POSITION:</b>										
Beginning of year	1,825,624	1,822,128	1,743,153	1,638,058	1,582,809	1,551,360	1,506,516	1,434,653	1,369,651	1,293,505
Cumulative effect of GASB 68 implementation		(65,422)								
Restated beginning net position		1,756,706								
End of year	\$ 1,918,030	\$ 1,825,624	\$ 1,822,128	\$ 1,743,153	\$ 1,638,058	\$ 1,582,809	\$ 1,551,360	\$ 1,506,516	\$ 1,434,653	\$ 1,369,651

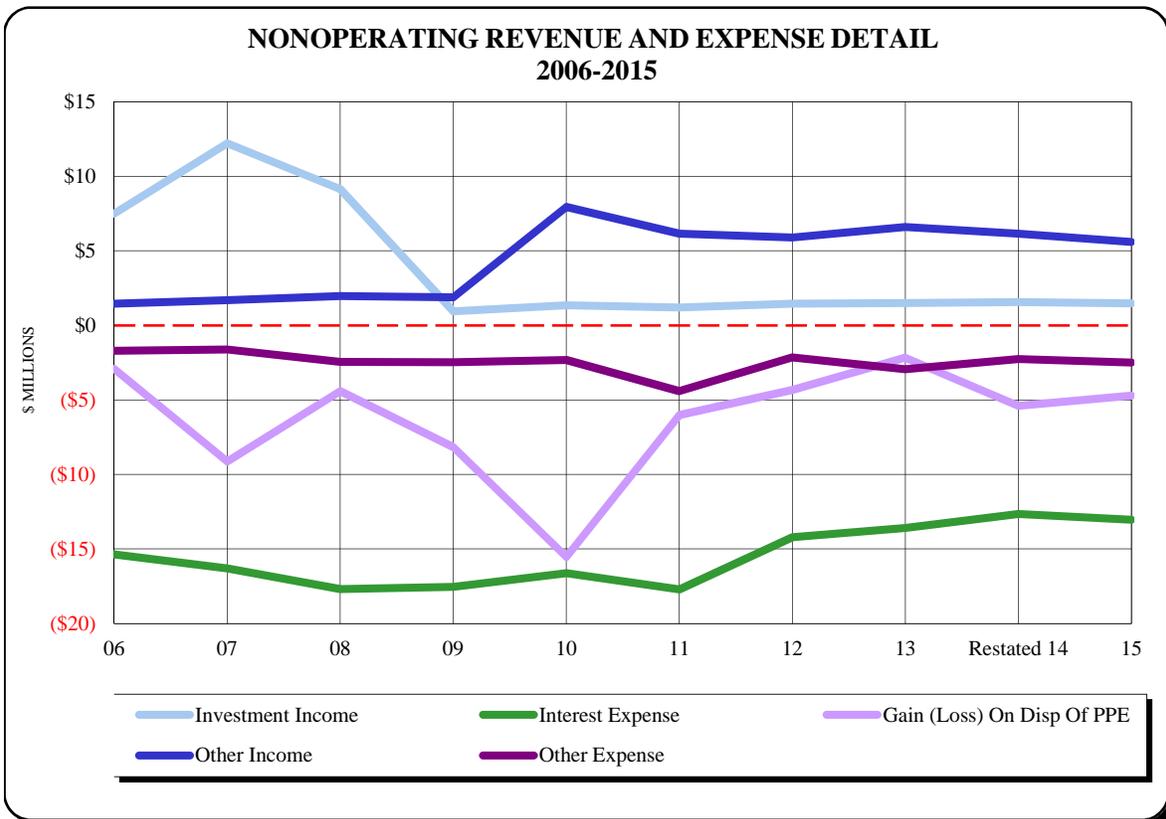
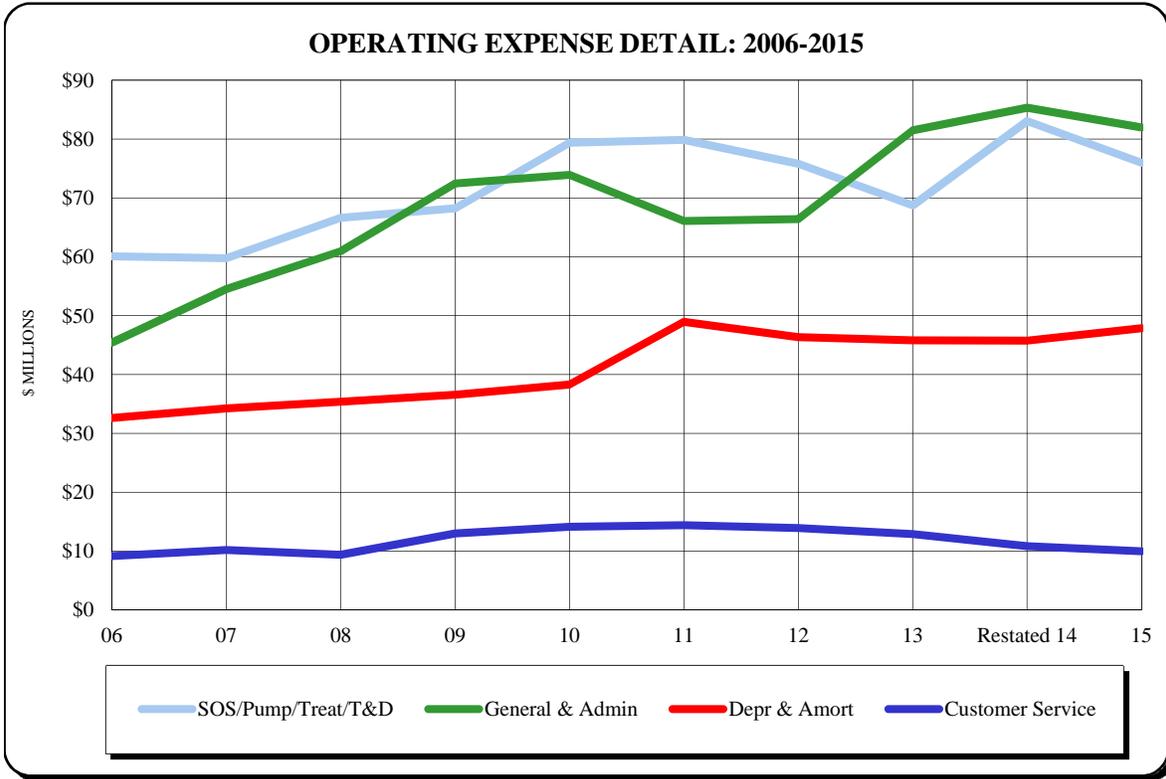
<sup>1</sup>The above data was extracted from the audited financial statements of the Board of Water Commissioners.

<sup>2</sup>Certain reclassifications have been made to prior years' information to conform to the current year presentation.

<sup>3</sup>The 2014 financial statements were restated as part of the implementation of GASB Statement No.68 *Accounting and Financial Reporting for Pensions*.



<sup>1</sup>Operating expenses, operating income, income before contributions and net position were restated for 2014 as part of the implementation of GASB Statement No.68 *Accounting and Financial Reporting for Pensions*.



<sup>1</sup>See footnote on page III-9

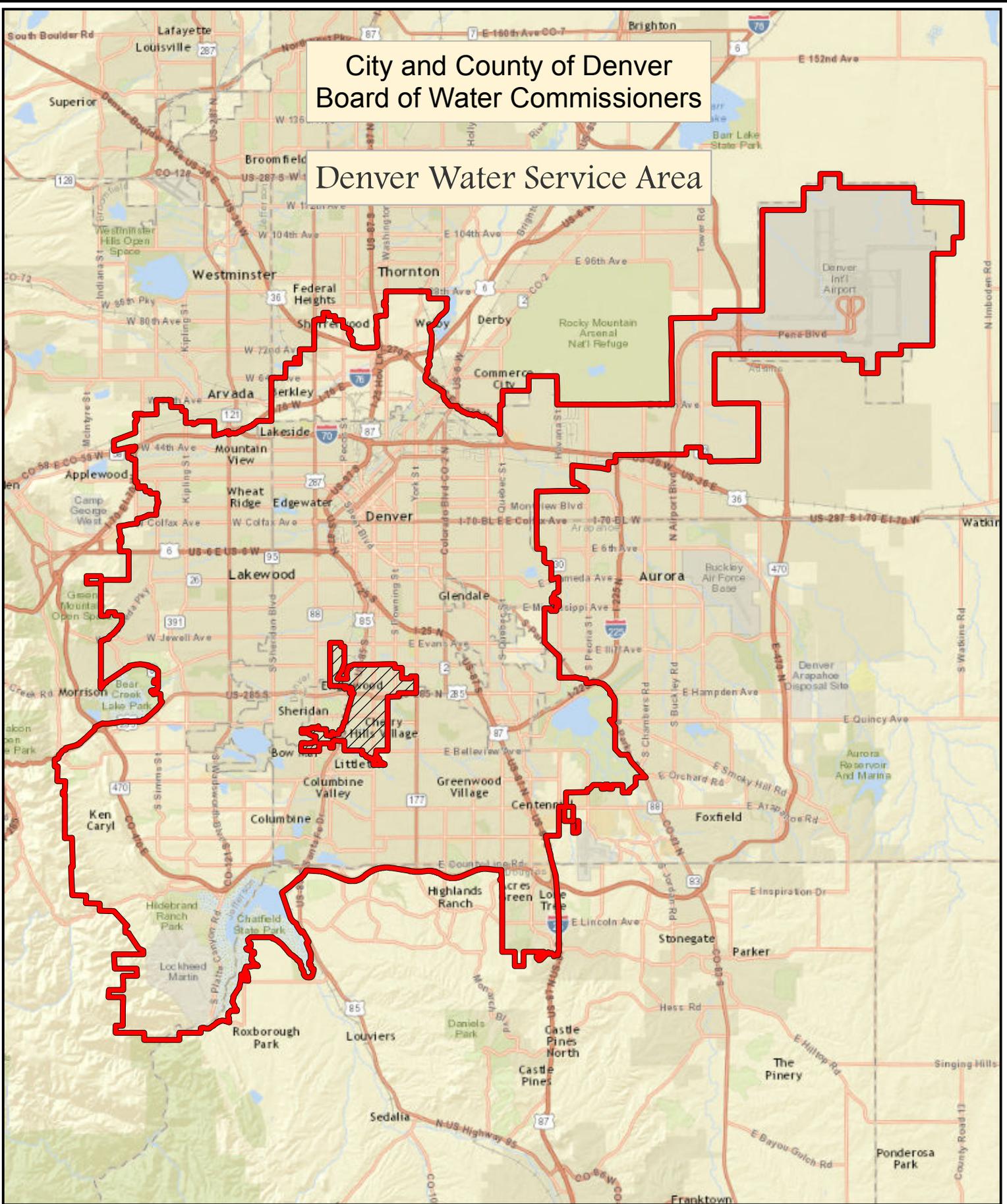
## B - REVENUE CAPACITY INFORMATION

*These schedules contain information to help the reader assess  
Denver Water's primary revenue sources.*

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# City and County of Denver Board of Water Commissioners

## Denver Water Service Area



### Legend

- Denver Water Service Area
- Not served by Denver Water



Map Date: 4/3/2015  
Author: ARG-MLF  
Source(s):

0 1.75 3.5 7 Miles

This Geographic Information Systems (GIS) map and information shown is provided "AS IS" with no claim by the Denver Water Board as to the completeness, usefulness or accuracy of its contents.  
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CUSTOMER SERVICE DATA: 2006 - 2015

	2015	2014	2013	2012	2011 <sup>6</sup>	2010	2009 <sup>7</sup>	2008	2007	2006
<u>Active Taps:</u> <sup>1</sup>										
Beginning of Year	312,908	312,228	310,463	309,272	309,562	310,068	309,373	308,079	306,901	304,483
Activated During Year	1,105	1,250	2,377	1,539	23	886	979	1,919	1,826	2,900
Discontinued During Year	(1,360)	(570)	(612)	(348)	(313)	(1,392)	(284)	(625)	(648)	(482)
Net Increase During Year	(255)	680	1,765	1,191	(290)	(506)	695	1,294	1,178	2,418
Total Active Taps - End of Year	312,653	312,908	312,228	310,463	309,272	309,562	310,068	309,373	308,079	306,901
<u>Active Taps:</u> <sup>1</sup>										
Inside City	161,611	161,997	161,668	160,205	159,302	159,592	161,611	158,448	157,707	157,124
City and County	1,229	1,236	1,334	1,218	1,204	1,277	1,272	1,226	1,212	1,222
Outside City - Read and Bill	37,020	36,911	36,795	36,637	36,542	36,477	35,760	36,420	36,278	36,043
Outside City - Total Service	36,452	36,408	36,473	36,318	36,270	36,376	36,140	36,230	36,112	35,960
Outside City - Master Meter	76,341	76,356	75,958	76,085	75,954	75,840	75,285	77,049	76,770	76,552
Total Active Taps - End of Year	312,653	312,908	312,228	310,463	309,272	309,562	310,068	309,373	308,079	306,901
Stub-Ins on System <sup>2</sup>	766	1,146	811	514	651	367	275	801	1,408	1,936
Fire Hydrant Use Permits	673	631	550	518	527	439	485	518	546	518
AMR (Automatic Meter Reading) Installations <sup>3</sup>	-	-	-	-	895	886	742	137	85	10,594
Turn-Offs Due to Delinquent Accounts	4,996	5,630	4,746	5,463	6,125	6,687	8,913	13,284	12,747	12,895
In-Home Water Audits	1,005	1,162	976	609	480	409	349	383	169	56
Call Center Calls <sup>4</sup>	231,620	214,867	227,736	231,533	221,291	213,065	229,979	237,047	215,457	198,620
Water Quality Calls:										
Taste and Odor	213	180	219	212	169	221	194	161	180	161
Dirty Water	335	300	326	289	333	309	356	205	221	222
Illness Concerns <sup>5</sup>	56	47	50	48	46	51	56	48	50	-
Other	94	89	192	99	89	128	63	50	40	88
New Taps Made	2,165	2,289	1,941	950	906	583	679	1,743	1,901	3,199

<sup>1</sup>An active tap is defined as a metered connection to the distribution main that has had all fees paid, and is either currently using water, or has used water at any time during the last five consecutive years. Does not include taps sold to raw water customers.

<sup>2</sup>A stub-in is a connection made solely to extend the service line from the main to the valve at the property line prior to the paving of the street and is not considered a tap.

<sup>3</sup>AMR represents large capital investments to replace old batteries in the AMRs not day to day replacements of meters.

<sup>4</sup>Call Center Calls include calls offered, plus calls handled through the Interactive Voice Response (IVR).

<sup>5</sup>Illness Concerns calls from 2002 through 2006 were included in "other."

<sup>6</sup>In 2011, there were 895 taps activated during the year. 875 change over taps were double counted in prior years which were corrected in 2011.

<sup>7</sup>In 2009, a new customer information system was implemented and data produced from that system may not be strictly comparable to prior years.

WATER SOLD IN DOLLARS BY TYPE OF CUSTOMER: 2006 - 2015

(NON-ACCRUAL BASIS)<sup>1</sup>  
(amounts expressed in thousands)

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
<b>SALES OF TREATED WATER</b>										
<b>A. METERED GENERAL CUSTOMERS</b>										
Residential -										
Inside City	\$ 49,842	\$ 49,114	\$ 48,057	\$ 57,504	\$ 49,853	\$ 46,658	\$ 34,776	\$ 39,376	\$ 36,393	\$ 38,199
Outside City-Read and Bill	17,623	16,938	16,893	20,726	17,739	17,547	13,016	15,970	16,255	16,933
Outside City-Total Service	21,943	22,113	22,168	28,464	23,923	24,172	17,921	22,069	19,965	21,868
Residential Irrigation <sup>2</sup> -										
Inside City	1,044	1,028	995	1,363	1,128	1,044	707	860	683	-
Outside City-Read and Bill	770	753	725	1,002	819	798	609	696	427	-
Outside City-Total Service	682	661	602	766	632	617	468	459	388	-
Small multi-family -										
Inside City	4,974	4,932	4,780	5,281	4,735	4,285	3,657	3,735	3,464	3,287
Outside City-Read and Bill	477	484	476	505	437	370	331	291	263	258
Outside City-Total Service	785	781	748	813	714	606	552	528	464	502
Commercial -										
Inside City	36,651	35,883	33,834	37,074	33,705	31,454	29,121	29,548	28,432	27,371
Outside City-Read and Bill	8,940	9,010	8,501	9,585	8,557	8,069	8,163	7,164	7,645	7,892
Outside City-Total Service	9,284	9,434	8,744	9,691	8,821	8,285	8,040	7,575	8,372	7,909
Industrial -										
Inside City	3,033	3,090	3,139	3,212	2,995	2,820	2,896	3,020	2,996	2,639
Outside City-Read and Bill	1,102	1,121	1,028	1,624	2,239	2,101	2,016	2,384	2,444	2,155
R&B Winter/Summer Adj	-	-	-	(1,644)	-	-	-	-	-	-
Outside City-Total Service	154	143	148	164	167	184	120	201	161	170
Other Irrigation <sup>3</sup> -										
Inside City	2,567	2,629	2,494	3,709	3,190	2,889	1,815	2,017	-	-
Outside City-Read and Bill	1,674	1,584	1,535	2,095	1,736	1,757	1,182	1,246	-	-
Outside City-Total Service	2,510	2,426	2,300	3,077	2,688	2,567	1,697	1,920	-	-
	<b>164,055</b>	<b>162,124</b>	<b>157,167</b>	<b>185,011</b>	<b>164,078</b>	<b>156,223</b>	<b>127,087</b>	<b>139,059</b>	<b>128,352</b>	<b>129,183</b>
<b>B. PRIVATE FIRE PROTECTION SERVICE</b>										
Sprinklers -										
Inside City	868	840	827	1,015	985	928	925	896	879	860
Outside City-Read and Bill	86	84	71	65	51	49	52	45	45	44
Outside City-Total Service	142	139	133	122	73	70	71	64	62	58
	<b>1,096</b>	<b>1,063</b>	<b>1,031</b>	<b>1,202</b>	<b>1,109</b>	<b>1,047</b>	<b>1,048</b>	<b>1,005</b>	<b>986</b>	<b>962</b>
<b>C. OTHER SALES TO PUBLIC AUTHORITIES</b>										
City & County of Denver <sup>4</sup> -										
Irrigation	2,626	2,707	2,686	4,087	3,148	3,616	2,441	3,394	-	-
Non-Irrigation	2,078	1,927	1,717	1,880	1,583	1,584	1,772	1,491	3,799	4,126
Other County Agencies -										
Inside City	1,016	971	1,003	1,476	1,136	1,040	950	1,153	1,102	1,115
Outside City-Read and Bill	608	768	625	743	757	891	458	600	752	725
Outside City-Total Service	750	736	708	964	852	839	674	758	1,136	1,127
State Agencies -										
Inside City	361	361	354	393	375	362	352	469	481	498
Outside City-Read and Bill	51	46	38	42	39	37	35	29	29	26
Outside City-Total Service	5	6	7	6	4	5	4	7	6	4
Federal Agencies -										
Inside City	54	127	133	168	198	92	357	288	269	231
Outside City-R&B at Denver Rates	31	9	26	26	67	31	35	61	17	17
Outside City-Read and Bill	44	49	37	48	62	530	118	427	297	248
Total Service	1	2	2	2	2	1	2	2	2	2
	<b>7,625</b>	<b>7,709</b>	<b>7,336</b>	<b>9,835</b>	<b>8,223</b>	<b>9,028</b>	<b>7,198</b>	<b>8,679</b>	<b>7,890</b>	<b>8,119</b>
<b>D. SALES OF TREATED WATER FOR RESALE</b>										
Outside City - Master Meter	48,906	48,371	47,550	62,968	47,483	43,196	38,192	40,909	37,611	37,396
Outside the Combined Service Area	13,034	13,598	10,729	4,064	9,886	9,552	8,954	8,686	9,141	7,715
	<b>61,940</b>	<b>61,969</b>	<b>58,279</b>	<b>67,032</b>	<b>57,369</b>	<b>52,748</b>	<b>47,146</b>	<b>49,595</b>	<b>46,752</b>	<b>45,111</b>
<b>TOTAL SALES OF TREATED WATER</b>	<b>234,716</b>	<b>232,865</b>	<b>223,813</b>	<b>263,080</b>	<b>230,780</b>	<b>219,046</b>	<b>182,479</b>	<b>198,338</b>	<b>183,980</b>	<b>183,375</b>
<b>SALES OF NONPOTABLE WATER</b>										
	7,509	5,912	7,043	8,271	7,039	6,189	5,587	7,204	5,576	9,309
<b>TOTAL SALES OF WATER</b>	<b>\$ 242,225</b>	<b>\$ 238,777</b>	<b>\$ 230,856</b>	<b>\$ 271,351</b>	<b>\$ 237,819</b>	<b>\$ 225,235</b>	<b>\$ 188,066</b>	<b>\$ 205,542</b>	<b>\$ 189,556</b>	<b>\$ 192,683</b>

<sup>1</sup>This schedule represents actual billings made for water during the year. No accruals were made for revenue earned on unbilled metered accounts. Therefore, amounts on this schedule do not agree with amounts on the Statement of Revenues, Expenses and Changes in Net Position. The difference from amounts on an accrual basis is immaterial.

<sup>2</sup>In 2007, a separate rate classification was created for residential irrigation-only customers ("Residential Irrigation"). For years prior to 2007, the revenue earned from the sale of water and the related gallons sold to these customers are included in the amounts shown for regular residential service.

<sup>3</sup>In 2008, a separate rate classification was created for commercial, industrial and governmental irrigation-only customers ("Other Irrigation"). For years prior to 2008, the revenue earned from the sale of water and the related gallons sold to these customers are included in the amounts shown for regular commercial, industrial and local government agency service.

<sup>4</sup>In 2008, a separate rate classification was created for City and County of Denver irrigation-only customers ("City & County of Denver - Irrigation"). Prior to 2008, the revenue earned from the sale of water and the related gallons sold to these customers are included in "City & County of Denver - Non-Irrigation."

TREATED WATER SOLD IN GALLONS BY TYPE OF CUSTOMER: 2006 - 2015  
(amounts expressed in thousands of gallons)

<u>SALES OF TREATED WATER</u>		2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
<b>A. METERED GENERAL CUSTOMERS</b>											
Residential -	Inside City	11,359,464	11,603,885	11,629,361	14,052,609	13,098,298	13,601,820	12,075,102	14,190,479	13,788,207	15,319,966
	Outside City-Read and Bill	3,714,016	3,722,505	3,839,625	4,750,696	4,399,807	4,593,122	4,114,005	4,913,295	4,691,563	5,278,025
	Outside City-Total Service	3,957,317	4,051,615	4,150,654	5,225,688	4,794,193	4,959,464	4,388,923	5,297,529	5,008,534	5,673,116
Residential Irrigation <sup>1</sup> -	Inside City	215,336	209,084	202,587	283,485	248,861	261,019	190,264	247,163	186,902	-
	Outside City-Read and Bill	144,812	145,195	139,779	198,236	173,346	186,694	139,916	200,591	116,794	-
	Outside City-Total Service	105,991	107,181	101,655	140,407	121,065	124,574	94,358	125,168	89,235	-
Small multi-family -	Inside City	1,355,336	1,386,032	1,370,868	1,560,394	1,495,266	1,525,150	1,437,136	1,556,375	1,544,714	1,625,016
	Outside City-Read and Bill	120,007	123,537	125,029	135,850	125,757	118,190	114,740	113,627	108,934	102,529
	Outside City-Total Service	160,073	162,590	163,553	184,925	172,393	156,313	149,255	158,912	149,588	164,236
Commercial -	Inside City	11,877,715	11,865,891	11,407,418	12,522,805	12,157,287	12,398,800	12,069,634	12,643,141	13,060,641	13,453,864
	Outside City-Read and Bill	2,232,004	2,257,606	2,208,047	2,524,765	2,384,164	2,370,656	2,390,356	2,519,213	2,778,664	2,940,758
	Outside City-Total Service	2,032,945	2,071,909	2,033,840	2,323,899	2,223,111	2,248,376	2,160,037	2,235,147	2,544,606	2,729,083
Industrial -	Inside City	1,061,877	1,116,290	1,145,795	1,188,635	1,185,642	1,220,187	1,286,307	1,328,867	1,434,058	1,403,596
	Outside City-Read and Bill	300,802	306,221	297,504	521,752	690,755	685,581	696,547	884,226	913,261	861,583
	R&B Winter/Summer Adj	-	-	-	(519,142)	-	-	-	-	-	-
	Outside City-Total Service	33,596	31,138	33,138	38,090	40,772	49,246	33,022	59,666	50,081	60,063
Other Irrigation <sup>1</sup> -	Inside City	543,870	550,833	514,946	786,154	719,221	747,524	574,776	806,722	-	-
	Outside City-Read and Bill	318,000	307,594	296,929	417,375	370,134	416,362	300,627	421,140	-	-
	Outside City-Total Service	398,268	396,232	391,745	567,216	520,659	525,479	391,178	546,971	-	-
		<b>39,931,429</b>	40,415,338	40,052,473	46,903,839	44,920,731	46,188,557	42,606,183	48,248,232	46,465,782	49,611,835
<b>B. OTHER SALES TO PUBLIC AUTHORITIES</b>											
City & County of Denver <sup>1</sup> -	Irrigation	978,144	1,026,040	1,008,417	1,565,859	1,230,115	1,594,390	1,036,056	1,951,435	-	-
	Non-Irrigation	843,730	802,951	763,591	829,144	763,595	790,149	888,372	824,476	2,415,541	2,793,826
Other County Agencies -	Inside City	302,066	291,796	309,260	445,947	368,139	363,214	358,456	478,945	500,176	535,080
	Outside City-Read and Bill	160,303	190,837	160,096	191,100	213,673	261,631	135,817	212,370	273,868	275,898
	Outside City-Total Service	149,410	146,595	148,160	210,913	195,617	208,405	166,629	219,046	338,161	386,017
State Agencies -	Inside City	116,022	117,316	118,520	130,365	130,345	140,865	147,880	200,936	224,516	251,300
	Outside City-Read and Bill	11,139	10,783	9,299	10,205	9,724	10,112	9,857	9,927	10,368	9,349
	Outside City-Total Service	1,088	1,225	1,622	1,557	1,081	1,370	1,177	1,931	1,742	1,468
Federal Agencies -	Inside City	20,840	40,390	48,534	60,751	83,863	38,759	55,456	84,686	133,356	129,602
	Outside City-R&B at Denver Rates	6,991	5,341	6,238	6,245	8,244	12,116	195,924	121,545	8,334	6,560
	Outside City-Read and Bill	10,166	11,486	8,493	11,156	22,629	152,973	38,949	149,333	107,201	94,067
	Total Service	296	451	457	367	375	384	443	488	506	475
		<b>2,600,195</b>	2,645,211	2,582,687	3,463,609	3,027,400	3,574,368	3,035,016	4,255,118	4,013,769	4,483,642
<b>C. SALES OF TREATED WATER FOR RESALE</b>											
Outside City - Master Meter		12,130,614	12,264,584	12,574,045	15,050,805	14,109,526	14,352,778	12,824,666	15,294,977	14,753,753	15,717,343
Outside the Combined Service Area		3,147,757	3,326,368	2,743,233	3,558,092	2,767,464	3,021,344	2,902,470	3,008,039	3,482,153	3,116,980
		<b>15,278,371</b>	15,590,952	15,317,278	18,608,897	16,876,990	17,374,122	15,727,136	18,303,016	18,235,906	18,834,323
<b>TOTAL SALES OF TREATED WATER</b>		<b>57,809,995</b>	58,651,501	57,952,438	68,976,345	64,825,121	67,137,047	61,368,335	70,806,366	68,715,457	72,929,800
<u>Reconciliation of Water Treated, Delivered, Consumption, Sales and Non-revenue Water:</u>											
Total Water Treated (Production) - Page III-76		60,140,870	61,177,090	60,195,400	71,960,650	68,257,000	69,713,070	62,089,800	71,983,540	70,474,410	74,722,230
(Increase) Decrease in Clear Water Storage - Page III-76		(24,900)	8,180	17,040	8,050	3,800	(17,670)	17,100	(7,670)	5,430	2,750
Treated Water Delivered - Page III-70 & III-76		60,115,970	61,185,270	60,212,440	71,968,700	68,260,800	69,695,400	62,106,900	71,975,870	70,479,840	74,724,980
Water Purchased - Page III-21		-	-	-	-	-	-	-	-	-	-
Treated Water Available (Consumption) -Page III-75		60,115,970	61,185,270	60,212,440	71,968,700	68,260,800	69,695,400	62,106,900	71,975,870	70,479,840	74,724,980
Less Sales of Treated Water - Page III-21		(57,809,995)	(58,651,501)	(57,952,438)	(68,976,345)	(64,825,121)	(67,137,047)	(61,368,335)	(70,806,366)	(68,715,457)	(72,929,800)
Less Load Shifted Treated Water - Page III-21		-	-	-	-	-	-	-	-	-	-
Non-revenue Water - Page III-21		2,305,975	2,533,769	2,260,002	2,992,355	3,435,679	2,558,353	738,565	1,169,504	1,764,383	1,795,180
% Non-revenue Water - Page III-21		3.84%	4.14%	3.75%	4.16%	5.03%	3.67%	1.19%	1.62%	2.50%	2.40%

<sup>1</sup>See footnotes on page III-16.

OPERATING REVENUE AND RELATED WATER CONSUMPTION - 2015

(NON-ACCRUAL BASIS)<sup>1</sup>

(amounts expressed in thousands)

		<u>Revenue</u>	<u>Gallons Sold (000)</u>	<u>Average Number of Customers</u>	<u>Revenue Per 1,000 Gallons</u>
<b>I. SALES OF TREATED WATER</b>					
<b>A. METERED GENERAL CUSTOMERS</b>					
Residential	Inside City	\$ 49,842	11,359,464	136,556	\$ 4.3877
	Outside City-Read and Bill	17,623	3,714,016	33,614	4.7450
	Outside City-Total Service	21,943	3,957,317	32,519	5.5449
Residential Irrigation	Inside City	1,044	215,336	581	4.8482
	Outside City-Read and Bill	770	144,812	180	5.3172
	Outside City-Total Service	682	105,991	181	6.4345
Small multi-family	Inside City	4,974	1,355,336	9,598	3.6699
	Outside City-Read and Bill	477	120,007	599	3.9748
	Outside City-Total Service	785	160,073	725	4.9040
Commercial	Inside City	36,651	11,877,715	14,995	3.0857
	Outside City-Read and Bill	8,940	2,232,004	2,584	4.0054
	Outside City-Total Service	9,284	2,032,945	2,806	4.5668
Industrial	Inside City	3,033	1,061,877	244	2.8563
	Outside City-Read and Bill	1,102	300,802	5	3.6635
	Outside City-Total Service	154	33,596	8	4.5839
Other Irrigation	Inside City	2,567	543,870	813	4.7199
	Outside City-Read and Bill	1,674	318,000	270	5.2642
	Outside City-Total Service	2,510	398,268	424	6.3023
		<u>164,055</u>	<u>39,931,429</u>	<u>236,702</u>	<u>4.1084</u>
<b>B. PRIVATE FIRE PROTECTION SERVICE<sup>2</sup></b>					
Sprinklers -	Inside City	868	-		
	Outside City-Read and Bill	86	-		
	Outside City-Total Service	142	-		
		<u>1,096</u>	<u>-</u>		
<b>C. OTHER SALES TO PUBLIC AUTHORITIES</b>					
City & County of Denver	Irrigation	2,626	978,144	788	2.6847
	Non-Irrigation	2,078	843,730	413	2.4629
Other County Agencies -	Inside City	1,016	302,066	152	3.3635
	Outside City-Read and Bill	608	160,303	47	3.7928
	Outside City-Total Service	750	149,410	79	5.0197
State Agencies -	Denver	361	116,022	48	3.1115
	Outside City-Read and Bill	51	11,139	4	4.5785
	Outside City-Total Service	5	1,088	2	4.5956
Federal Agencies -	Denver	54	20,840	18	2.5912
	Outside City-RB at Denver Rates	31	6,991	-	4.4343
	Outside City-Read and Bill	44	10,166	2	4.3282
	Outside City-Total Service	1	296	2	3.3784
		<u>7,625</u>	<u>2,600,195</u>	<u>1,555</u>	<u>2.9325</u>

<sup>1</sup>This schedule represents actual billings made for water during the year. No accruals were made for revenue earned on unbilled accounts. Therefore, amounts on this schedule do not agree with amounts on the Statement of Revenues, Expenses and Changes in Net Assets. The difference from amounts on an accrual basis is immaterial.

<sup>2</sup>Private fire protection consumption is unmetered and is considered part of non-revenue water. See "Sales of Treated Water between Denver and Outside City" on pages III-20 and III-21, for this estimate.

(Continued next page)

OPERATING REVENUE AND RELATED WATER CONSUMPTION (Continued) - 2015 (Page 2 of 2)

(NON-ACCRUAL BASIS)

(amounts expressed in thousands)

	Revenue	Gallons Sold (000)	Average Number of Customers	Revenue Per 1,000 Gallons
<b>I. SALES OF TREATED WATER (Continued)</b>				
<b>D. SALES OF TREATED WATER FOR RESALE<sup>3</sup></b>				
Outside City - Master Meter	\$ 48,906	12,130,614	76,341	\$ 4.0316
Outside the Combined Service Area	13,034	3,147,757	-	4.1407
	<u>61,940</u>	<u>15,278,371</u>	<u>76,341</u>	<u>4.0541</u>
<b>TOTAL SALES OF TREATED WATER<sup>4</sup></b>	<u>234,716</u>	<u>57,809,995</u>	<u>314,598</u>	<u>4.0601</u>
<b>II. SALES OF NON-POTABLE WATER<sup>5</sup></b>				
Inside City	458	814,752	113	0.5621
Outside City	939	974,702	19	0.9634
Outside the Combined Service Area	6,112	6,252,447	13	0.9775
	<u>7,509</u>	<u>8,041,901</u>	<u>145</u>	<u>0.9337</u>
<b>TOTAL SALES OF WATER</b>	<u>\$ 242,225</u>	<u>65,851,896</u> <sup>7</sup>	<u>314,743</u>	<u>\$ 3.6783</u>
<b>III. OTHER NON-POTABLE WATER DELIVERIES<sup>5</sup></b>		<u>1,384,883</u>		
<b>TOTAL GALLONS SOLD</b>		<u>67,236,779</u>		
<b>IV. OTHER OPERATING REVENUE</b>				
<b>A. POWER SALES REVENUE<sup>6</sup></b>				
Foothills Treatment Plant	\$ 385			
Strontia Springs	264			
Dillon Dam	511			
Roberts Tunnel	254			
Hillcrest	212			
Williams Fork	647			
Gross Reservoir	1,333			
	<u>3,606</u>			
<b>B. SPECIAL ASSESSMENTS</b>				
Administrative Fees	3,330			
Penalty Fees	73			
Stub-in, Taps and Meter Fees	1,648			
Hydrant Fees	1,729			
Plan Review, Easement, Distribution Inspection	1,275			
Other Assessments	(1,437)			
	<u>6,618</u>			
<b>TOTAL OTHER OPERATING REVENUE</b>	<u>10,224</u>			
<b>TOTAL OPERATING REVENUE</b>	<u>\$ 252,449</u>			

<sup>3</sup>See "Sales of Treated Water for Resale" on Page III-30

<sup>4</sup>See "Sales of Treated Water Between Denver and Outside City" on pages III-20 and III-21.

<sup>5</sup>See "Sales of Non-Potable Water Between Denver and Outside City" on page III-22.

<sup>6</sup>Power Sales Revenue represents actual billings made for power during the year. No accruals were made for unbilled revenue. Therefore, amounts on this schedule do not agree with amounts on other schedules which report the value of power produced.

<sup>7</sup>Billions of gallons sold reported on the MD&A may differ from the information above because the MD&A information is financial transaction based whereas the information presented above is service point based.

SALES OF TREATED WATER BETWEEN DENVER AND OUTSIDE CITY - 2015

(NON-ACCRUAL BASIS)<sup>1</sup>

(Page 1 of 2)

(amounts expressed in thousands)

	Revenue		Gallons Sold		Average Number of Customers
	Amount	Percent of Total	Amount (000)	Percent of Total	
<b>I. INSIDE CITY</b>					
<b>A. METERED GENERAL CUSTOMERS</b>					
Residential	\$ 49,841	21.23%	11,359,464	19.65%	136,556
Residential Irrigation	1,044	0.44%	215,336	0.37%	581
Duplex	2,592	1.10%	680,749	1.18%	5,994
3-Plex	755	0.32%	207,349	0.36%	1,410
4-Plex	1,076	0.46%	306,948	0.53%	1,568
5-Plex	551	0.23%	160,290	0.28%	626
Commercial	36,651	15.62%	11,877,715	20.55%	14,995
Industrial	3,033	1.29%	1,061,877	1.84%	244
Other Irrigation	2,567	1.09%	543,870	0.94%	813
	<u>98,110</u>	<u>41.78%</u>	<u>26,413,598</u>	<u>45.70%</u>	<u>162,787</u>
<b>B. PRIVATE FIRE PROTECTION SERVICE<sup>2</sup></b>					
Sprinklers	869	0.37%	-		
<b>C. OTHER SALES TO PUBLIC AUTHORITIES</b>					
City And County of Denver-Irrigation	2,626	1.12%	978,144	1.69%	788
City and County of Denver-Non-Irrigation	2,078	0.89%	843,730	1.46%	413
Other County Agencies	1,016	0.43%	302,066	0.52%	152
State Agencies	361	0.16%	116,022	0.20%	48
Federal Agencies	54	0.02%	20,840	0.03%	18
	<u>6,135</u>	<u>2.62%</u>	<u>2,260,802</u>	<u>3.90%</u>	<u>1,419</u>
<b>TOTAL SALES OF TREATED WATER - DENVER</b>					
	<u>105,114</u>	<u>44.77%</u>	<u>28,674,400</u>	<u>49.60%</u>	<u>164,206</u>
Revenue per 1,000 Gallons - Denver			<u>\$ 3.6658</u>		

**II. OUTSIDE CITY**

**A. METERED GENERAL CUSTOMERS**

Residential - Read & Bill	17,623	7.51%	3,714,016	6.42%	33,614
Residential Irrigation - Read & Bill	769	0.33%	144,812	0.25%	180
Duplex - Read & Bill	85	0.04%	20,516	0.04%	142
3-Plex - Read & Bill	88	0.04%	21,541	0.04%	138
4-Plex - Read & Bill	252	0.11%	64,419	0.11%	269
5-Plex - Read & Bill	52	0.02%	13,531	0.02%	50
Commercial - Read & Bill	8,940	3.81%	2,232,004	3.86%	2,584
Industrial - Read & Bill	1,103	0.47%	300,802	0.52%	5
Other Irrigation -Read & Bill	1,674	0.71%	318,000	0.55%	270
Residential - Total Service	21,943	9.35%	3,957,317	6.85%	32,519
Residential Irrigation - Total Service	682	0.29%	105,991	0.18%	181
Duplex - Total Service	217	0.09%	42,835	0.07%	284
3-Plex - Total Service	120	0.05%	24,478	0.04%	121
4-Plex - Total Service	327	0.14%	67,274	0.12%	227
5-Plex - Total Service	121	0.05%	25,486	0.04%	93
Commercial - Total Service	9,284	3.96%	2,032,945	3.52%	2,806
Industrial - Total Service	154	0.07%	33,596	0.06%	8
Other Irrigation - Total Service	2,510	1.07%	398,268	0.69%	424
	<u>65,944</u>	<u>28.11%</u>	<u>13,517,831</u>	<u>23.38%</u>	<u>73,915</u>

<sup>1</sup>This schedule represents actual billings made for water during the year. No accruals were made for revenue earned on unbilled accounts. Therefore, amounts on this schedule do not agree with amounts on the Statement of Revenues, Expenses and Changes in Net Assets. The difference from amounts on an accrual basis is immaterial.

<sup>2</sup>Private fire protection consumption is unmetered and is considered part of non-revenue water. See "Operating Revenue and Related Water Consumption" on pages III-18 and III-19, for this estimate.

(Continued next page)

SALES OF TREATED WATER BETWEEN DENVER AND OUTSIDE CITY - 2015

(NON-ACCRUAL BASIS)

(Page 2 of 2)

(amounts expressed as thousands)

	Revenue		Gallons sold		Average Number of Customers
	Amount	Percent of Total	Amount (000)	Percent of Total	
II. OUTSIDE CITY (Continued)					
B. PRIVATE FIRE PROTECTION SERVICE <sup>2</sup>					
Sprinklers	\$ 86	0.04%	-		
Sprinklers - Total Service	142	0.06%	-		
	<u>228</u>	<u>0.10%</u>	<u>-</u>		
C. OTHER SALES TO PUBLIC AUTHORITIES					
County Agencies - Read & Bill	608	0.26%	160,303	0.28%	47
State Agencies - Read & Bill	51	0.02%	11,139	0.02%	4
Federal Agencies - Read & Bill	44	0.02%	10,166	0.02%	2
Federal Agencies at Denver Rates	31	0.01%	6,991	0.01%	-
County Agencies - Total Service	750	0.32%	149,410	0.26%	79
State Agencies - Total Service	5	0.00%	1,088	0.00%	2
Federal Agencies - Total Service	1	0.00%	296	0.00%	2
	<u>1,490</u>	<u>0.63%</u>	<u>339,393</u>	<u>0.59%</u>	<u>136</u>
D. SALES OF TREATED WATER FOR RESALE <sup>3</sup>					
Master Meter Distributors	48,906	20.84%	12,130,614	20.98%	76,341
Outside CSA-Fixed Limit Contracts	13,034	5.55%	3,147,757	5.45%	-
	<u>61,940</u>	<u>26.39%</u>	<u>15,278,371</u>	<u>26.43%</u>	<u>76,341</u>
TOTAL SALES OF TREATED WATER - OUTSIDE CITY					
	<u>129,602</u>	<u>55.23%</u>	<u>29,135,595</u>	<u>50.40%</u>	<u>150,392</u>
Revenue per 1,000 Gallons - Outside City			<u>\$ 4.4482</u>		
TOTAL SALES OF TREATED WATER					
	<u>\$ 234,716</u>	<u>100.00%</u>	<u>57,809,995</u>	<u>100.00%</u>	<u>314,598</u>
Revenue per 1,000 Gallons - Total			<u>\$ 4.0601</u>		
RECONCILIATION/CALCULATION OF NON-REVENUE WATER					
Total Water Treated (Production) - Page III-76			60,140,870		
(Increase) Decrease in Clear Water Storage - Page III-76			<u>-24,900</u>		
Total Treated Water Delivered - Page III-76			60,115,970		
Water Purchased			<u>-</u>		
Total Treated Water Available (Consumption) - Page III-75			60,115,970	100.00%	
Less Sale of Treated Water			<u>(57,809,995)</u>	<u>(96.16)%</u>	
Less Load Shifted Treated Water			<u>-</u>	<u>0.00%</u>	
Non-revenue Water			<u>2,305,975</u>	<u>3.84%</u>	

<sup>2</sup>Private fire protection consumption is unmetered and is considered part of non-revenue water.

<sup>3</sup>See "Sales of Treated Water For Resale" on page III-30.

SALES OF NON-POTABLE WATER BETWEEN DENVER AND OUTSIDE CITY - 2015

(NON-ACCRUAL BASIS)<sup>1</sup>

(amounts expressed as thousands)

	Revenue		Gallons Sold		Number of Customers <sup>3</sup>	Revenue Per 1,000 Gallons
	Amount	Percent of Total	Amount (000)	Percent of Total		
<b>I. <u>INSIDE CITY</u></b>						
Raw Water Sales						
City & County of Denver Agencies	\$ 37	0.49%	128,890	1.60%	2	\$ 0.2871
Xcel Energy	-	0.00%	-	0.00%	-	-
All Other	9	0.12%	9,066	0.11%	2	0.9927
	<u>46</u>	<u>0.61%</u>	<u>137,956</u>	<u>1.71%</u>	<u>4</u>	<u>0.3334</u>
Effluent Sales						
City & County of Denver Agencies	5	0.07%	16,022	0.20%	1	0.3121
Xcel Energy	-	0.00%	-	0.00%	-	-
All Other	5	0.07%	8,686	0.11%	1	0.5756
	<u>10</u>	<u>0.14%</u>	<u>24,708</u>	<u>0.31%</u>	<u>2</u>	<u>0.4047</u>
Recycle Sales						
City & County of Denver Agencies	120	1.60%	390,306	4.85%	57	0.3075
All Other	263	3.50%	261,782	3.26%	50	1.0047
	<u>383</u>	<u>5.10%</u>	<u>652,088</u>	<u>8.11%</u>	<u>107</u>	<u>0.5873</u>
Minimum Contract Payment <sup>2</sup> -All Other	19	0.25%	-	0.00%	-	-
Total Denver	<u>458</u>	<u>6.10%</u>	<u>814,752</u>	<u>10.13%</u>	<u>113</u>	<u>0.5621</u>
<b>II. <u>OUTSIDE CITY, WITHIN COMBINED SERVICE AREA</u></b>						
Raw Water Sales-All Others	912	12.15%	972,556	12.09%	9	0.9377
Effluent Sales-All Others	2	0.03%	2,146	0.03%	4	0.9320
Recycle Sales-Xcel Energy	-	0.00%	-	0.00%	-	-
Minimum Contract Payments <sup>2</sup> -All Others	25	0.33%	-	0.00%	6	-
Total Outside City, Within Combined Service Area	<u>939</u>	<u>12.51%</u>	<u>974,702</u>	<u>12.12%</u>	<u>19</u>	<u>0.9634</u>
<b>III. <u>OUTSIDE COMBINED SERVICE AREA</u></b>						
Raw Water for Resale						
City of Arvada	4,119	54.85%	4,318,424	53.70%	2	0.9538
North Table Mountain	730	9.72%	764,130	9.50%	1	0.9553
	<u>4,849</u>	<u>64.57%</u>	<u>5,082,554</u>	<u>63.20%</u>	<u>3</u>	<u>0.9540</u>
Raw Water Sales						
Centennial Water & Sanitation District	392	5.22%	377,096	4.69%	1	1.0395
Consolidated Mutual Water	150	2.00%	144,352	1.79%	1	1.0391
All Other	13	0.17%	12,615	0.16%	6	1.0305
	<u>555</u>	<u>7.39%</u>	<u>534,063</u>	<u>6.64%</u>	<u>8</u>	<u>1.0392</u>
Effluent Sales-All Other	-	0.00%	-	0.00%	-	-
Recycle Sales-Xcel Energy	706	9.40%	635,830	7.91%	1	1.1104
Minimum Contract Payments <sup>2</sup> -All Other	2	0.03%	-	0.00%	1	-
	<u>708</u>	<u>9.43%</u>	<u>635,830</u>	<u>7.91%</u>	<u>2</u>	<u>1.1135</u>
Total Outside Combined Service Area	<u>6,112</u>	<u>81.39%</u>	<u>6,252,447</u>	<u>77.75%</u>	<u>13</u>	<u>0.9775</u>
TOTAL SALES OF NON-POTABLE WATER	<u>\$ 7,509</u>	<u>100.00%</u>	<u>8,041,901</u>	<u>100.00%</u>	<u>145</u>	<u>\$ 0.9337</u>
<b>IV. <u>OTHER NON-POTABLE WATER DELIVERIES</u></b>						
City Ditch at Washington Park			628,226			
City of Englewood (Cabin-Meadow Exchange)			756,657			
Total Other Non-Potable Water Deliveries			<u>1,384,883</u>			
TOTAL NON-POTABLE WATER DELIVERIES			<u>9,426,784</u>			

<sup>1</sup>This schedule represents actual billings made for water during the year. No accruals were made for revenue earned on unbilled accounts. The difference from amounts on an accrual basis is immaterial.

<sup>2</sup>The minimum contract payments category reflects contract stipulated payments with the ability to take a quantified amount of water. The payment is made in full regardless of consumption below the quantified amount.

<sup>3</sup>If the customer is reflected in the count of raw water customers, it is excluded from the count of effluent and minimum contract payment customers.

CUSTOMER ACCOUNTS FOR TREATED WATER - 2015<sup>1</sup>

		Total Customer Accounts <sup>2</sup>			Accounts with Active Billed Consumption	
		12-31-15	12-31-14	Increase (Decrease)	12-31-15	12-31-14
<b>METERED GENERAL CUSTOMERS</b>						
Residential	Inside City	182,975	175,662	7,313	137,137	136,274
	Outside City	42,930	41,365	1,565	33,794	33,655
	Total Service	41,194	39,861	1,333	32,700	32,696
Small multi-family	Inside City	9,520	9,434	86	9,598	9,518
	Outside City	584	550	34	599	586
	Total Service	714	712	2	725	733
Commercial	Inside City	18,623	17,956	667	14,995	14,903
	Outside City	3,294	3,151	143	2,584	2,550
	Total Service	3,553	3,394	159	2,806	2,790
Industrial	Inside City	289	296	(7)	244	251
	Outside City	5	5	-	5	5
	Total Service	7	8	(1)	8	8
Other Irrigation	Inside City	795	769	26	813	810
	Outside City	315	312	3	270	266
	Total Service	559	550	9	424	435
<b>TOTAL METERED GENERAL CUSTOMERS</b>		<u>305,357</u>	<u>294,025</u>	<u>11,332</u>	<u>236,702</u>	<u>235,480</u>
<b>PUBLIC AUTHORITIES</b>						
City & County of Denver		1,523	1,468	55	1,201	1,214
Other County Agencies	Inside City	365	350	15	152	182
	Outside City	54	57	(3)	47	48
	Total Service	93	99	(6)	79	81
State Agencies	Inside City	54	53	1	48	51
	Outside City	4	4	-	4	4
	Total Service	3	3	-	2	2
Federal Agencies	Inside City	20	20	-	18	19
	Outside City	2	2	-	2	2
	Total Service	2	2	-	2	2
<b>TOTAL PUBLIC AUTHORITIES</b>		<u>2,120</u>	<u>2,058</u>	<u>62</u>	<u>1,555</u>	<u>1,605</u>
<b>RESALE ACCOUNTS (MASTER METER)<sup>3</sup></b>		<u>76,341</u>	<u>76,356</u>	<u>(15)</u>	<u>76,341</u>	<u>76,356</u>
<b>TOTAL TREATED WATER CUSTOMERS</b>		<u><u>383,818</u></u>	<u><u>372,439</u></u>	<u><u>11,379</u></u>	<u><u>314,598</u></u>	<u><u>313,441</u></u>

<sup>1</sup>A customer account is defined as a person or legal entity to which Denver Water currently provides service or has provided service at any time during the last five consecutive years. A customer may have more than one license, tap and/or premise.

<sup>2</sup>Represents the number of active and inactive metered services at year-end.

<sup>3</sup>See "Analysis of Sales of Treated Water for Resale" on page III-30.

WATER RATE SCHEDULES - 2015

(Effective for bills dated on or after February 1, 2015)

Rate per 1,000 Gallons

TREATED WATER CONSUMPTION CHARGES (Monthly)

	Schedule 1 Inside City	Outside City	
		Schedule 2 Read and Bill	Schedule 3 Total Service
<u>Single Family Residential</u>			
First 11,000 Gallons	\$ 2.75	\$ 2.82	\$ 3.04
12,000 - 30,000 Gallons	5.50	5.64	6.08
31,000 - 40,000 Gallons	8.25	8.46	9.12
Over 40,000 Gallons	11.00	11.28	12.16
<u>Small Multi-Family (Duplex through 5-Plex with a Single Meter)</u>			
First 15,000 Gallons <sup>1</sup>	3.02	3.43	4.29
Over 15,000 Gallons	3.62	4.12	5.15

<sup>1</sup>Applies to two dwelling units. Monthly consumption increases by 6,000 gallons per dwelling unit up to 5 dwelling units.

All Other (Non-Residential)

Winter - All Consumption <sup>2</sup>	\$ 1.88	\$ 2.36	\$ 2.72
Summer - All Consumption	3.76	4.72	5.44

Irrigation Only

Winter - All Consumption <sup>2</sup>	1.20	1.35	1.64
Summer - All Consumption	4.81	5.40	6.56

<sup>2</sup>Winter bills have billing periods ending on October 28 through April 30. Summer bills have billing periods ending on May 1 through October 27.

SERVICE CHARGES

Monthly  
\$ 6.74

PRIVATE FIRE PROTECTION SERVICE CHARGES (Monthly)

	Schedule 1 Inside City	Outside City	
		Schedule 2 Read and Bill	Schedule 3 Total Service
Fire Hydrants	\$ 13.92	\$ 8.62	\$ 13.66
Sprinkler Systems and Standpipes:			
1"	3.78	2.34	3.71
2"	6.31	3.90	6.19
4"	9.75	6.03	9.57
6"	13.92	8.62	13.66
8"	24.36	15.07	23.91
10"	34.80	21.53	34.15
12"	55.68	34.45	54.65
16"	139.20	86.13	136.61

Schedule 1 Applicability: Charges under this schedule are applicable to all licensees for treated water service or private fire protection service inside the limits of the City and County of Denver.

Schedule 2 Applicability: Charges under this schedule are applicable to all licensees for treated water service or private fire protection service outside the limits of the City and County of Denver served under agreements whereby the distributor in some manner operates and maintains portions of the water system used to supply the licensee and Denver Water is responsible for billing each licensee on an individual basis.

Schedule 3 Applicability: Charges under this schedule are applicable to all licensees for treated water service or private fire protection service outside the limits of the City and County of Denver served under agreements whereby Denver Water operates and maintains the water system used to supply water to the licensee.

**Schedule 4**  
**Master Meter**

TREATED WATER CONSUMPTION CHARGE (Monthly) (Rate per 1,000 Gallons)	\$ 4.04
	<u>Monthly</u>
SERVICE CHARGES FOR ALL METER SIZES	\$ 6.74

Schedule 4 Applicability: Charges for treated water service under this schedule are applicable to entities (i.e. municipalities, quasi-municipal districts and water companies) outside the limits of the City and County of Denver served under distributor agreements whereby the entity operates and maintains water systems to supply individual licensees. Denver Water bills distributors for water delivered through “master meters.” Each distributor establishes charges for its individual licensees for water service.

**Schedule 5**  
**Raw and Recycled**

RAW WATER CONSUMPTION (Monthly)	<u>Per 1,000 Gallons</u>	<u>Per Acre Foot</u>
Inside City	\$ 0.52	\$ 169.44
Outside City	0.96	312.82
Outside the Combined Service Area (See Rate Schedule No. 6)	1.04	338.88

SERVICE CHARGES FOR RAW WATER	<u>Monthly</u> n/a
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RECYCLED WATER CONSUMPTION	<u>Per 1,000 Gallons</u>	<u>Per Acre Foot</u>
Inside City	\$ 0.99	\$ 322.59
Outside City	n/a	n/a
Outside the Combined Service Area (See Rate Schedule No. 6)	1.11	361.69

SERVICE CHARGES FOR RECYCLED WATER	<u>Monthly</u> \$ 6.74
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Schedule 5 Applicability: Charges under this schedule are applicable to entities (including municipalities, quasi-municipal districts and corporations) with whom Denver Water has contracts to deliver raw or recycled water service at inside city or outside city rates. See Rate Schedule No. 6 for applicability outside the combined service area.

**Schedule 6**  
**Outside Combined Service Area**

TREATED WATER CONSUMPTION (Monthly)	<u>Per 1,000 Gallons</u>	<u>Per Acre Foot</u>
	\$ 4.44	\$ 1,446.77

SERVICE CHARGE FOR TREATED WATER	<u>Monthly</u> \$ 6.74
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RAW WATER CONSUMPTION	<u>Per 1,000 Gallons</u>	<u>Per Acre Foot</u>
	\$ 1.04	\$ 338.88

SERVICE CHARGE FOR RAW WATER	<u>Monthly</u> n/a
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RECYCLED WATER CONSUMPTION	<u>Per 1,000 Gallons</u>	<u>Per Acre Foot</u>
	\$ 1.11	\$ 361.69

SERVICE CHARGE FOR RECYCLED WATER	<u>Monthly</u> \$ 6.74
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Schedule 6 Applicability: Charges under this schedule are applicable to entities (including municipalities, quasi-municipal districts and corporations) with whom Denver Water has contracts to deliver a fixed amount of water each year at Denver Water’s outside the combined service area rates. These entities are located outside of Denver Water’s combined service area, which is comprised of the City and County of Denver plus the total geographic area of all Total Service, Read and Bill, and Master Meter distributors who rely on Denver Water for their treated water supply. For contracts with entities outside of the combined service area, Denver Water is only obligated to provide specified amounts of treated, raw or recycled water as specified by contract. Denver Water has no relationship with, or obligation to, individual customers of the entity holding the fixed amount contract.

**Schedule 7**  
**City and County of Denver**

TREATED WATER CONSUMPTION CHARGE (Monthly)	<u>Per 1,000 Gallons</u>
<u>Domestic - All Consumption</u>	\$ 2.43
<u>Irrigation</u>	
Winter - All Consumption <sup>1</sup>	1.08
Summer - All Consumption	2.70

<sup>1</sup>Winter bills have billing periods ending on October 28 through April 30. Summer bills have billing periods ending on May 1 through October 27.

	<u>Monthly</u>
SERVICE CHARGES FOR ALL METER SIZES	\$ 6.74

RAW WATER CONSUMPTION (Monthly)	<u>Per 1,000 Gallons</u>
Inside City	\$ 0.29

	<u>Monthly</u>
SERVICE CHARGES FOR RAW WATER	n/a

RECYCLED WATER CONSUMPTION	<u>Per 1,000 Gallons</u>
Inside City	\$ 0.32

	<u>Monthly</u>
SERVICE CHARGES FOR RECYCLED WATER	\$ 6.74

Schedule 7 Applicability: Charges under this schedule are applicable to all licensees for treated water service or private fire protection service outside the limits of the City and County of Denver served under agreements whereby Denver Water operates and maintains the water system used to supply water to the licensee.

**Schedule 8**  
**Residential Multiplex (Inside City Only)**

<u>Residential Multiplex</u> <sup>1</sup>	
First 11,000 Gallons	\$ 2.75
12,000 - 30,000 Gallons	5.50
31,000 - 40,000 Gallons	8.25
Over 40,000 Gallons	11.00

<sup>1</sup>Block thresholds are determined for each multiplex based on the number of units. Each block threshold is multiplied by the number of units served by single meter.

	<u>Monthly</u>
	\$ 6.74

Schedule 8 Applicability: Charges under this schedule are applicable to all licensees for treated water service that are classified as a residential multiplex inside the limits of the City and County of Denver.

		<b>Schedule 9</b>			
		<b>System Development Charges</b>			
		Treated Water			
		Inside City	Outside City		
<b>I. SINGLE FAMILY RESIDENTIAL</b>					
Base Charge		\$ 3,030		\$ 4,240	
First 22,000 sq. ft., \$ per sq. ft.		0.70		0.98	
Over 22,000 sq. ft., \$ per sq. ft.		0.35		0.49	
Auxiliary Dwelling Unit <sup>1</sup>		\$ 1,940		\$ 2,710	
<b>II. RESIDENTIAL MULTIPLEX</b>					
Base Charge, \$ per unit		\$ 3,030			n/a
Lot size charge, \$ per sq. ft.		0.70			n/a
<b>III. MULTIFAMILY RESIDENTIAL</b>					
Base charge for the first two dwelling units that are on same parcel		\$ 10,040		\$ 14,060	
Charge for next 6 dwelling units that are on the same parcel		2,420		3,390	
Charge for each additional dwelling units above 8 that are on the same parcel		1,940		2,710	
<b>IV. IRRIGATION-ONLY</b>					
Minimum charge: first 5,000 sq. ft.		\$ 5,820		\$ 8,150	
Over 5,000 sq. ft., \$ per sq. ft.		0.87		1.22	
<b>V. NON-RESIDENTIAL<sup>2,3,4</sup></b>					
<u>Tap Size</u>		<u>Treated Water</u>		<u>Non-Potable Water</u>	
		<u>Inside City</u>	<u>Outside City</u>	<u>Inside City</u>	<u>Outside City</u>
3/4"		\$ 10,730	\$ 15,030	\$ 9,370	\$ 13,120
1"		19,170	26,840	16,730	23,420
1 1/2"		42,180	59,050	36,810	51,540
2"		76,690	107,360	66,930	93,710
<b>VI. MIXED USE<sup>5</sup> (sum of the following SDCs)</b>					
Multifamily component				<u>Inside City</u>	<u>Outside City</u>
Nonresidential component				As set forth in Section III of this schedule	As set forth in Section III of this schedule
\$ per sq. ft. of nonresidential gross floor area irrigation, if applicable				\$ 2.91	\$ 4.08
				As set forth in Section IV of this schedule	
<b>VII. SPECIAL CONTRACTS, FIXED VOLUME CONTRACTS, &amp; LARGE VOLUME CUSTOMERS</b>					
<u>Description</u>		<u>Treated Water</u>		<u>Non-Potable Water</u>	
		<u>Inside City</u>	<u>Outside City</u>	<u>Inside City</u>	<u>Outside City</u>
<b>Inside the Combined Service Area</b>					
Acre Foot Conversion (\$/AF)		\$ 18,980	\$ 26,570	\$ 16,570	\$ 23,190
1,000 Gallons Conversion (\$/1,000 gallons)		58.26	81.57	50.85	71.19
<b>Outside the Combined Service Area</b>					
Acre Foot Conversion (\$/AF)		n/a	37,210	n/a	32,470
1,000 Gallons Conversion (\$/1,000 gallons)		n/a	114.10	n/a	99.60

**System Development Charge Applicability:** Licenses for treated and non-potable water taps within the City and County of Denver and Denver Water service areas, including special contracts. System Development Charges are due and payable prior to issuance of a license to the customer.

**Note:** Several distributor contracts and water service agreements contain negotiated tap ratio conversions per acre foot and some agreements contain negotiated and/or prepaid system development charges. These contracts will continue to be administered utilizing the system development charge calculations and/or tap ratio conversions specified in each of the contracts. Tap credit pools are administered consistent with the applicable water service agreement and Denver Water Operating Rules.

<sup>1</sup> Units such as a guest house or carriage house that are detached from the primary residence and contain provisions for sleeping, cooking, and sanitation.

<sup>2</sup> Includes commercial, industrial, institutional development.

<sup>3</sup> SDCs for nonpotable by tap size apply only to recycled water taps.

<sup>4</sup> Tap sizes greater than 2 inches are determined on an individual basis using peak demand requirements.

<sup>5</sup> Development containing two or more different principal or primary uses such as residential, office, manufacturing, retail, public or entertainment uses.

	2015	2014	2013	2012	2011	2010	2009 <sup>1</sup>	2008	2007	2006
<b>City of Denver - Schedule 1</b>										
<u>Residential - Consumption Charge per 1,000 Gallons</u>										
First 11,000 Gallons	\$ 2.75	\$ 2.68	\$ 2.59	\$ 2.54	\$ 2.41	\$ 2.11	\$ 1.91	\$ -	\$ -	\$ -
12,000 - 30,000 Gallons	5.50	5.36	5.18	5.09	4.82	4.22	3.82	-	-	-
31,000 - 40,000 Gallons	8.25	8.04	7.77	7.63	7.23	6.33	5.73	-	-	-
Over 40,000 Gallons	11.00	10.72	10.36	10.17	9.64	8.44	7.64	-	-	-
<u>Prior to July 6, 2009</u>										
First 22,000 Gallons	-	-	-	-	-	-	-	1.81	1.72	1.84
22,000 - 60,000 Gallons	-	-	-	-	-	-	-	3.62	3.44	2.21
Over 60,000 Gallons	-	-	-	-	-	-	-	-	-	-
60,000 - 80,000 Gallons	-	-	-	-	-	-	-	5.43	5.16	2.76
Over 80,000 Gallons	-	-	-	-	-	-	-	7.24	6.88	3.59
<u>Residential Irrigation - Consumption Charge per 1,000 Gallons</u>										
Winter - All Consumption	-	-	-	-	-	1.00	0.92	0.89	0.94	-
Summer - All Consumption	-	-	-	-	-	4.00	3.68	3.56	3.76	-
<u>Small Multi-Family - Consumption Charge per 1,000 Gallons</u> (Duplexes through Five-Plexes with a Single Meter)										
First 15,000 Gallons <sup>2</sup>	3.02	2.93	2.83	2.82	2.67	2.33	2.17	-	-	-
Over 15,000 Gallons	3.62	3.52	3.40	3.38	3.20	2.80	2.60	-	-	-
<u>Prior to July 6, 2009</u>										
First 30,000 Gallons <sup>3</sup>	-	-	-	-	-	-	-	2.10	1.95	1.59
Over 30,000 Gallons	-	-	-	-	-	-	-	2.52	2.34	1.91
<u>All Other Retail - Consumption Charge per 1,000 Gallons</u>										
Winter - All Consumption	1.88	1.84	1.78	1.78	1.69	1.54	1.48	2.06	1.89	1.64
Summer - All Consumption	3.76	3.68	3.57	3.57	3.38	3.08	2.96	2.47	2.27	1.97
<u>Irrigation Only- Consumption Charge per 1,000 Gallons</u>										
Winter - All Consumption	1.20	1.20	1.20	1.20	1.14	1.00	1.49	2.02	-	-
Summer - All Consumption	4.81	4.81	4.81	4.81	4.56	4.00	3.17	2.50	-	-
<u>Service Charge/Meter Charge</u>										
Monthly Service Charge	6.74	6.58	6.33	6.33	6.00	5.58	4.41	3.82	3.87	-
Bimonthly Service Charge	-	-	-	-	-	-	-	6.07	5.98	-
Monthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	5.47
Bimonthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	9.15
<b>Outside City Read and Bill - Schedule 2</b>										
<u>Residential - Consumption Charge per 1000 Gallons</u>										
First 11,000 Gallons	2.82	2.73	2.61	2.49	2.36	2.20	2.00	-	-	-
12,000 - 30,000 Gallons	5.64	5.46	5.22	4.98	4.72	4.40	4.00	-	-	-
31,000 - 40,000 Gallons	8.46	8.19	7.83	7.47	7.08	6.60	6.00	-	-	-
Over 40,000 Gallons	11.28	10.92	10.44	9.96	9.44	8.80	8.00	-	-	-
<u>Prior to July 6, 2009</u>										
First 22,000 Gallons	-	-	-	-	-	-	-	1.90	2.11	2.48
22,000 - 60,000 Gallons	-	-	-	-	-	-	-	3.80	4.22	2.98
Over 60,000 Gallons	-	-	-	-	-	-	-	-	-	-
60,000 - 80,000 Gallons	-	-	-	-	-	-	-	5.70	6.33	3.72
Over 80,000 Gallons	-	-	-	-	-	-	-	7.60	8.44	4.84
<u>Residential Irrigation - Consumption Charge per 1,000 Gallons</u>										
Winter - All Consumption	-	-	-	-	-	1.09	1.08	0.98	0.92	-
Summer - All Consumption	-	-	-	-	-	4.36	4.32	3.92	3.68	-
<u>Small Multi-Family - Consumption Charge per 1000 Gallons</u> (Duplexes through Five-Plexes with a Single Meter)										
First 15,000 Gallons <sup>2</sup>	3.43	3.39	3.30	3.21	3.04	2.71	2.57	-	-	-
Over 15,000 Gallons	4.12	4.07	3.96	3.85	3.65	3.25	3.08	-	-	-
<u>Prior to July 6, 2009</u>										
First 30,000 Gallons <sup>3</sup>	-	-	-	-	-	-	-	2.27	2.13	2.10
Over 30,000 Gallons	-	-	-	-	-	-	-	2.72	2.56	2.52

<sup>1</sup>Effective July 6, 2009 Denver Water customers are billed monthly.

<sup>2</sup>Monthly usage amounts increase by 6,000 gallons per additional dwelling unit up to 5 dwelling units.

<sup>3</sup>Bimonthly usage amounts increased by 12,000 gallons per additional dwelling unit up to 5 dwelling units.

(Continued next page)

	2015	2014	2013	2012	2011	2010	2009 <sup>1</sup>	2008	2007	2006
<b>Outside City Read and Bill - Schedule 2 (Continued)</b>										
<u>All Other Retail - Consumption Charge per 1000 Gallons</u>										
Winter - All Consumption	\$ 2.36	\$ 2.35	\$ 2.26	\$ 2.20	\$ 2.09	\$ 1.99	\$ 1.99	\$ 2.50	\$ 2.42	\$ 2.23
Summer - All Consumption	4.72	4.70	4.52	4.41	4.18	3.98	3.98	3.00	2.90	2.68
<u>Irrigation Only - Consumption Charge per 1000 Gallons</u>										
Winter - All Consumption	1.35	1.31	1.29	1.29	1.22	1.09	1.78	2.35	-	-
Summer - All Consumption	5.40	5.24	5.15	5.15	4.88	4.36	3.94	3.08	-	-
<u>Service Charge/Meter Charge</u>										
Monthly Service Charge	6.74	6.58	6.33	6.33	6.00	5.58	4.41	3.82	3.87	-
Bimonthly Service Charge	-	-	-	-	-	-	-	6.07	5.98	-
Monthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	5.47
Bimonthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	9.15
<b>Outside City Total Service - Schedule 3</b>										
<u>Residential - Consumption Charge per 1000 Gallons</u>										
First 11,000 Gallons	3.04	3.02	2.93	2.85	2.70	2.59	2.43	-	-	-
12,000 - 30,000 Gallons	6.08	6.04	5.86	5.70	5.40	5.18	4.86	-	-	-
31,000 - 40,000 Gallons	9.12	9.06	8.79	8.55	8.10	7.77	7.29	-	-	-
Over 40,000 Gallons	12.16	12.08	11.72	11.39	10.80	10.36	9.72	-	-	-
<u>Prior to July 6, 2009</u>										
First 22,000 Gallons	-	-	-	-	-	-	-	2.27	2.22	2.92
22,000 - 60,000 Gallons	-	-	-	-	-	-	-	4.54	4.44	3.50
Over 60,000 Gallons	-	-	-	-	-	-	-	-	-	-
60,000 - 80,000 Gallons	-	-	-	-	-	-	-	6.81	6.66	4.38
Over 80,000 Gallons	-	-	-	-	-	-	-	9.08	8.88	5.69
<u>Residential Irrigation - Consumption Charge per 1,000 Gallons</u>										
Winter - All Consumption	-	-	-	-	-	1.26	1.24	1.09	1.09	-
Summer - All Consumption	-	-	-	-	-	5.04	4.96	4.36	4.36	-
<u>Small Multi-Family - Consumption Charge per 1000 Gallons</u> (Duplexes through Five-Plexes with a Single Meter)										
First 15,000 Gallons <sup>2</sup>	4.29	4.21	3.99	3.84	3.64	3.39	3.31	-	-	-
Over 15,000 Gallons	5.15	5.05	4.79	4.61	4.37	4.07	3.97	-	-	-
<u>Prior to July 6, 2009</u>										
First 30,000 Gallons <sup>3</sup>	-	-	-	-	-	-	-	2.97	2.77	2.58
Over 30,000 Gallons	-	-	-	-	-	-	-	3.56	3.32	3.10
<u>All Other Retail - Consumption Charge per 1000 Gallons</u>										
Winter - All Consumption	2.72	2.70	2.54	2.44	2.31	2.16	2.16	2.98	2.89	2.41
Summer - All Consumption	5.44	5.40	5.08	4.87	4.62	4.32	4.32	3.58	3.47	2.89
<u>Irrigation Only - Consumption Charge per 1000 Gallons</u>										
Winter - All Consumption	1.64	1.56	1.47	1.39	1.32	1.26	2.02	2.78	-	-
Summer - All Consumption	6.56	6.24	5.88	5.57	5.28	5.04	4.33	3.61	-	-
<u>Service Charge/Meter Charge</u>										
Monthly Service Charge	6.74	6.58	6.33	6.33	6.00	5.58	4.41	3.82	3.87	-
Bimonthly Service Charge	-	-	-	-	-	-	-	6.07	5.98	-
Monthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	5.47
Bimonthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	9.15
<b>Outside City Master Meter - Schedule 4</b>										
Consumption Charge per 1000 Gallons - All Consumption	4.04	3.95	3.81	3.64	3.45	3.01	3.01	2.67	2.55	2.36
<u>Service Charge/Meter Charge</u>										
Monthly Service Charge	6.74	6.58	6.33	6.33	6.00	5.58	4.41	3.82	3.87	-
Bimonthly Service Charge	-	-	-	-	-	-	-	6.07	5.98	-
Monthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	5.47
Bimonthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	9.15

<sup>1</sup>Effective July 6, 2009 Denver Water customers are billed monthly.

<sup>2</sup>Monthly usage amounts increase by 6,000 gallons per additional dwelling unit up to 5 dwelling units.

<sup>3</sup>Bimonthly usage amounts increased by 12,000 gallons per additional dwelling unit up to 5 dwelling units.

(Continued next page)

	2015	2014	2013	2012	2011	2010	2009 <sup>1</sup>	2008	2007	2006
<b>Outside City Master Meter Maintenance - Schedule 5</b>										
Consumption Charge per 1000 Gallons - All Consumption	\$ -	\$ -	\$ -	\$ 4.96	\$ 4.70	\$ 4.45	\$ 4.31	\$ 3.93	\$ 3.72	\$ 3.43
<u>Service Charge/Meter Charge</u>										
Monthly Service Charge	-	-	-	6.33	6.00	5.58	4.41	3.82	3.87	-
Bimonthly Service Charge	-	-	-	-	-	-	-	6.07	5.98	-
Monthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	5.47
Bimonthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	9.15
<b>Raw and Recycled - Schedule 6</b>										
<u>Raw - Consumption Charge per 1000 Gallons</u>										
Inside City - All Consumption	<b>0.52</b>	0.52	0.50	0.50	0.47	0.47	0.47	0.47	0.47	0.47
Outside City - All Consumption	<b>0.96</b>	0.91	0.91	0.86	0.81	0.77	0.73	0.67	0.67	0.62
Outside Combined Service Area - All Consumption	<b>1.04</b>	1.04	1.04	1.01	0.95	0.90	0.85	0.76	0.76	0.71
<u>Recycled - Consumption Charge per 1000 Gallons</u>										
Inside City Recycled - All Consumption	<b>0.99</b>	0.99	0.99	0.99	0.93	0.89	0.89	0.88	0.86	0.69
Outside City Recycled - All Consumption	-	-	-	-	-	-	-	-	-	-
Outside Combined Service Area - All Consumption	<b>1.11</b>	1.11	1.11	1.11	1.05	0.91	0.90	0.76	0.77	0.71
<u>Recycled Service Meter Charge</u>										
Monthly Service Charge	<b>6.74</b>	6.58	6.33	6.33	6.00	5.58	4.41	3.82	3.87	-
Bimonthly Service Charge	-	-	-	-	-	-	-	6.07	5.98	-
Monthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	5.47
Bimonthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	9.15
<b>Outside Combined Service Area - Schedule 7</b>										
Treated Water - Consumption Charge per 1000 Gallons	<b>4.44</b>	4.44	4.25	4.05	3.83	3.36	3.19	3.13	2.68	2.54
<u>Service Charge/Meter Charge</u>										
Monthly Service Charge	<b>6.74</b>	6.58	6.33	6.33	6.00	5.58	4.41	3.82	3.87	-
Bimonthly Service Charge	-	-	-	-	-	-	-	6.07	5.98	-
Monthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	5.47
Bimonthly 3/4" Meter Charge	-	-	-	-	-	-	-	-	-	9.15

<sup>1</sup>Effective July 6, 2009 Denver Water customers are billed monthly.

SALES OF TREATED WATER FOR RESALE - 2015

(NON-ACCRUAL BASIS)<sup>1</sup>

(amounts expressed in thousands)

Treated Water Sold Outside Denver to Municipalities and Distributors through Master Meters<sup>2</sup>

	<u>Revenue</u>	<u>Gallons Sold (000)</u>	<u>Number of Taps</u>
<u>OUTSIDE CITY - MASTER METER DISTRIBUTORS</u>			
Alameda Water & Sanitation District	\$ 277	68,665	336
Bancroft-Clover Water & Sanitation District	5,352	1,327,709	8,819
Bonvue Water & Sanitation District	55	13,680	169
Bow-Mar Water & Sanitation District	363	89,685	290
Cherry Creek Valley Water & Sanitation District	3,243	803,764	1,975
Cherry Creek Village Water & Sanitation District	483	119,596	475
City of Edgewater	574	142,445	1,483
City of Glendale	1,051	260,973	238
City of Lakewood	812	201,216	738
City of Thornton <sup>3</sup>	33	8,100	-
Consolidated Mutual Water Company	7,231	1,793,956	15,702
Crestview Water & Sanitation District	2,251	558,893	4,533
Green Mountain Water & Sanitation District	6,348	1,574,650	10,111
High View Water District	598	148,297	891
Ken-Caryl Water & Sanitation District	2,821	699,578	3,741
Lakehurst Water & Sanitation District	3,253	806,818	5,520
Meadowbrook Water & Sanitation District	636	157,596	1,321
North Pecos Water & Sanitation District	581	144,129	405
North Washington Street Water & Sanitation District	3,148	781,454	3,639
Northgate Water District	18	4,359	4
South Adams County Water & Sanitation District	224	55,502	169
Valley Water District	1,974	489,809	1,782
Wheat Ridge Water District	3,027	750,811	5,847
Willowbrook Water & Sanitation District	1,772	439,378	3,416
Willows Water District	2,781	689,551	4,737
Total Sales for Master Meter Distributors	<u>48,906</u>	<u>12,130,614</u>	<u>76,341</u>
<u>OUTSIDE THE COMBINED SERVICE AREA</u>			
Chatfield South Water District	17	3,905	
City and County of Broomfield	6,042	1,496,456	
East Cherry Creek Valley Water District	698	157,046	
GSA	314	77,734	
Inverness Water District	507	125,492	
Rocky Mountain Arsenal	31	6,991	
South Adams County Special Contract Area	2,854	642,781	
Suncor Energy USA	2,571	637,352	
Total Sales for Other Contracts at Wholesale Rates	<u>13,034</u>	<u>3,147,757</u>	
 Total Sales of Treated Water for Resale	 <u>\$ 61,940</u>	 <u>15,278,371</u>	 <u>76,341</u>

<sup>1</sup>This schedule represents actual billings made for water during the year. No accruals were made for revenue earned on unbilled accounts. The difference from amounts on an accrual basis is immaterial.

<sup>2</sup>Sales on Total Service or Read and Bill Contracts are not included.

<sup>3</sup>City of Thornton tap is not included in number of taps count because they are only an emergency interconnect.

10 LARGEST RETAIL CUSTOMERS - WATER CONSUMPTION AND REVENUE - 2015  
(NON-ACCRUAL BASIS)  
(amounts expressed in thousands)

<u>Account Type</u>	<u>Consumption</u>		<u>Revenue</u>	
	<u>Gallons Sold</u> <u>(000)</u>	<u>Percent of</u> <u>Total</u> <u>Gallons Sold</u>	<u>Water</u> <u>Revenue<sup>1</sup></u>	<u>Percent of</u> <u>Total Water</u> <u>Revenue</u>
Oil and Gas Company	652,302	1.13%	\$ 3,233	1.38%
Public Utility	459,007	0.79%	1,674	0.71%
Public School System	425,151	0.74%	1,452	0.62%
Housing Authority	329,705	0.57%	1,101	0.47%
Parks System	177,284	0.31%	1,048	0.45%
Retail Grocer - 1	161,110	0.28%	533	0.23%
Beverage Company	135,079	0.23%	392	0.17%
Hospitals	114,821	0.20%	371	0.16%
Retail Grocer - 2	111,543	0.19%	429	0.18%
State Government	103,832	0.18%	419	0.18%
Total of the 10 largest customers	<u>2,669,834</u>	<u>4.62%</u>	<u>\$ 10,652</u>	<u>4.55%</u>
Total sales of treated water	<u>57,809,995</u>		<u>\$ 234,716</u>	

<sup>1</sup>This column represents actual billings made for treated water and private fire protection service during the year. The difference from amounts on an accrual basis is immaterial. In addition to the 10 largest retail accounts listed, Denver Water provided 1,821 million gallons of treated water to the City and County of Denver. Revenues from these sales were \$4.70 million.

SYSTEM DEVELOPMENT CHARGES AND PARTICIPATION RECEIPTS:

1973 - 2015

(Cash basis - net of refunds)

(amounts expressed in thousands)

	System Development Charges ("SDC")	Participation Receipts (aka Contributions in Aid of Construction)
2015	\$ 36,109	\$ 8,713
2014	32,736	6,384
2013	34,461	4,834
2012	19,543	1,297
2011	14,233	7,023
2010	14,441	1,093
2009	8,118	10,908
2008	18,498	2,424
2007	26,028	3,300
2006	22,305	2,730
2005	26,257	1,850
2004	24,834	2,229
2003	19,615	2,831
2002	36,591	5,567
2001	22,186	7,027
2000	25,525	6,392
1999	24,224	11,964
1998	33,156	8,412
1997	45,058	3,733
1996	15,137	2,913
1995	15,528	3,927
1994	13,536	2,882
1993	12,182	1,344
1992	10,920	1,199
1991	7,530	2,331
1990	6,615	1,839
1989	6,251	4,965
1988	6,085	3,068
1987	8,544	4,561
1973-86	<u>149,475</u>	<u>43,646</u>
	<u>\$ 735,721</u>	<u>\$ 171,386</u>

## C - DEBT CAPACITY INFORMATION

*These schedules present information to help the reader assess the affordability of Denver Water's current levels of outstanding debt and its ability to issue additional debt in the future.*

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## RATIOS OF TOTAL OUTSTANDING DEBT BY TYPE: 2006 - 2015

(amounts expressed in thousands, except debt per capita)

Year	Total Principal Balance Outstanding Debt by Type <sup>1</sup>						Gross Revenues <sup>2,4</sup>	Ratio of Total Debt to Gross Revenue	Estimated Population Served <sup>3</sup>	Debt Per Capita
	General Obligation Bonds	Water Revenue Bonds	Capital Leases		Notes Payable <sup>5</sup>	Total				
			Certificates of Participation	Other						
2006	\$ 86,300	\$ 182,840	\$ 44,436	\$ 26,306	\$ -	\$ 339,882	\$ 242,085	1.40	1,064,000	319
2007	61,545	280,080	39,515	25,061	-	406,201	238,689	1.70	1,077,000	377
2008	42,725	277,490	33,805	23,731	-	377,751	248,074	1.52	1,093,000	346
2009	31,170	309,025	27,835	22,308	-	390,338	216,557	1.80	1,111,000	351
2010	28,090	377,665	21,630	20,790	-	448,175	259,730	1.73	1,125,000	398
2011	23,825	371,560	-	19,166	-	414,551	279,682	1.48	1,135,000	365
2012	500	401,420	-	17,431	-	419,351	313,093	1.34	1,147,000	366
2013	-	376,965	-	15,576	10,000	402,541	290,349	1.39	1,161,000	347
2014	-	395,125	-	13,595	-	408,720	297,768	1.37	1,172,000	349
2015	-	368,125	-	11,478	30,000	409,603	305,073	1.34	1,210,000	339

<sup>1</sup>Details regarding outstanding debt can be found in the notes to the financial statements. For presentation purposes, capital leases have been treated as debt. The numbers above are principal balances only and exclude discounts, premiums, and deferred amounts on advance refundings; therefore, they do not agree with numbers presented in the basic financial statements, exhibits, or the statistical summary. All bonded debt is secured by revenue.

<sup>2</sup>Gross Revenues are defined as operating revenues plus investment income plus proceeds from sales of capital assets plus other income plus cash proceeds from contributions in aid of construction (CIAC) and prepaid CIAC, and cash proceeds from system development charges (SDC) and prepaid SDC.

<sup>3</sup>Population estimates are treated water customers only. See schedule entitled "Consumption of Treated Water" on page III-75

<sup>4</sup>Certain reclassifications have been made to prior years' information to conform to the current year presentation.

<sup>5</sup>The lien on notes payable is subordinate and junior to the lien on the revenue bonds outstanding and on future revenue bond issues.

PLEDGED-REVENUE COVERAGE: 2006 - 2015

General Obligation Bonds, Water Revenue Bonds, Notes Payable and Obligations under Capital Lease<sup>1</sup>  
 (amounts expressed in thousands)

Year	Gross Revenues <sup>2,4,5</sup>	Less Operating Expenses <sup>3,4,5,7</sup>	Net Available Revenue	Total Debt Service <sup>1</sup>			Coverage with Notes Payable Debt <sup>6</sup>	Coverage without Notes Payable Debt
				Principal	Interest	Total		
2006	\$ 242,085	\$ 114,236	\$ 127,849	\$ 27,765	\$ 17,777	\$ 45,542	2.81	2.81
2007	238,689	124,170	114,519	32,055	19,683	51,738	2.21	2.21
2008	248,074	138,402	109,672	30,250	19,324	49,574	2.21	2.21
2009	216,557	155,127	61,430	31,413	19,204	50,617	1.21	1.21
2010	259,730	168,501	91,229	32,164	19,065	51,229	1.78	1.78
2011	279,682	163,167	116,515	33,624	22,335	55,959	2.08	2.08
2012	313,093	156,525	156,568	24,715	19,740	44,455	3.52	3.52
2013	290,349	164,074	126,275	26,810	19,410	46,220	2.73	2.73
2014	297,768	179,516	118,252	28,071	18,673	46,744	2.53	2.53
2015	305,073	168,544	136,529	29,117	18,802	47,919	2.85	2.85

<sup>1</sup>Details regarding outstanding debt can be found in the notes to the financial statements. For presentation purposes, capital leases have been treated as debt. All bonded debt is secured by revenue.

<sup>2</sup>Gross Revenues are defined as operating revenues plus investment income plus proceeds from sales of capital assets plus other income plus cash proceeds from contributions in aid of construction (CIAC) and prepaid CIAC, and cash proceeds from system development charges (SDC) and prepaid SDC.

<sup>3</sup>Operating Expenses are defined as operating expenses plus other expenses minus total depreciation and amortization (as disclosed in Note 4 to the financial statements).

<sup>4</sup>All items computed as defined in bond covenants. Rate maintenance covenant is 1.10; additional bonds test is 1.2 times average annual debt service. Notes payable debt service is not subject to this covenant.

<sup>5</sup>Certain reclassifications have been made to prior years' information to conform to the current year presentation.

<sup>6</sup>Notes payable debt has a subordinate lien to the lien on outstanding revenue bonds and future revenue bond issues. Total debt service for notes payable in 2014 was \$0 in principal and \$72 thousand in interest. In 2014 \$10 million in principal in notes payable was refunded by issuing the 2014 revenue bonds. In 2015, \$30 million was drawn on the notes payable and \$57 thousand was paid in interest.

<sup>7</sup>The 2014 financial statements we restated as part of the implementation of GASB Statement No.68 *Accounting and Financial Reporting for Pensions*.

**RATIOS OF GENERAL OBLIGATION BONDED DEBT OUTSTANDING: 2006 - 2015**  
(amounts expressed in thousands, except debt per capita)

<u>Year</u>	<u>General Obligation Bonds<sup>1</sup></u>	<u>Gross Revenues<sup>2,4</sup></u>	<u>Ratio of General Obligation Debt to Gross Revenue</u>	<u>Estimated Population Served<sup>3</sup></u>	<u>General Obligation Debt per Capita</u>
2006	\$ 86,300	\$ 242,085	0.36	1,064,000	81
2007	61,545	238,689	0.26	1,077,000	57
2008	42,725	248,074	0.17	1,093,000	39
2009	31,170	216,557	0.14	1,111,000	28
2010	28,090	259,730	0.11	1,125,000	25
2011	23,825	279,682	0.09	1,135,000	21
2012	500	313,093	-	1,147,000	-
2013	-	290,349	-	1,161,000	-
2014	-	297,768	-	1,172,000	-
2015	-	305,073	-	1,210,000	-

<sup>1</sup>Details regarding outstanding debt can be found in the notes to the financial statements. The Board no longer has authority to issue general obligation bonds of the City.

<sup>2</sup>Gross Revenues are defined as operating revenues plus investment income plus proceeds from sales of capital assets plus other income plus cash proceeds from contributions in aid of construction (CIAC) and prepaid CIAC, and cash proceeds from system development charges (SDC) and prepaid SDC.

<sup>3</sup>Population estimates are treated water customers only. See schedule entitled "Consumption of Treated Water."

<sup>4</sup>Certain reclassifications have been made to prior years' information to conform to the current year presentation.

**RATIOS OF WATER REVENUE BONDED DEBT OUTSTANDING: 2006 - 2015**  
(amounts expressed in thousands, except debt per capita)

Year	Water Revenue Bonds <sup>1</sup>	Gross Revenues <sup>2,4</sup>	Ratio of Water Revenue Debt to Gross Revenue	Estimated Population Served <sup>3</sup>	Water Revenue Debt per Capita
2006	\$ 182,840	\$ 242,085	0.76	1,064,000	172
2007	280,080	238,689	1.17	1,077,000	260
2008	277,490	248,074	1.12	1,093,000	254
2009	309,025	216,557	1.43	1,111,000	278
2010	377,665	259,730	1.45	1,125,000	336
2011	371,560	279,682	1.33	1,135,000	327
2012	401,420	313,093	1.28	1,147,000	350
2013	376,965	290,349	1.30	1,161,000	325
2014	395,125	297,768	1.33	1,172,000	337
2015	368,125	305,073	1.21	1,210,000	304

<sup>1</sup>Details regarding outstanding debt can be found in the notes to the financial statements. The numbers above are principal balances only and exclude discounts, premiums, agree with and deferred amounts on advance refundings; therefore, they do not agree with numbers presented in the basic financial statements, exhibits, or the statistical summary.

<sup>2</sup>Gross Revenues are defined as operating revenues plus investment income plus proceeds from sales of capital assets plus other income plus cash proceeds from contributions in aid of construction (CIAC) and prepaid CIAC, and cash proceeds from system development charges (SDC) and prepaid SDC.

<sup>3</sup>Population estimates are treated water customers only. See schedule entitled "Consumption of Treated Water." Population estimates for 2005 through 2010 were revised based on 2010 census.

<sup>4</sup>Certain reclassifications have been made to prior years' information to conform to the current year presentation.

## D - DEMOGRAPHIC AND ECONOMIC INFORMATION

*These schedules offer demographic and economic indicators to help the reader understand the environment within which Denver Water's financial activities take place.*

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## DEMOGRAPHIC AND ECONOMIC OVERVIEW OF THE DENVER METROPOLITAN AREA – 2015

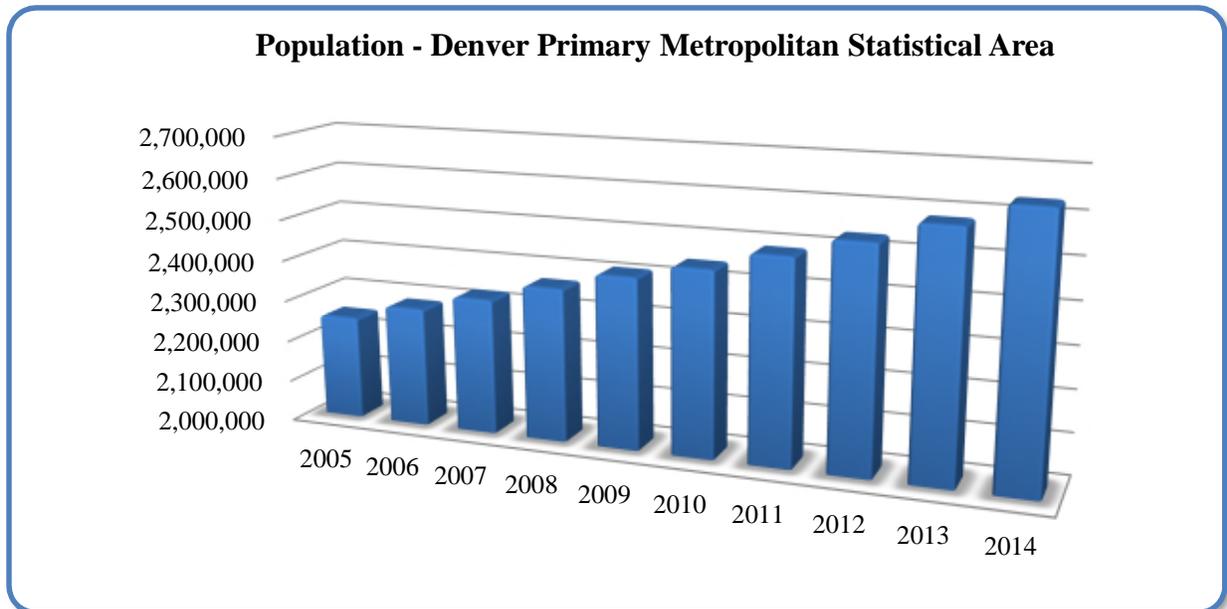
The following is general information concerning the economic and demographic conditions in the City and County of Denver (“Denver” or the “City”) and the immediate vicinity. The statistics presented below have been obtained from the sources indicated and represent the most current information available from such sources. However, certain of the information is released only after a significant amount of time has passed since the most recent date of the reported data and therefore such information may not be indicative of economic and demographic conditions as they currently exist or conditions which may be experienced in the near future. Further, the reported data has not been adjusted to reflect economic trends, notably inflation.

### Population

The following table sets forth population statistics for Denver, the Denver Primary Metropolitan Statistical Area (“PMSA”) and the State of Colorado. The Denver PMSA includes the counties of Adams, Arapahoe, Denver, Douglas, and Jefferson.

<b>Population Estimates</b> (n/a = not available)			
<u>Year</u>	<u>Denver</u>	<u>Denver PMSA</u>	<u>State of Colorado</u>
2005	559,459	2,251,016	4,662,534
2006	562,862	2,288,912	4,745,660
2007	570,437	2,327,953	4,821,784
2008	581,903	2,370,592	4,901,938
2009	595,573	2,413,145	4,976,853
2010	604,879	2,446,184	5,050,289
2011	620,807	2,490,427	5,120,193
2012	634,814	2,535,136	5,191,979
2013	648,978	2,584,157	5,270,986
2014	664,220	2,636,002	5,353,471
2015	n/a	n/a	n/a

Source: Colorado Department of Local Affairs, Division of Local Government, State Demography Office.



DEMOGRAPHIC AND ECONOMIC OVERVIEW OF THE DENVER METROPOLITAN AREA – 2015 (Continued)

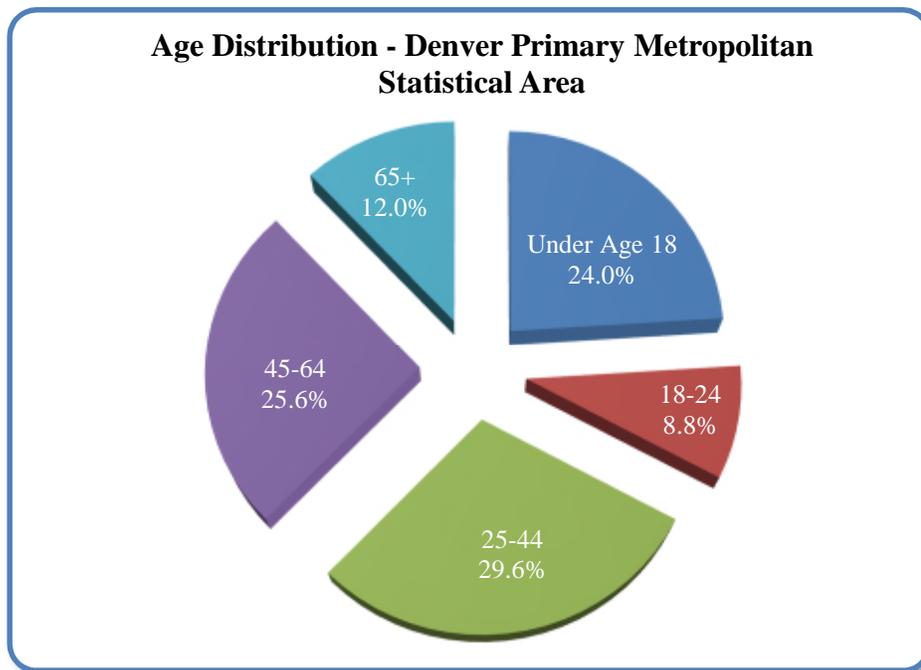
**Age Distribution**

The following table sets forth a forecasted age distribution profile for Denver, the Denver PMSA, and the State of Colorado for 2015.

**Forecasted Age Distribution for 2015**  
(Columns may not add to 100% due to rounding)

<u>Age Groups</u>	<u>Percent of Population</u>		
	<u>Denver</u>	<u>Denver PMSA</u>	<u>State of Colorado</u>
Under 18	22.2%	24.0%	23.5%
18-24	8.6	8.8	9.8
25-44	36.1	29.6	27.6
45-64	21.5	25.6	26.0
65+	11.6	12.0	13.1

Sources: Colorado Department of Local Affairs, Division of Local Government, State Demography Office.



**Income**

The following tables set forth recent annual personal income and per capita personal income levels for Denver, the Denver-Aurora-Lakewood Metropolitan Statistical Area (“MSA”), the State of Colorado and the United States from 2005 through 2014 as reported by the U.S. Department of Commerce, Bureau of Economic Analysis. The Denver-Aurora-Lakewood MSA includes the counties of Adams, Arapahoe, Broomfield, Clear Creek, Denver, Douglas, Elbert, Gilpin, Jefferson and Park.

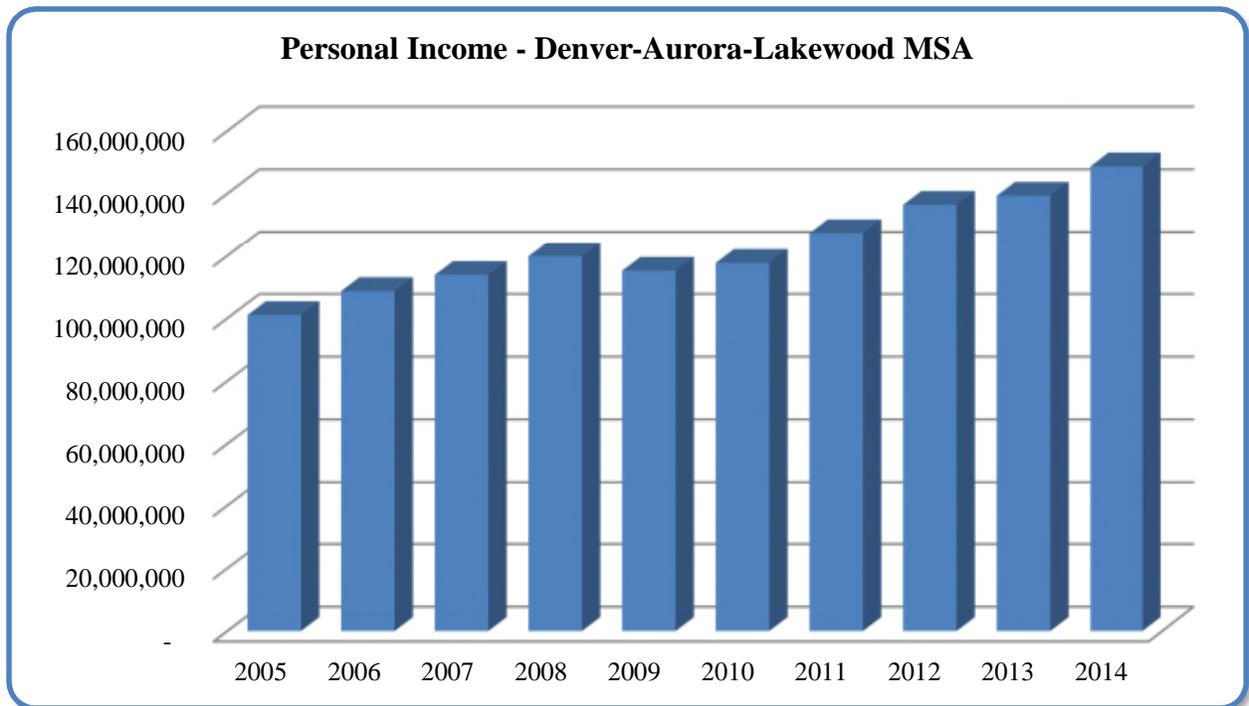
DEMOGRAPHIC AND ECONOMIC OVERVIEW OF THE DENVER METROPOLITAN AREA – 2015 (Continued)

**Personal Income**

(Current dollars, not adjusted for inflation. Amounts expressed in thousands. n/a = not available)

<u>Year</u>	<u>Denver</u>	<u>Denver-Aurora-Lakewood MSA</u>	<u>State of Colorado</u>	<u>United States</u>
2005	\$25,976,180	\$100,982,951	\$179,089,828	\$10,610,320,000
2006	28,892,734	108,649,293	192,161,658	11,381,350,000
2007	29,930,820	113,819,351	203,034,950	11,995,419,000
2008	32,353,756	119,788,248	213,342,148	12,492,705,000
2009	29,636,700	115,164,563	206,385,419	12,079,444,000
2010	31,307,135	117,673,725	211,419,677	12,459,613,000
2011	34,604,738	127,319,100	227,052,222	13,233,436,000
2012	38,082,581	136,424,788	240,905,431	13,904,485,000
2013	39,078,983	139,315,183	246,447,709	14,064,468,000
2014	41,743,426	148,684,245	261,735,447	14,683,147,000
2015	n/a	n/a	n/a	n/a

Source: U.S. Department of Commerce, Bureau of Economic Analysis.



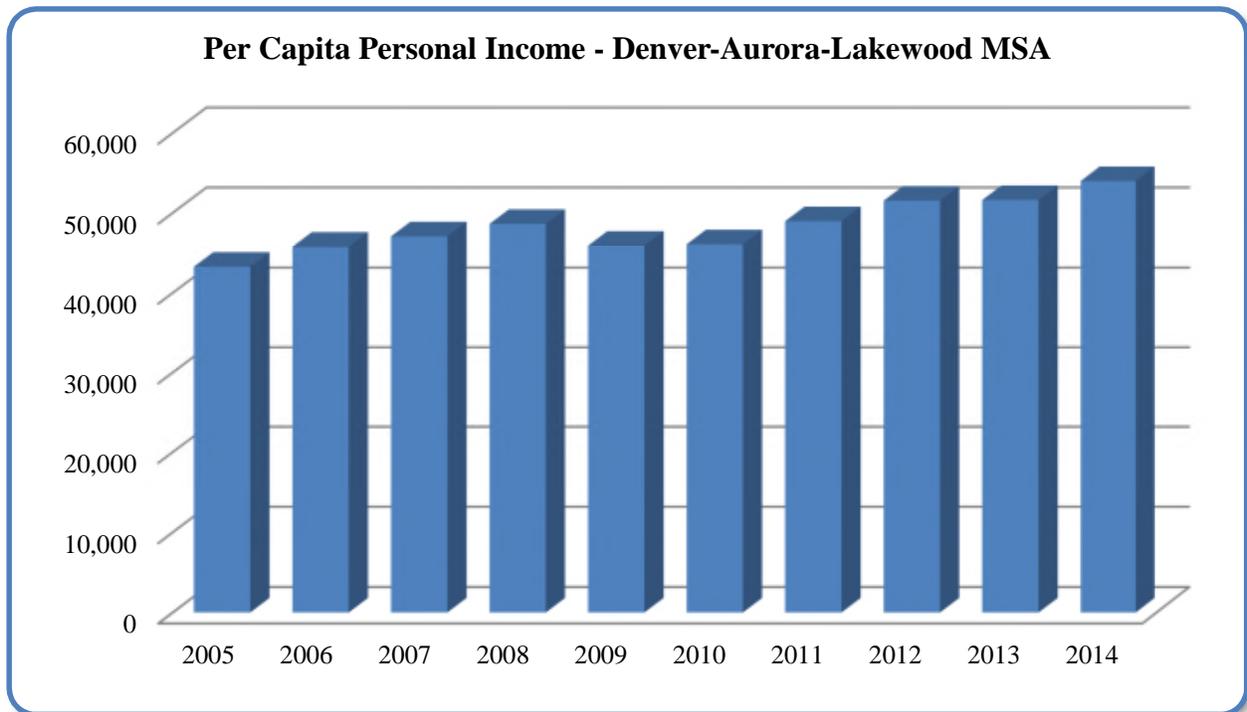
DEMOGRAPHIC AND ECONOMIC OVERVIEW OF THE DENVER METROPOLITAN AREA – 2015 (Continued)

**Per Capita Personal Income**

(Current dollars, not adjusted for inflation. n/a = not available)

<u>Year</u>	<u>Denver</u>	<u>Denver-Aurora-Lakewood MSA</u>	<u>State of Colorado</u>	<u>United States</u>
2005	\$47,085	\$43,289	\$38,665	\$35,904
2006	51,882	45,763	40,709	38,144
2007	53,032	47,058	42,265	39,821
2008	56,197	48,616	43,631	41,082
2009	50,316	45,893	41,508	39,376
2010	51,888	46,068	41,877	40,277
2011	55,869	48,953	44,349	42,453
2012	60,080	51,524	46,402	44,266
2013	60,270	51,603	46,746	44,438
2014	62,880	53,983	48,869	46,049
2015	n/a	n/a	n/a	n/a

Source: U.S. Department of Commerce, Bureau of Economic Analysis.



**Employment**

The following table sets forth recent total labor force, employment and unemployment statistics for Denver, the Denver-Aurora MSA and the State of Colorado. The national unemployment rate is estimated to be approximately 5.0% as of December, 2015.

DEMOGRAPHIC AND ECONOMIC OVERVIEW OF THE DENVER METROPOLITAN AREA – 2015 (Continued)

**Local Area Employment Statistics**  
(Annual averages, not seasonally adjusted.)

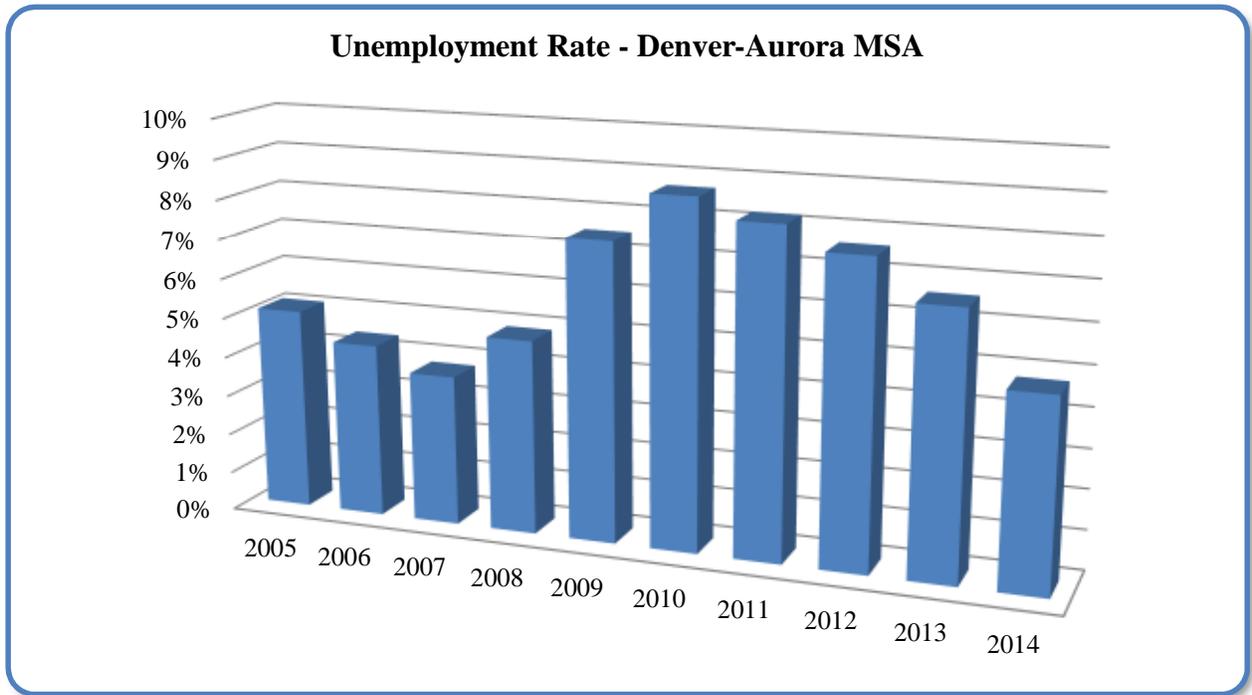
<b>Denver</b>				
<b>Year</b>	<b>Labor Force (Thousands)</b>	<b>% Change</b>	<b>Unemployed (Thousands)</b>	<b>Unemployment Rate</b>
2005	302.0	(0.4)	17.1	5.7
2006	306.0	1.3	14.7	4.8
2007	314.8	2.9	13.0	4.1
2008	323.3	2.7	17.4	5.4
2009	324.3	0.3	26.3	8.1
2010	347.6	7.2	31.7	9.1
2011	352.1	1.3	30.1	8.6
2012	357.7	1.6	27.8	7.8
2013	364.6	1.9	24.2	6.6
2014	370.5	1.6	18.1	4.9
2015	n/a	n/a	n/a	n/a

<b>Denver-Aurora MSA</b>				
<b>Year</b>	<b>Labor Force (Thousands)</b>	<b>% Change</b>	<b>Unemployed (Thousands)</b>	<b>Unemployment Rate</b>
2005	1,314.3	1.0	67.7	5.1
2006	1,338.7	1.9	58.5	4.4
2007	1,359.0	1.5	51.8	3.8
2008	1,393.4	2.5	68.9	4.9
2009	1,392.7	(0.1)	104.2	7.5
2010	1,423.4	2.2	123.6	8.7
2011	1,430.4	0.5	117.8	8.2
2012	1,448.2	1.2	110.6	7.6
2013	1,470.5	1.5	96.5	6.6
2014	1,495.0	1.7	72.2	4.8
2015	n/a	n/a	n/a	n/a

<b>State of Colorado</b>				
<b>Year</b>	<b>Labor Force (Thousands)</b>	<b>% Change</b>	<b>Unemployed (Thousands)</b>	<b>Unemployment Rate</b>
2005	2,563.9	1.2	128.8	5.0
2006	2,622.2	2.3	112.5	4.3
2007	2,664.7	1.6	99.6	3.7
2008	2,716.6	1.9	131.4	4.8
2009	2,723.0	0.2	198.5	7.3
2010	2,724.4	0.1	238.0	8.7
2011	2,734.4	0.4	226.6	8.3
2012	2,757.1	0.8	214.6	7.8
2013	2,779.6	0.8	189.0	6.8
2014	2,817.3	1.4	141.4	5.0
2015	n/a	n/a	n/a	n/a

Source: Colorado Department of Labor and Employment

DEMOGRAPHIC AND ECONOMIC OVERVIEW OF THE DENVER METROPOLITAN AREA – 2015 (Continued)



**Principal Employers**

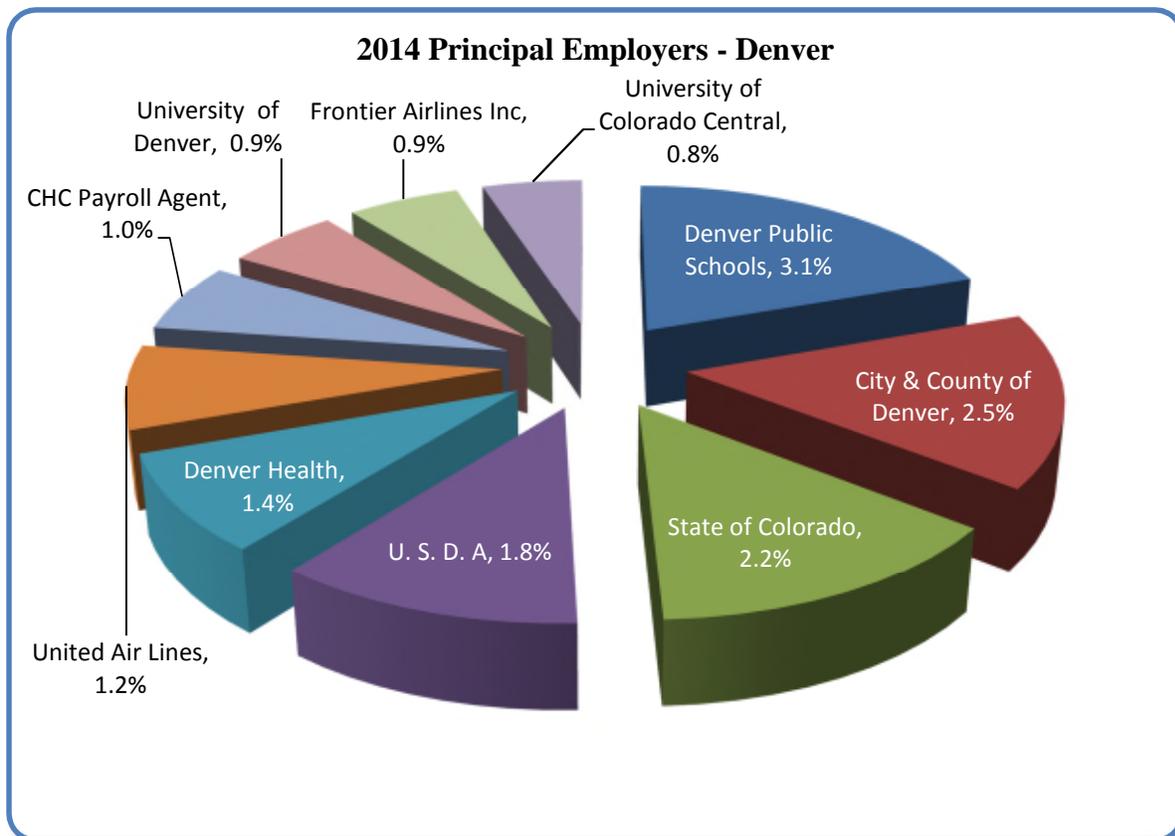
Set forth in the following table are the ten largest employers in Denver for the current year and the period nine years prior, the number of persons each employs, and the percentage of total employment that each represents.

DEMOGRAPHIC AND ECONOMIC OVERVIEW OF THE DENVER METROPOLITAN AREA – 2015 (Continued)

**Principal Employers in Denver**  
 Current Year and Nine Years Ago  
 (2015 data not available at time of publication.)

	2014			2005		
	Employees	Rank	% of Total City Employment	Employees	Rank	% of Total City Employment
Denver Public School District #1	12,482	1	3.1%	9,555	2	2.7%
City & County of Denver	10,281	2	2.5	9,878	1	2.8
State of Colorado Central Payroll	9,195	3	2.2	8,900	3	2.5
U. S. D. A. National Finance Center	7,187	4	1.8	5,772	6	1.6
Denver Health & Hospital Authority	5,523	5	1.4	3,492	9	1.0
United Airlines, Inc.	5,070	6	1.2	6,150	5	1.7
CHC Payroll Agent, Inc. (HCA Health One)	4,226	7	1.0	3,212	10	0.9
University of Denver	3,759	8	0.9	-	-	-
Frontier Airlines Inc.	3,642	9	0.9	3,512	8	1.0
University of Colorado Central	3,448	10	0.8	6,165	4	1.7
Accounting Service Center (U.S. Postal Svc.)	-	-	-	3,715	7	1.0
<b>Total</b>	<b>64,813</b>		<b>15.8%</b>	<b>60,351</b>		<b>16.9%</b>

Source: Based on 2014 and 2005 Occupational Privilege Tax Remitters.



DEMOGRAPHIC AND ECONOMIC OVERVIEW OF THE DENVER METROPOLITAN AREA – 2015 (Continued)

**New Residential Building Construction**

Set forth in the following table are recent historical residential building permit statistics for Denver and the Denver metropolitan area (Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, and Jefferson counties).

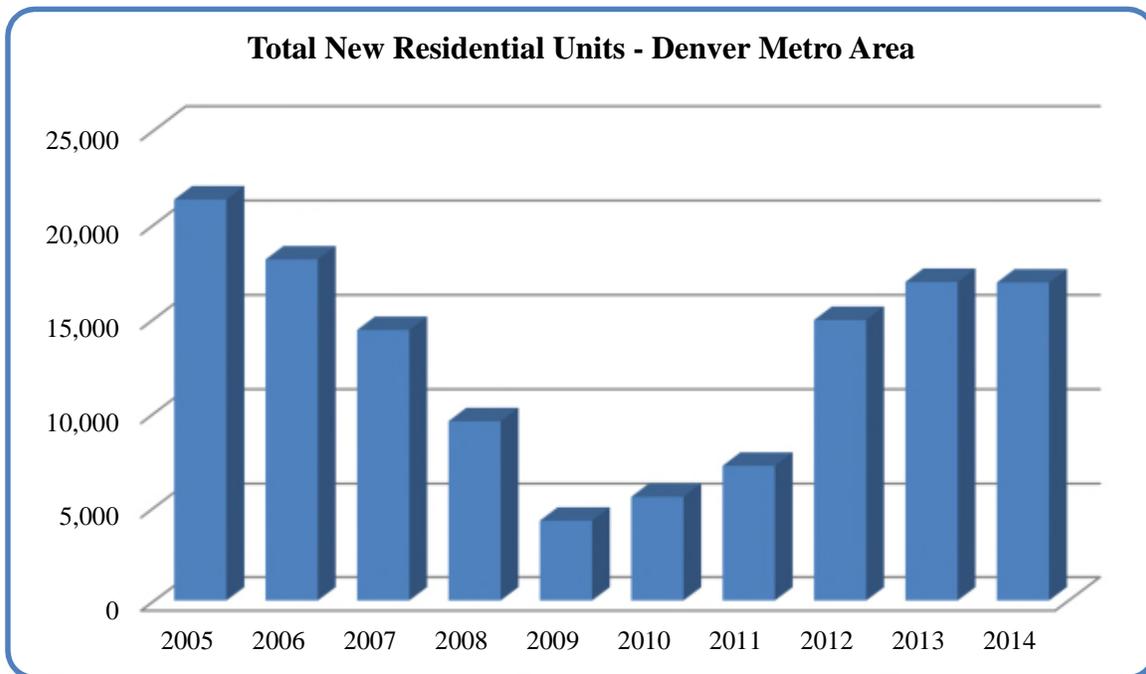
**New Residential Units in Denver and the Denver Metropolitan Area**

<u>Year</u>	<u>Denver</u>				<u>Denver Metropolitan Area</u>			
	<u>Single Family Detached<sup>1</sup></u>	<u>Single Family Attached<sup>1</sup></u>	<u>Multi-Family<sup>2</sup></u>	<u>Total</u>	<u>Single Family Detached</u>	<u>Single Family Attached<sup>1</sup></u>	<u>Multi-Family<sup>2</sup></u>	<u>Total</u>
2005	2,029	88	1,047	3,164	17,888	471	2,953	21,312
2006	1,800	170	1,882	3,852	12,938	428	4,769	18,135
2007	1,215	201	2,266	3,682	7,799	398	6,195	14,392
2008	837	148	2,195	3,180	4,037	224	5,296	9,557
2009	485	74	329	888	2,690	133	1,465	4,288
2010	632	130	470	1,232	3,791	285	1,478	5,554
2011	703	147	1,835	2,685	3,885	309	3,005	7,199
2012	1,056	166	4,356	5,578	5,947	299	8,679	14,925
2013	1,284	256	4,330	5,870	7,396	399	9,145	16,940
2014	1,710	287	3,961	5,958	8,396	440	8,074	16,910
2015	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

<sup>1</sup> Generally includes owner occupied residential units such as duplexes, tri-plexes, townhomes and condominiums.

<sup>2</sup> Generally includes non-owner occupied residential units such as apartments.

Source: Metro Denver Economic Development Corporation.



## E - OPERATING INFORMATION

*These schedules contain information about Denver Water's operations and resources to help the reader understand how Denver Water's financial information relates to the services Denver Water provides and the activities it performs.*

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EMPLOYEES BY DIVISION<sup>1</sup>: 2006 - 2015

<u>Division/Section</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u> <sup>2</sup>	<u>2010</u>	<u>2009</u> <sup>3</sup>	<u>2008</u>	<u>2007</u>	<u>2006</u>
<b>Manager &amp; Staff Division</b>	<b>10.0</b>	15.0	11.0	10.0	7.0	7.0	7.0	15.0	15.0	14.0
<b>Human Resources Division</b>	<b>29.0</b>	32.0	25.0	24.8	23.8	23.8	22.8	20.0	19.0	24.8
<b>Information Technology Division</b>	<b>110.4</b>	92.5	80.8	74.5	68.5	68.5	69.0	61.0	57.8	58.8
<b>Public Affairs Division</b>										
Director of Public Affairs	3.0	3.0	3.0	2.0	6.0	4.0	4.0	8.0	7.0	6.0
Community Relations	-	11.0	-	-	8.6	9.6	9.6	6.0	5.4	4.2
Communications and Marketing	12.0	-	11.6	10.4	-	-	-	-	-	-
Conservation	17.0	16.0	17.0	15.0	15.0	17.0	17.0	15.0	12.0	10.0
Govt & Stakeholder Relations	9.0	7.0	7.0	6.8	-	-	-	-	-	-
Central Services	-	-	-	-	-	3.0	3.0	3.0	3.0	3.0
Customer Care	-	-	-	-	-	39.2	41.2	43.0	39.2	37.0
CIS Business Support	-	-	-	-	-	2.0	5.0	-	-	-
Customer Services - Field	-	-	-	-	-	70.0	75.0	66.0	60.0	63.0
Meter Inspection Shop	-	-	-	-	-	7.0	5.0	8.0	7.0	5.0
Sales Administration	-	-	-	-	-	20.8	16.8	12.0	15.6	11.6
	<b>41.0</b>	37.0	38.6	34.2	29.6	172.6	176.6	161.0	149.2	139.8
<b>Customer Relations</b>										
Director of Customer Relations	3.0	2.0	2.0	2.0	2.0	-	-	-	-	-
Central Services	-	2.6	2.6	1.0	3.0	-	-	-	-	-
Customer Care	29.3	30.3	31.3	42.8	42.2	-	-	-	-	-
Quality Assurance & Reporting	8.0	7.0	8.0	-	-	-	-	-	-	-
Customer Services - Field	48.0	49.0	51.0	64.0	66.0	-	-	-	-	-
Meter Inspection Shop	-	-	-	-	7.0	-	-	-	-	-
Sales Administration	9.0	9.0	9.0	13.0	12.8	-	-	-	-	-
	<b>97.3</b>	99.9	103.9	122.8	133.0	-	-	-	-	-
<b>Legal Division</b>	<b>13.0</b>	14.0	14.4	14.6	13.6	13.6	14.6	12.0	13.8	13.3
<b>Finance Division</b>										
Director of Finance	2.0	2.0	1.0	1.0	1.0	1.0	2.0	9.0	9.0	10.0
Controller	1.0	1.0	1.0	-	-	-	-	-	-	-
Finance Computer Support	-	-	1.0	2.0	2.0	2.0	2.0	-	-	-
Treasury Operations	8.0	9.0	9.0	9.0	8.0	7.0	8.0	7.0	7.0	7.0
Budget	4.0	3.0	3.0	3.0	4.0	4.0	5.0	4.0	4.0	4.0
Purchasing	12.0	11.0	11.0	11.0	9.0	5.0	9.0	8.0	8.0	9.0
Accounting	20.0	20.0	20.0	20.0	20.0	19.0	19.0	19.0	18.0	17.0
Rate Administration	1.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	2.0	2.0
Records & Document Administration	8.8	7.8	8.8	9.0	9.0	9.0	9.0	6.0	6.0	8.0
	<b>56.8</b>	56.8	57.8	58.0	56.0	50.0	58.0	56.0	54.0	57.0
<b>Engineering Division</b>										
Administration	7.8	7.8	7.8	7.8	7.8	6.0	6.0	3.0	6.0	8.0
Programs & Projects	55.0	58.0	58.0	57.9	53.9	57.0	57.0	49.0	39.0	36.0
Survey	23.0	25.0	25.0	25.0	26.0	26.0	26.0	26.0	25.0	26.0
Distribution	38.0	37.0	41.0	39.0	40.0	41.0	40.0	41.0	39.0	37.0
Asset Recording	7.0	8.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	-
Construction Management	27.0	28.0	24.0	25.0	24.0	24.0	23.0	21.0	23.0	19.0
	<b>157.8</b>	163.8	165.8	161.7	158.7	161.0	159.0	147.0	139.0	126.0
<b>Planning Division</b>										
Director of Planning	2.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0
Environmental Planning	6.0	5.6	5.6	5.6	5.6	5.6	5.6	5.0	4.6	5.6
Raw Water Supply	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Water Rights	7.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Water Resources Analysis	10.0	10.0	11.0	11.0	9.0	11.0	11.0	11.0	10.8	10.7
Water Resource Planning	4.0	4.0	3.0	3.0	3.0	2.0	2.0	2.0	-	-
Demand Planning	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Hydraulics	10.0	10.0	10.0	10.0	8.0	8.0	8.0	8.0	7.0	7.0
	<b>48.0</b>	48.6	49.6	49.6	45.6	46.6	46.6	45.0	41.4	42.3
<b>Operations and Maintenance Division</b>										
Plant Office	7.0	5.0	6.0	3.0	4.0	4.0	4.0	3.0	3.0	3.0
Water Quality & Compliance	35.0	44.0	44.0	42.0	37.0	33.0	33.0	32.0	32.0	31.8
Safety and Loss Control	11.0	10.0	15.0	15.0	16.0	14.0	16.0	15.0	14.0	13.0
Source of Supply	56.0	58.0	57.0	57.0	59.0	61.0	60.0	60.0	53.0	56.0
Water Treatment	86.0	85.0	87.0	84.0	88.0	89.0	89.0	92.0	90.0	86.0
Transmission & Distribution	136.0	122.0	132.0	142.0	144.0	157.0	149.0	145.0	144.0	154.0
Treated Water Operations	53.0	55.0	62.0	58.0	59.0	59.0	57.5	57.0	54.0	55.0
Instrumentation & Ctrl Systems	-	18.0	11.0	14.0	12.0	11.0	12.0	11.0	11.0	6.0
Maintenance and Warehouse	106.0	106.0	102.0	113.0	115.0	118.0	121.0	123.0	120.0	124.0
Emergency Management	4.0	2.0	2.0	2.0	-	-	-	-	-	-
	<b>494.0</b>	505.0	518.0	530.0	534.0	546.0	541.5	538.0	521.0	528.8
<b>Total All Divisions</b>	<b>1,057.3</b>	1,064.6	1,064.9	1,080.2	1,069.8	1,089.1	1,095.1	1,055.0	1,010.2	1,004.8

<sup>1</sup>Number of employees includes regular and introductory employees. Temporary and project employees are not included. The source of the data is Human Resource employee records.

<sup>2</sup>In 2011, the Customer Relations division was split out from Public Affairs.

<sup>3</sup>In 2009, Director positions were moved to their respective divisions and manager positions were moved to their respective sections.

ADDITIONS TO CAPITAL ASSETS - 2015  
(amounts expressed in thousands)

(Page 1 of 2)

NEW FACILITIES

SOURCE OF SUPPLY		
Marston Reservoir	\$ 6,405	
Downstream Reservoirs	2,302	
Land & Land Rights	1,889	
Gross Reservoir	2,180	
Water Rights	364	
Other Source of Supply	29	
Total Source of Supply		13,169
PUMPING PLANT		
Other Pumping Plant	33	
Total Pumping Plant		33
WATER TREATMENT		
Moffat Treatment Plant	1,183	
Foothills Treatment Plant	77	
Total Water Treatment		1,260
TRANSMISSION AND DISTRIBUTION		
Distribution Mains & Hydrants	8,705	
Ashland Reservoir	6,694	
Hillcrest Reservoir	2,283	
Recycled Water Conduits	1,687	
Treated Water Conduits	1,135	
Wynetka Decentralization	242	
Lonetree Pump Station Reservoir	13	
Total Transmission and Distribution		20,759
GENERAL PLANT		
Operations Complex Redevelopment Project	6,136	
Total General Plant		6,136
TOTAL NEW FACILITIES		41,357

FACILITY REPLACEMENTS AND IMPROVEMENTS

SOURCE OF SUPPLY		
Antero Reservoir	6,011	
South Boulder Canal/Diversion	1,419	
Long Lakes Reservoir	459	
Strontia Springs Power Plant	411	
Ralston Reservoir	382	
Cherry Creek Well	280	
Moffat Tunnel	199	
Other Source of Supply	28	
Total Source of Supply		9,189

ADDITIONS TO CAPITAL ASSETS (Continued) - 2015  
 (amounts expressed in thousands)

(Page 2 of 2)

PUMPING PLANT		
Cherry Hills Pump Station	\$ 5,067	
Kendrick Pump Station	2,297	
Green Mountain Pump Station	1,632	
64th Avenue Pump station	306	
Hillcrest Pump Station	56	
Other Pumping Plant	47	
Total Pumping Plant	<u>9,405</u>	9,405
WATER TREATMENT		
Marston Treatment Plant	2,903	
Foothills Treatment Plant	921	
Moffat Treatment Plant / Recycle Plant	458	
Recycle Treatment Plant	48	
Total Water Treatment	<u>4,330</u>	4,330
TRANSMISSION AND DISTRIBUTION		
Mains - Replaced, Extend and Relocate	33,209	
Land & Land Rights	12,733	
Treated Water Conduits	6,642	
Highlands Reservoir	3,094	
Total Transmission and Distribution	<u>55,678</u>	55,678
GENERAL PLANT		
General Plant	539	
Administration Building & Westside Yards	288	
General Equipment	286	
Total General Plant	<u>1,113</u>	1,113
TOTAL FACILITY REPLACEMENTS AND IMPROVEMENTS	<u>79,715</u>	79,715
NON-UTILITY		
Highline Canal	128	
TOTAL NON-UTILITY REPLACEMENTS AND IMPROVEMENTS	<u>128</u>	128
<u>GENERAL EQUIPMENT ADDITIONS, REPLACEMENTS, AND IMPROVEMENTS</u>		
Motor Vehicles & Heavy Equipment	5,277	
Capitalization Software & IT Projects	4,577	
	<u>9,854</u>	9,854
TOTAL PROPERTY, PLANT & EQUIPMENT ADDITIONS	<u>\$ 131,054</u>	\$ 131,054

CAPITAL ASSETS BY FUNCTION: 2006 - 2015  
(amounts expressed in thousands)

	2015 <sup>2</sup>	2014	2013	2012	2011	2010	2009	2008	2007	2006
<b>UTILITY PLANT IN SERVICE:</b>										
Land and land rights	\$ 99,098	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Source of supply plant and equipment	621,979	669,181	665,962	655,650	603,059	601,640	577,785	524,366	490,413	477,999
Water treatment plant and equipment	480,097	479,030	465,253	463,798	459,888	380,166	369,704	368,921	333,933	330,394
Transmission and distribution plant and equipment	1,139,150	1,099,327	1,056,399	1,002,493	937,809	896,618	862,572	830,307	774,953	747,966
Pumping plant and equipment	165,741	129,721	126,236	113,103	111,259	103,259	104,867	86,174	72,101	70,951
Support services and equipment	238,247	-	-	-	-	-	-	-	-	-
General plant and equipment	-	159,854	155,713	153,834	149,381	135,031	131,128	116,207	111,993	113,928
Leasehold and other improvements	-	71,111	71,111	71,111	81,656	84,311	89,703	97,840	97,668	90,535
Land held for future use	-	14,276	14,276	14,276	14,276	14,249	14,257	14,249	14,321	14,050
<b>Total utility plant in service</b>	<b>2,744,312</b>	<b>2,622,500</b>	<b>2,554,950</b>	<b>2,474,265</b>	<b>2,357,328</b>	<b>2,215,274</b>	<b>2,150,016</b>	<b>2,038,064</b>	<b>1,895,382</b>	<b>1,845,823</b>
<b>NONUTILITY PLANT IN SERVICE:</b>										
Noutility plant and equipment	14,433	-	-	-	-	-	-	-	-	-
Plant	-	9,036	9,070	9,070	8,300	8,685	8,738	8,830	8,795	8,802
General equipment	-	37	37	27	27	27	27	19	19	69
Idle plant	-	-	-	-	-	-	-	-	-	203
<b>Total nonutility plant in service</b>	<b>14,433</b>	<b>9,073</b>	<b>9,107</b>	<b>9,097</b>	<b>8,327</b>	<b>8,712</b>	<b>8,765</b>	<b>8,849</b>	<b>8,814</b>	<b>9,074</b>
<b>UTILITY PLANT UNDER CAPITAL LEASE:</b>										
Certificates of participation <sup>1</sup>	-	-	-	-	-	70,453	69,962	71,949	79,022	78,584
Other	42,980	42,980	42,980	42,980	42,980	42,981	42,981	42,981	42,981	42,981
<b>Total utility plant under capital lease</b>	<b>42,980</b>	<b>42,980</b>	<b>42,980</b>	<b>42,980</b>	<b>42,980</b>	<b>113,434</b>	<b>112,943</b>	<b>114,930</b>	<b>122,003</b>	<b>121,565</b>
<b>CONSTRUCTION IN PROGRESS</b>										
<b>Gross capital assets</b>	<b>2,964,991</b>	<b>2,845,768</b>	<b>2,731,281</b>	<b>2,644,204</b>	<b>2,538,405</b>	<b>2,447,903</b>	<b>2,349,064</b>	<b>2,271,159</b>	<b>2,182,012</b>	<b>2,095,968</b>
<b>LESS ACCUMULATED DEPRECIATION AND AMORTIZATION</b>										
<b>(818,091)</b>	<b>(776,187)</b>	<b>(733,690)</b>	<b>(689,532)</b>	<b>(658,178)</b>	<b>(620,991)</b>	<b>(589,060)</b>	<b>(566,158)</b>	<b>(534,410)</b>	<b>(506,095)</b>	
<b>Net capital assets</b>	<b>\$ 2,146,900</b>	<b>\$ 2,069,581</b>	<b>\$ 1,997,591</b>	<b>\$ 1,954,672</b>	<b>\$ 1,880,227</b>	<b>\$ 1,826,912</b>	<b>\$ 1,760,004</b>	<b>\$ 1,705,001</b>	<b>\$ 1,647,602</b>	<b>\$ 1,589,873</b>

<sup>1</sup>In 2011, assets under Certificates of Participation capital lease were reclassified to Water Treatment Plant upon redemption of the Certificates of Participation.

<sup>2</sup>In 2015, assets were transferred between previous asset categories into revised functional programs. Prior to 2015 the amounts shown in each functional category consisted of plant assets and equipment was shown separately. Starting in 2015, plant and equipment assets are reporting in combined functional asset categories.

RECEIPTS AND EXPENDITURES  
 BUDGET TO ACTUAL COMPARISON 2011 - 2015 AND 2016 BUDGET (CASH BASIS)  
 (amounts expressed in thousands)

	2016	2015		2014		2013		2012		2011	
	Budget	Budget	Actual	Budget	Actual	Budget <sup>1</sup>	Actual	Budget	Actual	Budget	Actual
BEGINNING CASH & INVESTMENTS	\$ 240,889	\$ 234,924	\$ 234,924	\$ 219,744	\$ 219,744	\$ 222,299	\$ 222,299	\$ 187,296	\$ 187,296	\$ 225,410	\$ 225,410
<b>RECEIPTS FROM:</b>											
Sale of water	273,112	269,256	242,225	250,376	238,777	233,058	230,857	261,978	271,647	246,079	238,124
Nonoperating, interest & other	19,482	19,951	21,184	19,336	24,026	20,502	24,946	18,783	23,606	19,532	31,434
System development charges	20,294	17,294	36,109	15,294	32,736	8,640	34,616	10,714	19,619	8,000	14,649
Developer participation (new facilities), reimbursements & grants	8,129	4,415	10,795	2,163	6,384	2,911	7,426	5,367	3,452	4,863	8,088
	321,017	310,916	310,313	287,169	301,923	265,111	297,845	296,842	318,324	278,474	292,295
Sale of bonds or issuance of notes	56,923	42,000	30,000	36,000	40,102	25,600	10,000	38,000	40,358	-	-
Total receipts	377,940	352,916	340,313	323,169	342,025	290,711	307,845	334,842	358,682	278,474	292,295
<b>LESS EXPENDITURES FOR:</b>											
Operations, maintenance & refunds	199,545	191,036	185,820	197,662	185,820	183,092	185,857	201,862	174,878	198,641	181,364
Debt service	43,835	48,822	56,742	48,364	46,742	46,752	46,218	39,853	45,089	46,374	55,958
	243,380	239,858	242,562	246,026	232,562	229,844	232,075	241,715	219,967	245,015	237,322
Capital improvements (new facilities)	80,313	29,808	33,011	45,931	44,343	26,958	24,471	47,343	47,465	46,344	39,396
System replacements	29,830	50,125	44,668	59,734	52,153	42,823	35,271	37,271	32,486	32,101	26,981
Equipment	11,276	12,700	10,603	5,813	3,030	6,486	4,214	7,186	6,975	8,642	5,609
	121,419	92,633	88,282	111,478	99,526	76,267	63,956	91,800	86,926	87,087	71,986
Indirects to capital	22,720	11,527	9,058	13,994	9,585	12,735	9,954	14,265	15,176	14,791	15,236
Total expenditures	387,519	344,018	339,902	371,498	341,673	318,846	305,985	347,780	322,069	346,893	324,544
Cash Balance Adjustment <sup>2</sup>			5,554		14,828		(4,415)		(1,610)		(5,865)
ENDING CASH & INVESTMENTS	\$ 231,310	\$ 243,822	\$ 240,889	\$ 171,415	\$ 234,924	\$ 194,164	\$ 219,744	\$ 174,358	\$ 222,299	\$ 156,991	\$ 187,296

**GENERAL EXPLANATION OF VARIANCES:**

<sup>1</sup>The 2013 budget represents the revised budget approved by the Board on April 10, 2013 in response to the drought.

<sup>2</sup>The cash balance adjustment is due to a timing difference between cash payments that were made in January but were accrued for in December.

Variances in operating receipts are generally due to abnormal climatic conditions.

Variances in system development charges are generally related to levels of activity in the home building industry.

Variances in capital improvements are generally due to changes in project scheduling.

Cash and investments do not agree with amounts on the statements of net assets due to differences in valuation methods.

Prior year information has been updated to adjust for timing differences during the original reporting period.

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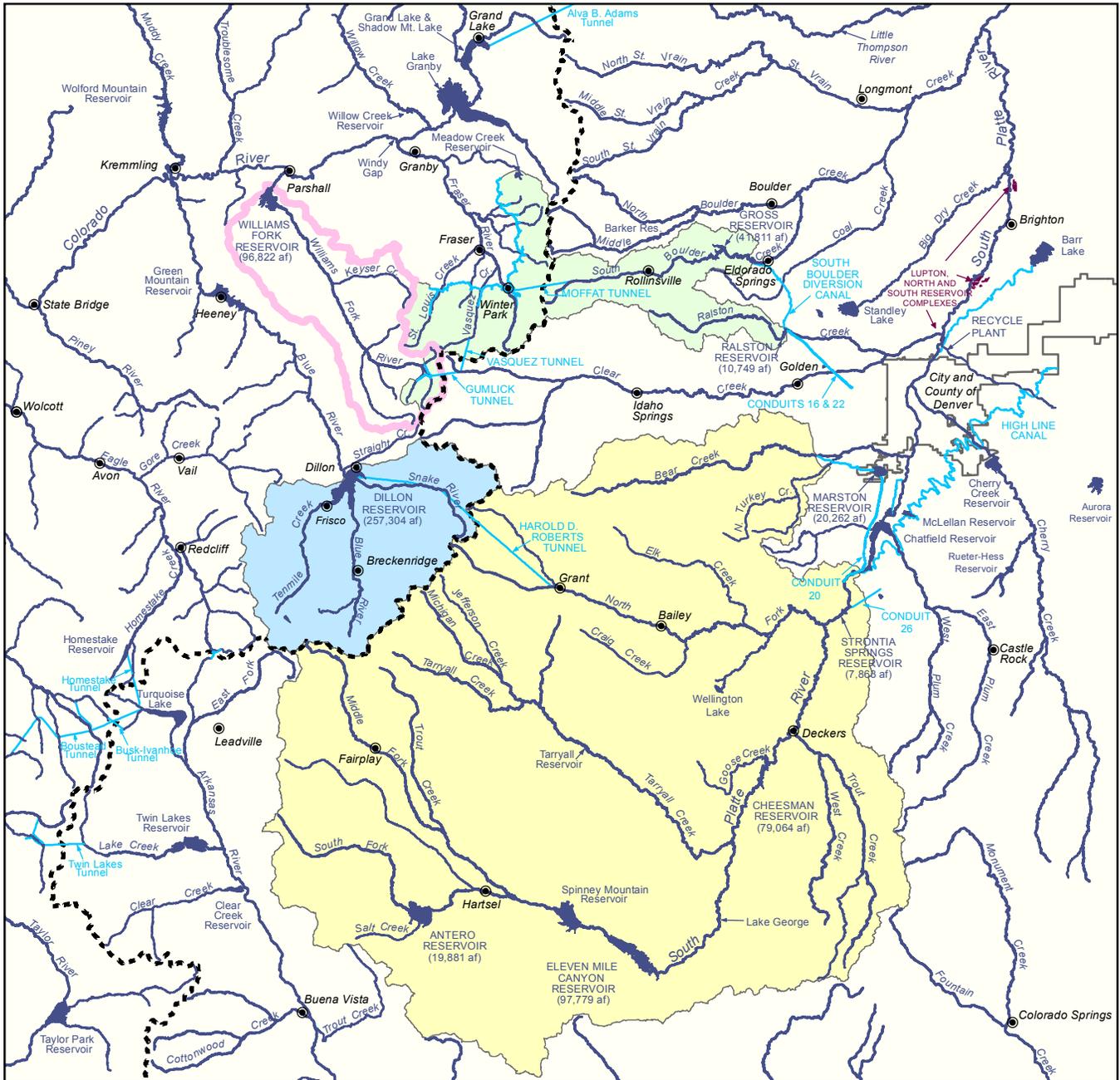
# Supply

## 2015 Facts

Raw water collected .....	279,378	Acre Feet
Percent of average yield-last 10 years .....	91%	
Percent from South Platte System .....	60%	
Percent from Moffat System .....	26%	
Percent from Roberts Tunnel System .....	14%	
Reservoir storage, January 1 .....	601,493	Acre Feet
Percent of capacity .....	88.9%	
Reservoir storage, December 31 .....	582,015	Acre Feet
Percent of capacity .....	86.1%	
Power generation (excluding power purchased).....	61,586,646	KWH
Value of power generation (excluding power purchased)..	\$3,913,171	

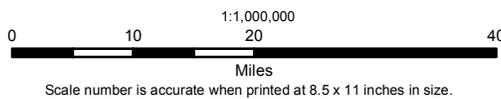
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# City and County of Denver Board of Water Commissioners Water Collection System



**LEGEND**

<span style="display: inline-block; width: 20px; height: 10px; background-color: yellow; border: 1px solid black;"></span> South Platte Collection System	<span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-radius: 50%;"></span> Town
<span style="display: inline-block; width: 20px; height: 10px; background-color: lightblue; border: 1px solid black;"></span> Roberts Tunnel Collection System	<span style="border-bottom: 2px dashed black; width: 20px; display: inline-block;"></span> Continental Divide
<span style="display: inline-block; width: 20px; height: 10px; background-color: lightgreen; border: 1px solid black;"></span> Moffat Collection System	<span style="border-bottom: 2px solid blue; width: 20px; display: inline-block;"></span> Major Canal or Aqueduct
<span style="display: inline-block; width: 20px; height: 10px; background-color: pink; border: 1px solid black;"></span> Williams Fork Reservoir Watershed	<span style="border-bottom: 2px solid blue; width: 20px; display: inline-block;"></span> Major Stream or River
<span style="display: inline-block; width: 20px; height: 10px; background-color: lightblue; border: 1px solid black; border-radius: 50%;"></span> Major Lake or Reservoir	



Map Date: 12/29/2015  
 Author: Planning WRGIS  
 Sources: USGS-NHD, DOLA,  
 Denver Water,  
 NRCS, CDWR.

SOURCE OF SUPPLY - 2015  
Reservoirs and Collection Systems

	Capacity in <u>Acre-Feet</u>	Capacity in <u>Million Gals.</u>
<b>RAW WATER STORAGE</b>		
Storage Reservoirs:		
Antero	19,881	6,478.2
Chatfield	27,428	8,937.4
Cheesman	79,064	25,763.1
Dillon	257,304	83,842.8
Eleven Mile Canyon	97,779	31,861.4
Gross	41,811	13,624.2
Meadow Creek Reservoir (Denver Water portion)	4,520	1,472.8
Soda Lakes (Denver Water portion)	615	200.4
Total Storage Reservoirs	<u>528,402</u>	<u>172,180.3</u>
Operating Reservoirs:		
Long Lakes	1,787	582.3
Marston Lake	19,796	6,450.5
Platte Canyon	910	296.5
Ralston	10,776	3,511.4
Strontia Springs	7,863	2,562.2
Total Operating Reservoirs	<u>41,132</u>	<u>13,402.9</u>
<b>TOTAL RAW WATER STORAGE</b>	<u><u>569,534</u></u>	<u><u>185,583.2</u></u>
 <b>REPLACEMENT RESERVOIRS</b>		
Williams Fork	96,822	31,549.5
Wolford Mountain (Denver Water portion)	<u>25,610</u>	<u>8,345.0</u>
<b>TOTAL REPLACEMENT RESERVOIRS</b>	<u><u>122,432</u></u>	<u><u>39,894.5</u></u>
 <b>MOUNTAIN COLLECTION SYSTEM</b>		
	<u>Length in Feet</u>	<u>Length in Miles</u>
Moffat Collection System:		
Concrete and Steel Pipe	99,549	18.9
Moffat Water Tunnel	32,383	6.1
Open Canals	15,443	2.9
Covered Canals	20,081	3.8
Other Tunnels	10,953	2.1
Total Moffat Collection System	<u>178,409</u>	<u>33.8</u>
Williams Fork Collection System:		
Steel Pipe	18,939	3.6
Vasquez Tunnel	17,874	3.4
A. P. Gumlick Tunnel	15,572	2.9
Open Canals	1,795	0.3
Total Williams Fork Collection System	<u>54,180</u>	<u>10.2</u>
Roberts Tunnel	<u>122,953</u>	<u>23.3</u>
South Boulder Diversion Conduit:		
Open Canals	30,250	5.7
Concrete and Steel Pipe	13,948	2.6
Tunnels	7,704	1.5
Covered Canals	1,748	0.3
Total South Boulder Diversion Conduit	<u>53,650</u>	<u>10.1</u>
<b>TOTAL MOUNTAIN COLLECTION SYSTEM</b>	<u><u>409,192</u></u>	<u><u>77.4</u></u>

Supply Mains and Wells

RAW WATER SUPPLY MAINS

	<u>Size</u>	<u>Kind of Pipe</u>	<u>Length in Feet</u>	<u>Length in Miles</u>
Conduit 5:	< 20"	No Material breakout <sup>3</sup>	1,517	0.3
	24"	Cast Iron	10	0.0
	24"	Ductile Iron	58	0.0
	24"	High Density Polyethylene	2,239	0.4
	24"	Steel	144	0.0
	30"	Cast Iron	157	0.0
	30"	Concrete	242	0.0
	30"	Reinforced Concrete Cyl	24,485	4.6
	30"	Steel	87	0.0
	36"	Cast Iron	965	0.2
	36"	Reinforced Concrete Cyl	637	0.1
	42"	Steel	204	0.0
<b>Total Conduit 5</b>			<u>30,745</u>	<u>5.6</u>
Conduit 8:	< 20"	No Material breakout <sup>3</sup>	26	0.0
	36"	Cast Iron	913	0.2
	36"	Concrete	106	0.0
	36"	Reinforced Concrete Cyl	2,550	0.5
	36"	Steel	1,109	0.2
	44"	Cast Iron	15	0.0
	60"	Steel	541	0.1
	84"	Steel	15	0.0
	90"	Steel	10	0.0
<b>Total Conduit 8</b>			<u>5,285</u>	<u>1.0</u>
Conduit 14:	24"	Steel	8	0.0
	30"	Reinforced Concrete Cyl	69	0.0
	36"	Corrugated Metal Pipe	104	0.0
	36"	Concrete	1,381	0.3
	36"	Steel	117	0.0
	48"	Reinforced Concrete Cyl	3,322	0.6
<b>Total Conduit 14</b>			<u>5,001</u>	<u>0.9</u>
Conduit 15:	< 20"	No Material breakout <sup>3</sup>	410	0.1
	24"	Cast Iron	90	0.0
	30"	Reinforced Concrete Cyl	410	0.1
	60"	Reinforced Concrete Cyl	8,036	1.5
	60"	Steel	11,235	2.1
	72"	Reinforced Concrete Cyl	5,532	1.0
	72"	Steel	6,741	1.3
	84"	Reinforced Concrete Cyl	437	0.1
<b>Total Conduit 15</b>			<u>32,891</u>	<u>6.2</u>

	<u>Size</u>	<u>Kind of Pipe</u>	<u>Length in Feet</u>	<u>Length in Miles</u>
Conduit 16:	< 20"	No Material breakout <sup>3</sup>	562	0.1
	24"	Steel	22	0.0
	36"	Steel	19	0.0
	42"	Reinforced Concrete	3,071	0.6
	42"	Reinforced Concrete Cyl	40,980	7.8
	42"	Steel	1,433	0.3
	48"	Steel	25	0.0
	72"	Steel	229	0.0
<b>Total Conduit 16</b>			<u>46,341</u>	<u>8.8</u>
Conduit 20:	< 20"	No Material breakout <sup>3</sup>	247	0.0
	30"	Concrete	8	0.0
	36"	Concrete	6	0.0
	40"	Reinforced Concrete Cyl	75	0.0
	60"	Reinforced Concrete Cyl	122	0.0
	60"	Steel	509	0.1
	84"	Steel	543	0.1
	90"	Steel	60	0.0
	90"	Reinforced Concrete Non-Cyl	59,904	11.3
	96"	Steel	3,007	0.6
<b>Total Conduit 20</b>			<u>64,481</u>	<u>12.1</u>
Conduit 22:	< 20"	No Material breakout <sup>3</sup>	418	0.1
	24"	Ductile Iron	133	0.0
	24"	Steel	37	0.0
	36"	Ductile Iron	68	0.0
	42"	Reinforced Concrete Cyl	14	0.0
	48"	Steel	74	0.0
	54"	Reinforced Concrete Cyl	43,519	8.2
	54"	Steel	1,318	0.2
	60"	Steel	51	0.0
<b>Total Conduit 22</b>			<u>45,632</u>	<u>8.5</u>

<sup>1</sup>These are raw water supply mains typically on Denver Water property that are not assigned a conduit number

<sup>2</sup>Alternative uses for supplies from the Farnell Lane Well Field are presently under study.

<sup>3</sup>Updates to pipe database in 2014 added 20" and smaller pipe diameter footage totals.

(Continued on the next page)

SOURCE OF SUPPLY - 2015  
Supply Mains and Wells (Continued)

RAW WATER SUPPLY MAINS

	<u>Size</u>	<u>Kind of Pipe</u>	<u>Length in Feet</u>	<u>Length in Miles</u>		<u>Size</u>	<u>Kind of Pipe</u>	<u>Length in Feet</u>	<u>Length in Miles</u>
Conduit 26:	< 20"	No Material breakout <sup>3</sup>	50	0.0	Other (no number) <sup>1</sup> :	< 20"	No Material breakout <sup>3</sup>	6,444	1.2
	24"	Ductile Iron	13	0.0		24"	Cast Iron	212	0.0
	24"	Reinforced Concrete Cyl	365	0.1		24"	Ductile Iron	24	0.0
	24"	Steel	72	0.0		24"	Steel	68	0.0
	36"	Steel	54	0.0		30"	Cast Iron	12	0.0
	60"	Steel	76	0.0		30"	Steel	791	0.1
	72"	Steel	64	0.0		36"	Cast Iron	1,047	0.2
	78"	Steel	213	0.0		36"	Concrete	1,652	0.3
	96"	Steel	225	0.0		36"	Steel	559	0.1
	120"	Steel	14	0.0		42"	Steel	4,423	0.8
	126"	Concrete	13,976	2.6		48"	Cast Iron	157	0.0
	126"	Steel	5,766	1.1		48"	Concrete	15	0.0
Total Conduit 26			<u>20,888</u>	<u>3.8</u>		48"	Steel	146	0.0
						54"	Steel	2,890	0.5
Conduit 155:	< 20"	No Material breakout <sup>3</sup>	89	0.0		60"	Steel	1,718	0.3
	24"	Ductile Iron	27	0.0		66"	Reinforced Concrete Non-Cyl	1,629	0.3
	30"	Ductile Iron	2,492	0.5		72"	Steel	978	0.2
Total Conduit 155			<u>2,608</u>	<u>0.5</u>		90"	Steel	31	0.0
						96"	Steel	225	0.0
Conduit 157:	30"	Steel	25	0.0		108"	Concrete	123	0.0
	42"	Reinforced Concrete Cyl	3,044	0.6		108"	Steel	8,263	1.6
	42"	Steel	468	0.1		120"	Steel	86	0.0
	48"	Reinforced Concrete Cyl	130	0.0		132"	Steel	322	0.1
Total Conduit 157			<u>3,667</u>	<u>0.7</u>		144"	Steel	836	0.2
Conduit 160:	36"	Steel	321	0.1	Total Conduit Other			<u>32,651</u>	<u>5.9</u>
					TOTAL RAW WATER SUPPLY MAINS			<u>290,511</u>	<u>54.1</u>

INFILTRATION GALLERIES & WELLS

	<u>Capacity in MGD</u>		<u>Capacity in MGD</u>	<u>Capacity in MGD</u>	
Cherry Creek Wells - Well O	1.6	Glendale Well No.2	1.15	Glendale LFH-1	0.43
Cherry Creek Galleries/Conduit No. 5	9.06	Glendale Well No.3	1.29	Glendale UA-1	0.22
Farnell Lane Well Field	- <sup>2</sup>	Glendale Well No.4	1.29	Glendale LA-1	0.22
Glendale Well No.1	1.15	Glendale Well No.5	0.72	Garland Park	0.76

<sup>1</sup>These are raw water supply mains typically on Denver Water property that are not assigned a conduit number

<sup>2</sup>Alternative uses for supplies from the Farnell Lane Well Field are presently under study.

<sup>3</sup>Updates to pipe database in 2014 added 20" and smaller pipe diameter footage totals.

## POWER GENERATION, PURCHASE, DISTRIBUTION, AND BANKING

POWER GENERATION AND PURCHASE	<u>Kilowatt Hours</u>	<u>Value<sup>2</sup></u>
Net Power Generation: <sup>1</sup>		
Dillon	11,897,824	\$ 548,191
Foothills	9,197,930	656,360
Gross	18,592,559	1,277,810
Hillcrest	648,550	233,952
Roberts Tunnel	3,747,320	282,994
Strontia Springs	5,189,417	273,589
Williams Fork	<u>12,313,046</u>	<u>640,275</u>
Total Power Generation	61,586,646	3,913,171
Power Purchased for Department of Energy (DOE) power interference	<u>6,815,304</u>	<u>299,510</u>
TOTAL POWER GENERATION AND PURCHASE	<u>68,401,950</u>	<u>4,212,681</u>
POWER DISTRIBUTION		
Internal Power Consumption: <sup>1</sup>		
Foothills	3,815,204	272,251
Hillcrest	39,469	14,238
Total Internal Power Consumption	<u>3,854,673</u>	<u>286,489</u>
Power Deliveries:		
To Xcel Energy:		
Dillon	11,897,824	548,191
Foothills	5,382,726	384,109
Gross	18,592,559	1,277,810
Hillcrest	609,081	219,714
Roberts Tunnel	3,747,320	282,994
Strontia Springs	<u>5,189,417</u>	<u>273,589</u>
Total	45,418,927	2,986,407
To Tri-State Generation and Transmission Association:		
Williams Fork	<u>12,313,046</u>	<u>640,275</u>
Total Power Deliveries to Xcel and Tri-State	<u>57,731,973</u>	<u>3,626,682</u>
Total Power Generation	61,586,646	3,913,171
To DOE for Power Interference:		
Purchased Power	<u>6,815,304</u>	<u>299,510</u>
Total Power Deliveries to DOE	<u>6,815,304</u>	<u>299,510</u>
TOTAL POWER DISTRIBUTION	<u>68,401,950</u>	<u>4,212,681</u>
DOE BANKED POWER INTERFERENCE ACCOUNT <sup>3</sup>		
Balance, Beginning of Year	33,648,310	1,199,417
Net Interference	(485,533)	(14,566)
Total Allocation	<u>6,815,304</u>	<u>299,510</u>
Balance, End of Year	<u>39,978,081</u>	<u>\$ 1,484,361</u>

<sup>1</sup>Net Power Generation is total generation less station service (except Foothills and Hillcrest) and transmission wheeling losses. Value of Williams Fork power and that consumed by Foothills and Hillcrest based on PSC tariff schedule TT, June 4, 1988.

<sup>2</sup>Values on this schedule represent the value of power produced and distributed and do not relate to power sales on other schedules.

<sup>3</sup>Value based on 30 mills/kwh (approximate average of PSC and DOE rates).

POWER VALUE, COST, AND RETURN ON INVESTMENT

	Power Plant							Total
	Dillon	Foothills	Gross	Hillcrest	Roberts Tunnel	Strontia Springs	Williams Fork	
Date of Commercial Operation:	Oct 1, 1987	May 25, 1985	Aug 1, 2007	Jun 30, 1993	Jan 30, 1988	Aug 11, 1986	July 25, 1959	
<b>VALUE OF POWER GENERATION<sup>1</sup></b>								
Delivered to Xcel Energy	\$ 548,191	\$ 384,109	\$ 1,277,810	\$ 219,714	\$ 282,994	\$ 273,589	\$ -	\$ 2,986,407
Foothills Internal Consumption	-	272,251	-	-	-	-	-	272,251
Hillcrest Internal Consumption	-	-	-	14,238	-	-	-	14,238
Delivered to Tri-State	-	-	-	-	-	-	640,275	640,275
<b>TOTAL VALUE</b>	<b>548,191</b>	<b>656,360</b>	<b>1,277,810</b>	<b>233,952</b>	<b>282,994</b>	<b>273,589</b>	<b>640,275</b>	<b>3,913,171</b>
<b>COST OF POWER GENERATION</b>								
Transmission Wheeling	-	16,523	-	-	11,376	-	-	27,899
Operation and Maintenance	79,414	14,513	96,035	1,118,938	116,911	50,818	154,750	1,631,379
Administrative Expense	18,098	2,904	29,490	86,600	24,052	13,015	29,742	203,901
Depreciation	79,818	74,026	758,082	114,118	105,353	33,740	836,344	2,001,481
<b>TOTAL COST</b>	<b>177,330</b>	<b>107,966</b>	<b>883,607</b>	<b>1,319,656</b>	<b>257,692</b>	<b>97,573</b>	<b>1,020,836</b>	<b>3,864,660</b>
Net Return (Loss)	\$ 370,861	\$ 548,394	\$ 394,203	\$ (1,085,704)	\$ 25,302	\$ 176,016	\$ (380,561)	\$ 48,511
Plant Investment (Before Depreciation)	\$ 4,646,727	\$ 2,936,645	\$ 18,685,773	\$ 6,309,868	\$ 6,007,230	\$ 1,733,652	\$ 25,336,393	\$ 65,656,288
Return on Investment - Current Year	8%	19%	2%	(17)%	0%	10%	(2)%	0%
Return on Investment - Cumulative	175%	332%	32%	21%	108%	255%	11%	59%

<sup>1</sup>Values on this schedule represent the value of power produced and distributed and do not relate to power sales on other schedules.

WATER SUPPLY, USE AND STORAGE: 2006 - 2015

Values in acre-feet<sup>1</sup>

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
<b><u>SUPPLY</u></b>										
South Platte System:										
South Platte Direct Rights	110,915	108,990	72,254	46,557	75,389	94,795	84,365	67,152	103,166	63,190
South Platte Storage Rights	46,741	31,939	37,816	4,283	25,739	31,347	39,402	31,786	40,192	15,812
Bear Creek Rights	-	-	2,067	61	1,359	1,222	1,178	1,862	1,930	1,234
Total South Platte System	157,656	140,929	112,137	50,901	102,487	127,364	124,945	100,800	145,288	80,236
Blue River/Roberts Tunnel System	39,801	77,765	111,564	54,394	148,643	74,674	58,468	80,056	65,682	127,074
Effluent Exchange <sup>2</sup>	8,905	7,751	30,778	34,864	15,072	24,527	13,846	21,455	23,266	33,632
Moffat System:										
Fraser Collection System	20,943	24,012	49,036	29,399	45,353	27,240	37,640	58,490	34,090	65,034
Williams Fork Collection System	21,288	26,680	68,483	23,275	33,565	28,362	31,138	26,268	34,608	41,970
Cabin-Meadow Creek System	2,271	85	3,080	1,448	4,112	1,452	4,668	3,794	5,866	6,574
South Boulder Creek	22,172	19,516	7,418	-	9,606	15,178	4,816	-	7,708	-
Ralston Creek	6,342	3,292	13,142	401	1,127	4,086	1,374	290	2,792	-
Total Moffat System	73,016	73,585	141,159	54,523	93,763	76,318	79,636	88,842	85,064	113,578
Total Water Supply	279,378	300,030	395,638	194,682	359,965	302,883	276,895	291,153	319,300	354,520
<b><u>USE</u></b>										
Foothills Filters	113,433	101,795	116,095	155,334	137,330	142,811	117,784	117,973	141,468	135,774
Marston Filters	34,427	52,777	36,135	46,029	25,763	40,489	31,853	56,498	43,303	34,633
Moffat Filters	33,691	33,173	32,503	19,477	46,380	30,642	40,910	46,438	31,507	58,907
Total Water Filtered	181,551	187,745	184,733	220,840	209,473	213,942	190,547	220,909	216,278	229,314
Change in Clear Water Storage	(76)	26	52	24	12	(55)	52	(23)	17	8
Total Treated Water Delivered <sup>3</sup>	181,475	187,771	184,785	220,864	209,485	213,887	190,599	220,886	216,295	229,322
Raw Water Deliveries	26,566	19,260	24,533	31,574	27,535	24,641	25,717	30,079	26,830	43,061
Other Uses <sup>4</sup>	90,815	103,131	46,075	91,467	100,922	79,819	58,632	39,620	61,234	63,356
Total Water Use	298,856	310,162	255,393	343,905	337,942	318,347	274,948	290,585	304,359	335,739
<b><u>STORAGE</u></b>										
Total Reservoir Storage, December 31	582,015	601,493	611,625	471,380	620,603	598,580	614,044	612,097	611,529	596,588
Total Reservoir Storage, January 1	601,493	611,625	471,380	620,603	598,580	614,044	612,097	611,529	596,588	577,807
Storage Gain or (Loss)	(19,478)	(10,132)	140,245	(149,223)	22,023	(15,464)	1,947	568	14,941	18,781

<sup>1</sup>Starting in Water Year 2011 the conversion factor from cfs to acre-feet was changed from 2 to 1.9835.

<sup>2</sup>Initiated exchange programs for Blue River effluent on September 10, 1976.

<sup>3</sup>Total Treated Water Delivered is determined by adding or subtracting Change in Clear Water Storage from Total Water Filtered.

<sup>4</sup>Other Uses include, but are not limited to, evaporation, carriage losses, seepage losses, Chatfield bypasses, flood bypasses, substitution and releases for power production and maintenance projects.

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# Pumping

## 2015 Facts

Treated Water pumped - Current year .....	27,677.6	MG <sup>1</sup>
Treated Water pumped - Last year .....	36,088.9	MG <sup>1</sup>
Percentage increase (decrease) from last year .....	(2331)%	
Number of treated water pump stations .....	18	
Maximum pumping capacity .....	1,048.4	MGD <sup>2</sup>
Pumping energy costs (Treated Water) - Current year .....	\$2,816,438	
Pumping energy costs (Treated Water) - Last year .....	\$3,287,803	
Percentage increase from last year .....	-14%	

<sup>1</sup>Million Gallons

<sup>2</sup>Million Gallons per Day

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PUMPING STATION CAPACITIES - 2015

(Page 1 of 3)

Center of pump U.S.G.S. elevation in parentheses

Pump Station/Elevation	Pump			Horse- power	Head in Feet	Capacity in MGD
	Number	Make of Pump	Make of Motor			
BELLEVIEW (5,714) (High Pressure)	4	Goulds	Ideal Electric	900	260	15.0
	5	Worthington	Westinghouse	300	260	5.0
	6	Goulds	US Motor	700	271	10.0
	7	Worthington	General Electric	900	260	15.0
				<u>2,800</u>		<u>45.0</u>
BELLEVIEW (5,714) (Low Pressure)	1	Goulds	General Electric	250	175	6.0
	2	Goulds	General Electric	400	175	10.0
				<u>650</u>		<u>16.0</u>
BROOMFIELD (5,316)	1	Goulds	US Motor	500	350	6.5
	2	Goulds	US Motor	500	350	6.5
	3	Goulds	US Motor	500	350	6.5
	4	Goulds	US Motor	500	300	6.5
				<u>2,000</u>		<u>26.0</u>
CASTLEWOOD (5,785) <sup>1</sup>	1	Peerless	US Motor	10		0.5
	2	Peerless	General Electric	40		1.5
	3	Peerless	General Electric	100		4.2
				<u>150</u>		<u>6.2</u>
CHATFIELD (5,717) (Low Pressure)	1	ITT	US Motor	200	150	5.0
	2	ITT	US Motor	200	150	5.0
	3	ITT	US Motor	200	150	5.0
				<u>600</u>		<u>15.0</u>
CHATFIELD (5,717) (High Pressure)	5	ITT	US Motor	400	320	5.0
	6	ITT	US Motor	400	320	5.0
	7	ITT	Nidec	400	320	5.0
				<u>1,200</u>		<u>15.0</u>
CHERRY HILLS (5,380)	1	Worthington	General Electric	1,000	220	20.0
	2	Worthington	General Electric	1,000	220	20.0
	3	Worthington	General Electric	1,000	220	20.0
	4	Worthington	General Electric	1,000	220	20.0
	5	Worthington	General Electric	1,000	220	20.0
	6	Worthington	General Electric	1,000	220	20.0
				<u>6,000</u>		<u>120.0</u>
CLARKSON (5,482) <sup>1</sup>	1	Fairbanks Morse	Fairbanks Morse	150	234	2.1
	2	Fairbanks Morse	Fairbanks Morse	150	234	2.1
	3	Fairbanks Morse	Fairbanks Morse	150	234	2.1
	4	Fairbanks Morse	Fairbanks Morse	150	234	2.1
	5	Fairbanks Morse	Fairbanks Morse	150	234	2.1
	6	Fairbanks Morse	Reliance Electric	150	234	2.1
				<u>900</u>		<u>12.6</u>
EINFELDT (5,341)	2	Wheeler Economy	General Electric	800	175	20.0
	3	Byron Jackson	General Electric	600	175	17.0
	4	Byron Jackson	General Electric	400	175	12.0
	5	Byron Jackson	Westinghouse	200	175	5.3
	6	Worthington	General Electric	800	175	20.0
	7	Wheeler Economy	General Electric	800	175	20.0
					<u>3,600</u>	
ELIZABETH (5,374)	1	Goulds	US Motor	400	164	11.0
	2	Goulds	US Motor	600	164/250	8.5
	3	Goulds	US Motor	600	164/250	8.5
	4	Goulds	US Motor	600	164/250	8.5
	5	Goulds	US Motor	200	164	5.0
				<u>2,400</u>		<u>41.5</u>

<sup>1</sup>Vault Type Structure (underground)

PUMPING STATION CAPACITIES (Continued) - 2015

Center of pump U.S.G.S. elevation in parentheses

<u>Pump Station/Elevation</u>	<u>Pump Number</u>	<u>Make of Pump</u>	<u>Make of Motor</u>	<u>Horse-power</u>	<u>Head in Feet</u>	<u>Capacity in MGD</u>
FIFTY-SIXTH AVENUE (5,203)	2	Allis Chalmers	Ideal Electric	1,750	450	15.0
	3	Allis Chalmers	Ideal Electric	1,750	450	15.0
	4	Allis Chalmers	Ideal Electric	1,750	450	15.0
	5	Allis Chalmers	Ideal Electric	1,750	450	15.0
	8	Gould	U.S. Motor	500	75	30.0
	9	Gould	U.S. Motor	500	75	30.0
				<u>8,000</u>		<u>120.0</u>
GREEN MOUNTAIN (5,837)	1	Flow Serve	General Electric	600	200	12.0
	2	Flow Serve	General Electric	300	200	6.0
	3	Flow Serve	General Electric	300	200	6.0
	4					
				<u>1,200</u>		<u>24.0</u>
						no longer exists
HIGHLANDS (5,704) (Low Pressure)	1	Fairbanks Morse	General Electric	125	165	3.0
	2	Fairbanks Morse	General Electric	125	165	3.0
	3	Fairbanks Morse	General Electric	125	165	3.0
	4	Fairbanks Morse	General Electric	125	165	3.0
	5	DeLaval	Ideal Electric	350	165	10.0
	6	DeLaval	Ideal Electric	350	165	10.0
	7	DeLaval	Ideal Electric	350	165	10.0
				<u>1,550</u>		<u>42.0</u>
HIGHLANDS (5,704) (High Pressure)	1	Gould	General Electric	900	260	15.0
	2	Gould	General Electric	900	260	15.0
	6	Gould	General Electric	300	110	10.0
	7	Gould	General Electric	300	110	10.0
	8	Gould	General Electric	150	110	5.0
	9	Gould	General Electric	150	110	5.0
				<u>2,700</u>		<u>60.0</u>
HILLCREST (5,602) (Low Pressure)	1	Allis Chalmers	Allis Chalmers	50	169	1.0
	2	Allis Chalmers	Allis Chalmers	100	167	2.0
	3	DeLaval	Electric Machinery	200	163	5.0
	4	DeLaval	Electric Machinery	400	163	11.0
	5	DeLaval	Electric Machinery	400	163	11.0
	6	Worthington	Fairbanks Morse	400	163	11.0
	7	Worthington	Fairbanks Morse	400	163	11.0
				<u>1,950</u>		<u>52.0</u>
HILLCREST (5,602) (High Pressure)	8	American Marsh	Westinghouse	75	320	0.8
	9	Gould	US Motor	1,500	330	20.0
	10	DeLaval	Electric Machinery	350	313	4.8
	11	DeLaval	Electric Machinery	800	315	10.5
	12	DeLaval	Electric Machinery	800	315	10.5
	13	Patterson	Ideal Electric	900	320	10.0
				<u>4,425</u>		<u>56.6</u>
KENDRICK (5,607) (Low Pressure)	1	Peerless	US Motor	300	120	10.6
	2	Peerless	US Motor	200	120	6.7
	3	Peerless	US Motor	100	120	3.3
	4	Peerless	US Motor	100	120	3.3
	5	Peerless	US Motor	100	120	3.3
				<u>800</u>		<u>27.2</u>

PUMPING STATION CAPACITIES (Continued) - 2015

(Page 3 of 3)

Center of pump U.S.G.S. elevation in parentheses

<u>Pump Station/Elevation</u>	<u>Pump Number</u>	<u>Make of Pump</u>	<u>Make of Motor</u>	<u>Horse-power</u>	<u>Head in Feet</u>	<u>Capacity in MGD</u>
KENDRICK (5,607) (High Pressure)	7	Worthington	Electric Machinery	800	260	10.0
	8	Worthington	Electric Machinery	800	260	10.0
	9	Goulds	Waukesha <sup>2</sup>	700	260	10.0
	10	DeLaval	Waukesha <sup>2</sup>	400	260	5.0
	11	Flow Serve	General Electric	600	243	10.0
				<u>3,300</u>		<u>45.0</u>
LAKERIDGE (5,516)	1	American Marsh	General Electric	25	120	0.7
	2	American Marsh	General Electric	75	120	2.9
	3	American Marsh	General Electric	75	120	2.9
	4	American Marsh	General Electric	60	120	1.7
				<u>235</u>		<u>8.2</u>
LAMAR (5,443) <sup>1</sup>	1	Peerless	US Motor	40	111	1.1
	2	Peerless	US Motor	60	113	2.1
	3	Peerless	US Motor	125	119	4.1
				<u>225</u>		<u>7.3</u>
LONE TREE (5,904) (Low Pressure)	3	Gould	US Motor	300	127	10.0
	4	Gould	US Motor	150	127	5.0
	5	Gould	US Motor	150	127	5.0
				<u>600</u>		<u>20.0</u>
LONE TREE (5,904) (High Pressure)	6	Gould	Siemens & Allis	300	227	5.0
	7	Gould	Siemens & Allis	600	227	10.0
	8	Gould	Siemens & Allis	600	227	10.0
				<u>1,500</u>		<u>25.0</u>
MARSTON (5,485) (Low Pressure)	1	Worthington	Waukesha <sup>2</sup>	700	166	20.0
	2	Worthington	General Electric	700	166	20.0
	3	Worthington	General Electric	700	166	20.0
	4	Worthington	General Electric	700	166	20.0
	5	Worthington	General Electric	700	166	20.0
				<u>3,500</u>		<u>100.0</u>
MARSTON (5,485) (High Pressure)	8	Patterson	Waukesha <sup>2</sup>	400	260	6.5
	9	Ingersoll-Rand	Reliance Electric	500	260	8.0
	10	Gould	US Motor	900	260	15.0
	11	Gould	US Motor	900	260	15.0
				<u>2,700</u>		<u>44.5</u>
SIXTY-FOURTH AVENUE (5,427) (Low Pressure)	3	Fairbanks Morse	United States	100	90	5.0
	6	Fairbanks Morse	United States	200	90	10.0
				<u>300</u>		<u>15.0</u>
SIXTY-FOURTH AVENUE (5,427) (High Pressure)	1	Fairbanks Morse	United States	400	170	10.0
				<u>53,685</u>		<u>1,048.4</u>

Note: City Datum = 5,172.91

<sup>1</sup>Vault Type Structure (underground)

<sup>2</sup>Natural Gas Engine

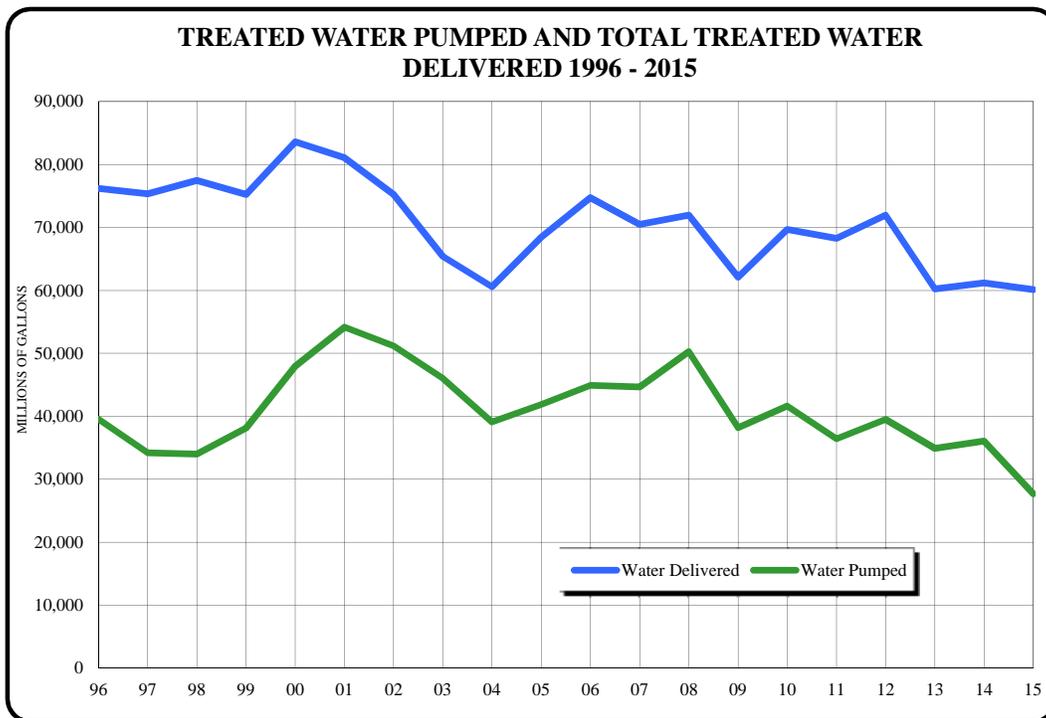
TREATED WATER PUMPED AND POWER COSTS: 1996 - 2015

Year	Total Treated Water Pumped	Total Treated Water Delivered	Pumps		Treated Water Total Pumping	Gas Used	Total Power, Electric and Gas Costs <sup>2</sup>
	(million gals.)	(million gals.)	Number	Capacity (million gals.)	Power Used (kwh) <sup>1</sup>	(dth)	
1996	39,578.30	76,203.96	105	1,027.5	40,222,555	-	\$2,638,872
1997	34,179.67	75,363.33	105	1,027.5	31,876,334	23,055	\$1,997,924
1998	33,990.21	77,466.65	105	1,027.5	30,170,882	38,331	\$1,881,873
1999	38,149.92	75,232.01	106	1,052.5	33,378,202	18,927	\$1,915,984
2000	47,953.92	83,585.25	106	1,052.5	39,257,987	20,159	\$2,166,806
2001	54,161.28	81,051.42	106	1,052.5	42,691,836	15,096	\$2,774,857
2002	51,205.33	75,221.18	109	1,070.6	46,058,108	7,217	\$1,986,429
2003	46,030.79	65,399.47	110	1,077.1	33,489,508	1,858	\$2,322,558
2004	39,105.07	60,578.77	110	1,077.1	35,898,176	-	\$2,820,144
2005	41,890.71	68,473.70	110	1,096.3	38,384,576	-	\$3,686,475
2006	44,937.60	74,724.98	110	1,096.3	44,823,999	-	\$3,247,213
2007	44,684.79	70,479.84	112	1,097.4	38,635,526	-	\$2,942,190
2008 <sup>3</sup>	50,283.70	71,975.87	112	1,097.4	33,898,600	-	\$3,583,417
2009	38,198.90	62,106.90	112	1,095.9	27,801,487	-	\$2,568,082
2010	41,611.30	69,695.40	112	1,095.9	28,457,672	-	\$2,709,675
2011	36,443.49	68,260.80	112	1,003.3	25,674,399	-	\$3,042,871
2012	39,484.07	71,968.70	112	1,003.3	26,277,763	-	\$3,328,526
2013	34,895.37	60,212.44	112	1,007.9	25,604,391	-	\$3,259,289
2014	36,088.94	61,185.27	112	1,007.9	29,118,267	-	\$3,517,530
2015	27,677.64	60,115.97	113	1,048.4	22,901,689	-	\$2,960,292

<sup>1</sup>Years prior to 2008 included some raw water pumping and a portion of power used at the treatment plants.

<sup>2</sup>Total energy costs for all Denver metropolitan area Board treated water distribution facilities.

<sup>3</sup>Foothills Treatment Plant out of service from December 4, 2007 through April 25, 2008.



DISTRIBUTING RESERVOIRS AND RAW WATER PUMPING STATIONS - 2015

High water U.S.G.S. elevation in parentheses

	Capacity (million gals.)		Capacity (million gals.)
Alameda & Beech (6,042) <sup>1</sup>		Hillcrest (5,624)	
Number 1	1.0	Number 1	14.8
Number 2	2.0	Number 2	14.8
	<u>3.0</u>		<u>29.6</u>
Ashland (5,430)		Hogback (6,007)	4.0
East Basin	under construction		
West Basin	10.0	Ken Caryl Ranch (6,410) <sup>1</sup>	
	<u>10.0</u>	Number 3	2.0
Belleview (5,743)	10.0	Number 4	2.0
	<u>10.0</u>		<u>4.0</u>
Broomfield (5,335)		Kendrick (5,627)	15.0
Number 1	2.5		
Number 2	2.5	Lone Tree (5,930)	
	<u>5.0</u>	Number 1	10.0
Broomfield Tank (5,534) <sup>1</sup>		Number 2	10.0
Number 1	3.0		<u>20.0</u>
Number 2	3.0	Marston Treatment (5,497)	
	<u>6.0</u>	Marston Treatment (5,497)	
Capitol Hill (5,395)		Number 3	6.8
Number 1	23.4	Number 4	9.2
Number 3	27.0		<u>16.0</u>
	<u>50.4</u>	Moffat Treatment (5,620)	
Chatfield Tank (5,740)		Number 1	4.3
Number 1	5.0	Number 2	4.3
Number 2	5.0	Number 3	5.0
	<u>10.0</u>	Number 4	4.4
Colorow (6007)	3.7		<u>18.0</u>
	<u>3.7</u>	Sixty-Fourth Avenue (5,460)	15.0
Fifty-Sixth Avenue (5,223)	15.0		
	<u>15.0</u>	Southgate (6,123) <sup>1</sup>	
Foothills (5,860)		9E	2.0
Number 1	25.0	9E2	6.0
Number 2	25.0		<u>8.0</u>
Number 3	25.0	Southgate (6,270) <sup>1</sup>	
	<u>75.0</u>	10E	1.5
Green Mountain (5,859)	5.0	10E2	1.5
	<u>5.0</u>		<u>3.0</u>
Highlands (5,722)		Utah Tank (6,042) <sup>1</sup>	3.0
Number 1	7.2		
Number 2	no longer exists	Valley Tank (6,000) <sup>1</sup>	2.0
Number 3	13.5		
	<u>20.7</u>	Total Capacity	<u>351.4</u>

<sup>1</sup>Not Owned by Denver Water.

RAW WATER PUMPING STATIONS

Pump Station	Pump Number	Make of Pump	Make of Motor	Horse-Power	Head in Feet	Capacity in MGD
Last Chance	1	Worthington	General Electric	30	60	2.2
Metro Sewer	1	Peerless	United States	200	30	30.0
	2	Peerless	General Electric	200	30	30.0
	3	Peerless	General Electric	200	30	30.0
				<u>600</u>	<u>90</u>	<u>90.0</u>
Kassler	3	Peerless	General Electric	600	153	10.0
	5	Peerless	General Electric	600	153	10.0
				<u>1,200</u>	<u>306</u>	<u>20.0</u>
			Total	<u>1,830</u>	<u>456</u>	<u>112.2</u>

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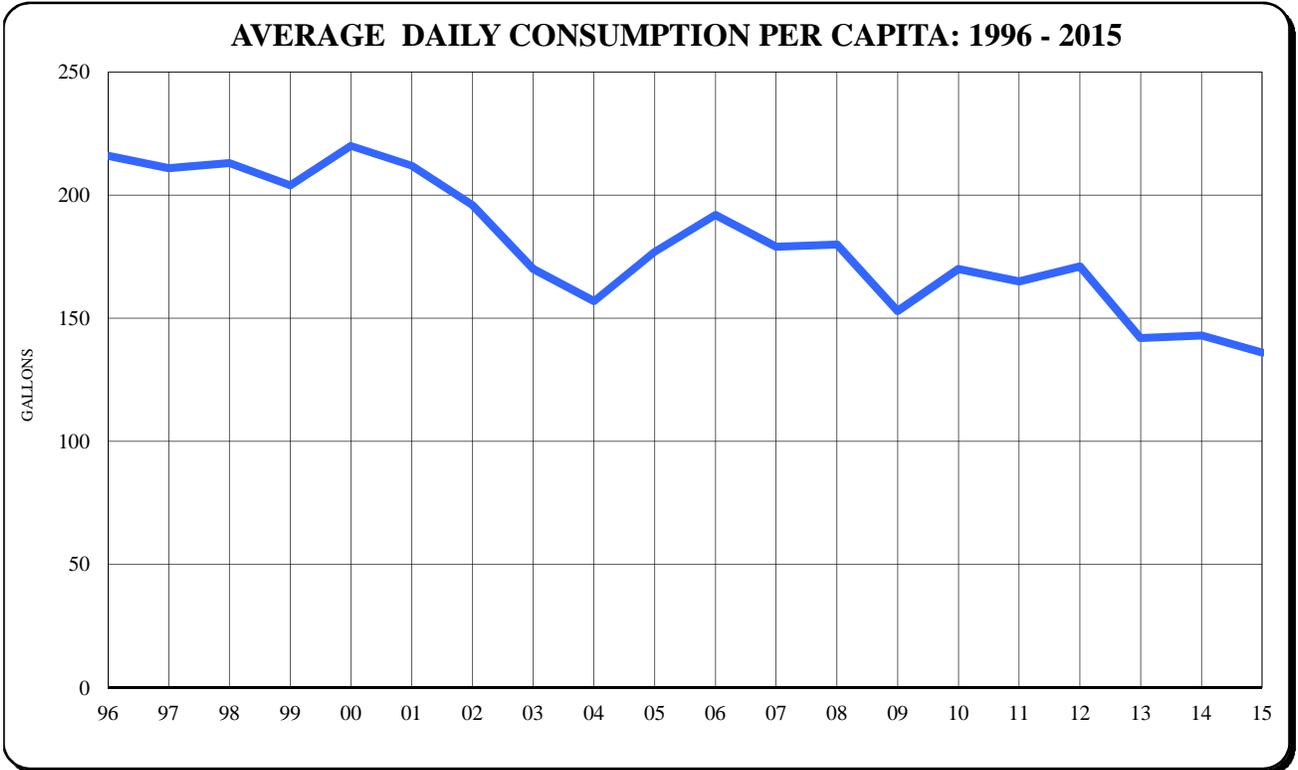
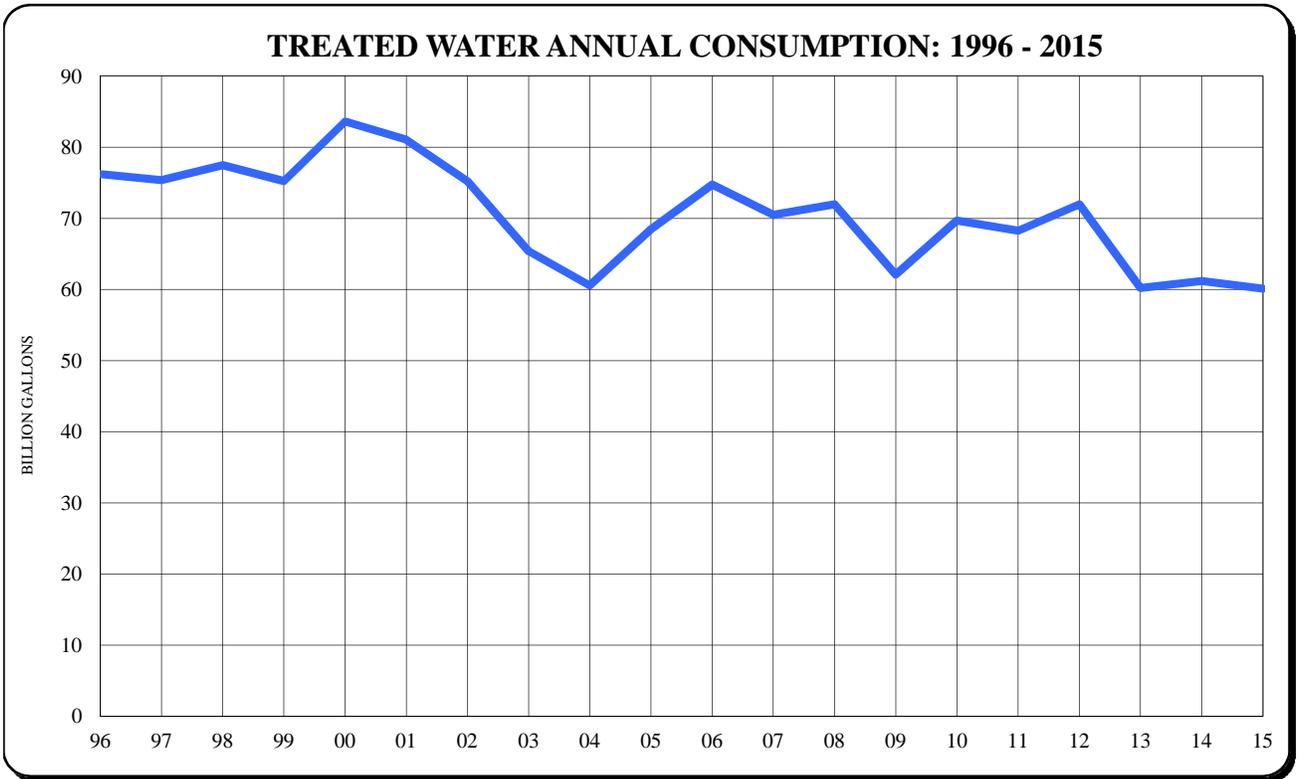
# Treatment and Water Quality

## 2015 Facts

Treated water consumption.....	60,115.97 MG
Increase (decrease) from last year.....	(1,069.30) MG
Average daily consumption.....	164.70 MG
Maximum daily consumption: (July 28).....	344.26 MG
Maximum hour treated water use rate: (August 5 at 6:30 a.m.).....	499.30 MGD
Water Quality:	
Total samples collected.....	35,478
Microbiological analyses completed.....	11,208
Chemical analyses completed.....	56,885

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CONSUMPTION OF TREATED WATER - 20 YEAR GRAPHS: 1996 - 2015



CONSUMPTION OF TREATED WATER: 1996 - 2015

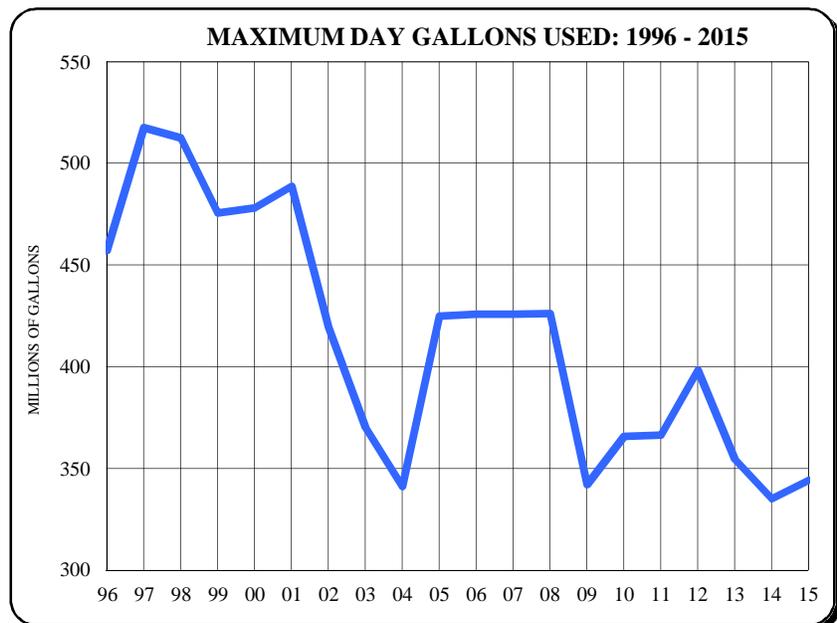
Year	Acre-Feet	(million gallons)			Population July 1 <sup>1</sup>	Avg. Daily Gals. Per Capita	Precipitation in Inches <sup>2</sup>	
		Annual	Daily Avg.	Daily Max.			Year	4/1 to 9/30
1996	233,861	76,203.96	208.21	456.99	966,000	216	14.81	10.96
1997	231,282	75,363.33	206.47	517.57	980,000	211	20.38	14.46
1998	237,764	77,475.48	212.26	512.53	996,000	213	17.61	12.77
1999	230,879	75,232.01	206.12	475.66	1,012,000	204	20.03	17.04
2000	256,514	83,585.25	228.38	478.19	1,036,000	220	14.87	11.07
2001	248,738	81,051.42	222.06	488.71	1,048,000	212	16.45	12.43
2002	230,845	75,221.18	206.09	419.20	1,049,000	196	9.95	6.59
2003	200,704	65,399.47	179.18	370.05	1,052,000	170	17.00	8.77
2004	185,909	60,578.77	165.52	340.92	1,055,000	157	21.35	16.06
2005	210,138	68,473.70	187.60	424.80	1,057,000	177	16.32	10.90
2006	229,323	74,724.98	204.73	425.68	1,064,000	192	16.15	8.66
2007	216,295	70,479.84	193.10	425.70	1,077,000	179	18.10	11.45
2008	220,886	71,975.87	196.66	426.16	1,093,000	180	12.42	8.19
2009	190,599	62,106.90	170.16	341.80	1,111,000	153	21.34	15.09
2010	213,887	69,695.40	190.95	365.81	1,125,000	170	14.28	9.74
2011	209,485	68,260.80	187.02	366.40	1,135,000	165	19.29	13.99
2012	220,864	71,968.70	196.64	398.20	1,147,000	171	12.39	8.72
2013	184,785	60,212.44	164.97	354.50	1,161,000	142	22.41	17.95
2014	187,771	61,185.27	167.63	335.20	1,172,000	143	20.26	14.77
2015	184,489	60,115.97	164.70	344.26	1,210,000	136	27.80	19.07

<sup>1</sup>Population estimates are treated water customers only.

<sup>2</sup>Precipitation readings are the averages of Stapleton, Lakewood and Kassler measurement stations.

TREATMENT PLANT CAPACITY

Plant	Type	Capacity in MGD
Foothills	Dual-Media	280.0
Marston	Dual-Media	250.0
Moffat	Rapid Sand	185.0
		<u>715.0</u>

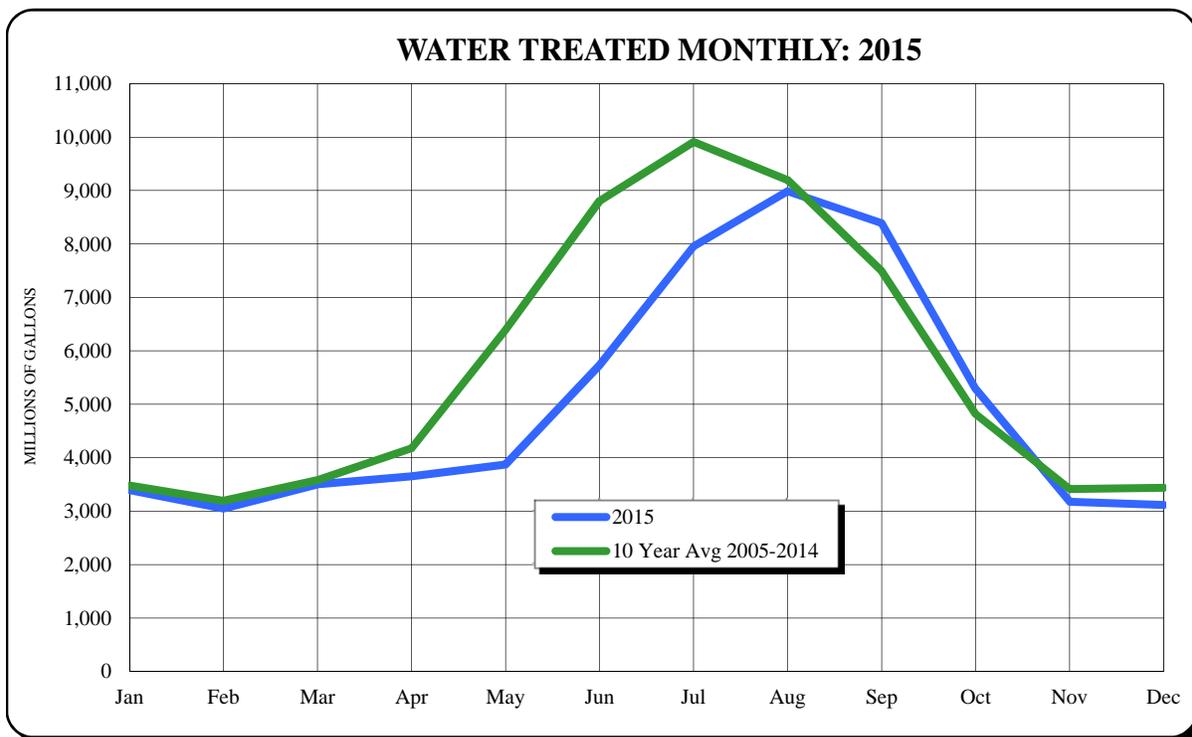


## WATER TREATED MONTHLY - 2015

(millions of gallons)

	Treatment Plant			Total Produced
	Foothills	Marston	Moffat	
January	2,372.74	93.11	931.60	3,397.45
February	151.59	1,621.68	1,278.14	3,051.41
March	-	2,331.54	1,174.18	3,505.72
April	2,306.12	703.84	644.15	3,654.11
May	2,378.16	681.25	812.09	3,871.50
June	3,747.49	635.69	1,347.11	5,730.29
July	5,158.26	1,129.22	1,671.35	7,958.83
August	5,898.89	1,099.73	1,990.67	8,989.29
September	5,632.67	862.94	1,895.42	8,391.03
October	4,164.61	898.93	229.69	5,293.23
November	2,607.77	570.48	-	3,178.25
December	2,533.34	586.42	-	3,119.76
	<u>36,951.64</u>	<u>11,214.83</u>	<u>11,974.40</u>	<u>60,140.87</u>

Note: Totals are based on multiple totalizer meter readings at various treatment plant sites. The accuracy of the readings varies within the limits inherent to each water meter.



### RECONCILIATION OF WATER TREATED TO WATER DELIVERED/CONSUMED:

Total Water Treated for the Year (Produced)	60,140.87 MG
(Increase) Decrease In Clear Water Storage	-24.90 MG
Total Treated Water Delivered/Consumed for the Year	<u>60,115.97 MG</u>

CHEMICAL TREATMENT AND ANALYSIS:  
TREATED WATER IN DISTRIBUTION SYSTEM - 2015

CHEMICAL TREATMENT

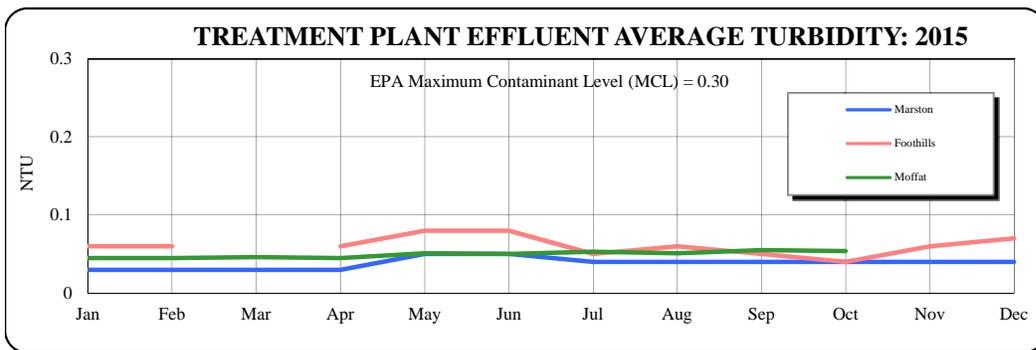
Chemicals are used at various points throughout the treatment plants to provide for appropriate water treatment including oxidation, coagulation, pH adjustment, fluoridation and disinfection. The following are total pounds and cost of chemicals used at each treatment plant.

	<u>Pounds of Chemicals Used</u>	<u>Total Cost</u>
Foothills	19,364,184	\$ 3,229,480
Moffat	5,982,525	999,980
Marston	8,070,345	828,381
Recycling	1,770,407	200,570
	<u>35,187,461</u>	<u>\$ 5,258,411</u>

DISTRIBUTION SYSTEM & TREATMENT PLANT EFFLUENT TOTAL COLIFORM RESULTS

<u>Month</u>	<u>Number of Samples</u>	<u>Number of Positives</u>	<u>% Positive</u>
January	406	0	0.00%
February	397	0	0.00%
March	422	0	0.00%
April	412	0	0.00%
May	418	0	0.00%
June	438	0	0.00%
July	451	1	0.22%
August	432	0	0.00%
September	435	1	0.23%
October	468	0	0.00%
November	359	0	0.00%
December	421	0	0.00%
	<u>5,059</u>	<u>2</u>	<u>0.04%</u>

The total coliform group of bacteria is a microbiological indicator used to determine the safety of drinking water for human consumption. The EPA and the Colorado Department of Public Health and Environment require that Denver Water test a minimum of 300 treated water samples each month for total coliforms. The Maximum Contaminant Level (MCL) for total coliform specifies that no more than 5% of the samples taken each month may be positive. All positive samples were further analyzed to determine if *E. coli* bacteria were present, which would indicate possible contamination from a fecal source. There were no *E. coli* positive samples in the current year.



Turbidity is a measure of the clarity of the water. EPA has established 0.30 NTU (Nephelometric Turbidity Unit) as the MCL for turbidity.

TREATED WATER QUALITY SUMMARY:  
TREATMENT PLANT EFFLUENT AVERAGES – 2015

<u>Analysis</u>	<u>Maximum Contaminant Level (MCL)</u>	<u>Marston</u>	<u>Foothills</u>	<u>Moffat</u>
<b>General (mg/L)</b>				
Alkalinity, Total as CaCO <sub>3</sub>		64	62	34
Chlorine, Total		1.74	1.75	1.79
Hardness as CaCO <sub>3</sub>		87	82	48
pH (SU)		7.7	7.8	7.8
Specific Conductance (µS)		300	291	143
Temperature (°C)		11	13	11
Total Dissolved Solids		175	173	100
Turbidity (NTU)	0.30	0.04	0.06	0.05
<b>Metals (µg/L)</b>				
Aluminum		26	40	15
Barium	2,000	35.6	34.9	26
Boron		13.8	13.5	8.2
Calcium (mg/L)		23.2	22.4	14
Magnesium (mg/L)		6.9	6.9	3.1
Manganese		3.9	13	<0.5
Molybdenum		3.5	3.6	1.5
Potassium (mg/L)		1.6	1.5	0.9
Sodium (mg/L)		16.7	17.0	10.2
Strontium (mg/L)		0.16	0.16	0.09
<b>Ions (mg/L)</b>				
Chloride		26.0	25.6	10.1
Fluoride	4.0	0.72	0.77	0.50
Nitrate + Nitrite- Nitrogen	10	0.12	0.11	0.10
Silicon		3.7	3.8	3.3
Sulfate		48.7	47	32.2
<b>Radiological (pCi/L)</b>				
Uranium (µg/L)	30	<0.5	<0.5	<0.5

(Continued next page)

TREATED WATER QUALITY SUMMARY:  
TREATMENT PLANT EFFLUENT AVERAGES – 2015 (Continued)

<u>Analysis</u>	<u>Maximum Contaminant Level (MCL)</u>	<u>Marston</u>	<u>Foothills</u>	<u>Moffat</u>
<b>Disinfection By-Products (µg/L)</b>				
Bromodichloromethane		6.2	5.8	3.0
Chloroform		14.7	16.0	9.5
Dibromochloromethane		1.4	1.1	<0.5
Dichloroacetic acid		10.7	11.7	8.3
Haloacetic Acids	60	19	22	15
Total Trihalomethanes	80	22	24	12
Trichloroacetic acid		7.2	6.9	5.8
<b>Nonspecific Organics</b>				
Total Organic Carbon (mg/L)		2.4	2.5	1.8
Total Organic Halogen (µg/L)		142	190	110

TREATED WATER QUALITY SUMMARY:  
TREATMENT PLANT EFFLUENT AVERAGES – 2015 (Continued)

The following analyses were performed and each of these constituents was either below the reporting limit or the average result was less than the reporting limit. The Maximum Contaminant Level is listed after the analysis in parentheses, if applicable. The unit of measure is also listed if different than that listed for the subsection.

<b>General Parameters</b>	Strontium-90	2-Chlorobiphenyl	Hexachlorocyclopentadiene
Chlorine, Free	Thorium-227,234	2-Chlorophenol	Indeno(1,2,3-cd)pyrene
Asbestos (7 MFL)	Thallium=208	2-Nitrophenol	Isophorone
<b>Metals - plumbing, mining, natural erosion (µg/L)</b>	Uranium-235	2,4-Dichlorophenol	Methacrylonitrile
Antimony (6)	Zinc-65	2,4-Dimethylphenol	Methyl acrylate
Arsenic (10)	<b>human activity, Algal toxins</b>	2,4-Dinitrophenol	Methylmethacrylate
Beryllium (4)	<i>Cryptosporidium (oocysts/L)</i>	2,4-Dinitrotoluene	Naphthalene
Cadmium (5)	<i>E. coli (count/100 ml)</i>	2,6-Dinitrotoluene	n-Butyl Acrylate
Chromium (100)	<i>Giardia (TT<sup>1</sup>) (cysts/L)</i>	3,5-Dichlorobenzoic acid	N-nirtosopyrrolidine
Cobalt	<i>Legionella (TT<sup>1</sup>)</i>	4-tert-Octylphenol	Nitrobenzene
Copper (TT <sup>1</sup> )	Plankton	4-Nitrophenol	Nonylphenol isomer mix
Iron	Cylindrospermopsin (Algal Toxin)	4,6-Dinitro-2-methylphenol	Pyrene
Lead (TT <sup>1</sup> )	Microcystin-LA (Algal Toxin)	Acenaphthene	TCPP
Lithium	Microcystin -LF (Algal Toxin)	Acenaphthylene	TDCPP
Mercury (2)	Microcystin-LR (Algal Toxin)	Acetochlor	Trichloronate
			<b>SOC - Plastizers, Surfactants, Personal Care Products µg/L, ng/L</b>
Selenium (50)	Microcystin-LY (Algal Toxin)	Ametryn	1,2,4,5-Tetrachlorobenzene
Silver	Microcystin-RR (Algal Toxin)	Anthracene	1,1,2-Trichloro-1,2,2-trifluoroethane
Thallium (2)	Microcystin-YR (Algal Toxin)	Benzo(a)anthracene	2,4,5-Trichlorobiphenyl
Titanium	Nodularin (Algal Toxin)	Benzo(a)pyrene (0.2)	4-Chloro-3-methylphenol
Vanadium	Total Coliform (DS)	Benzo(b)fluoranthene	
	<b>Disinfection By-Products - reaction between the disinfectant and natural organic matter (µg/L)</b>	Benzo(g,h,i)perylene	Benzyl chloride
<b>Ions - from farming, and industry, (mg/L, µg/L)</b>		Benzo(k)fluoranthene	Bis(2-ethylhexyl)adipate
Bromide	Bromoform	Chloroprene	Bis(2-ethylhexyl)phthalate
Carbon disulfide	Carbon Tetrachloride	Chloropropylate	Bisphenol A
Cyanide, Total	Chlorate	Chrysene	Butyl benzyl phthalate
Hydroxide	Chloroacetone nitrile	Cyclohexanone	Butylparaben
Nitrite-Nitrogen (1)	Monochloroacetic Acid	Dibenzo(a,h)anthracene	Chloroprene
Ortho Phosphorus, Dissolved	N-nitrosodiethylamine (Nitrosamine)	Diethanolmine (DEA)	Desethylatrazine
Perchlorate	N-nitrosodimethylamine (NDMA)		
<b>Radiological erosion of natural deposits/mining (pCi/L)</b>	N-nitrosodi-n-butylamine	Ethyl acrylate	Desisopropylatrazine
Alpha	N-nitrosodi-n-propylamine	Ethyl tert-butyl ether	Diethyl phthalate
Beta	N-nitrosomethylethylamine	Fluoranthene	Dimetyl phthalate
Cesium-134,137	N-nitrosodiphenylamine	Fluorene	Di-n-butyl phthalate
Iodine-129, 131	Tribromoacetic Acid	Hexachlorobenzene	Di-n-octyl phthalate
Radium <sup>226/228</sup> (5)	<b>Synthetic Organic Compounds (SOC) - from Feedstock/ combustion by-products, Flame retardants (µg/L)</b>		

<sup>1</sup>TT indicates that the MCL involves treatment techniques.

TREATED WATER QUALITY SUMMARY:  
TREATMENT PLANT EFFLUENT AVERAGES – 2015 (Continued)

Epichlorohydrin	alpha-Chlordane	Cyanazine	Ethion
Ethyl acrylate	Acifluourfen	Dacthal	Ethofumesate
Ethyl methacrylate	Alachlor (2)	Dalapon (200)	Ethoprop
Galaxolide	Aldicarb	DCPA acid metabolites	Ethylene dibromide
Isobutylparaben	Aldicarb sulfone	Demeton O	Etridiazole
Isopropyl ether	Aldicarb sulfoxide	Demeton S	Famphur
Methyl paraben	Aldrin	Desethylatrazine	Fenamiphos
Methacrylonitrile	Atraton	Desisopropylatrazine (DIA)	Fenarimol
Polychlorinated Biphenyls (PCB)	Atrazine (3)	delta- BHC	Fenitrothion
PCB 1016 Aroclor	Azinphos-ethyl	Diazinon	Fenoxaprop-ethyl
PCB 1221 Aroclor	Azoxystrobin	Dicamba	Fensulfothion
PCB 1232 Aroclor	Baygon	Dichlobenil	Fenthion
PCB 1242 Aroclor	Bendiocarb	Dichlofenthion	Fenuron
PCB 1248 Aroclor	Benfluralin	Dichloran	Fipronil
PCB 1254 Aroclor	Bensulide	Dichloprop	Fluazifop-butyl
PCB 1260 Aroclor	Bentazon	Dichlorvos	Fluchloralin
Perfluoro octanesulfonic acid (PFOS)	β-BHC (beta-BHC)	Dicrotophos	Fluometuron
Perfluoro-1-butanesulfonic acid (PFBS)	Bolstar	Dieldrin	Fluridone
Perfluoro-1-hexanesulfonic acid (PFHxS)	Bromacil	Diflubenzuron	Fonofos
Perfluoroheptanoic acid (PFHpA)	Butachlor	Dimethoate	gamma-Chlordane
Perfluoro-nonanoic acid (PFNA)	Butylate	Dinoseb	Halofenozide
Perfluorooctanoic acid (PFOA)	Carbaryl	Dioxathion	Halosulfuron methyl
Phenol	Carbofuran	Dioxin	Heptachlor (0.4)
Pyrene	Carbophenothion	Diphenamid	Heptachlor Epoxide (0.2)
Tetrabromobisphenol A	Carboxin	Disulfoton	Hexachlorobenzene
Toxaphene	Chlordane	Disulfoton sulfone	Hexazinone
<b>Pesticides µg/L</b>	Chlorfenvinphos	Disulfoton sulfoxide	Imidacloprid
1,2-Dibromo-3-chloropropane (0.2)	Chloridazon	Diuron	Isophorone
2,4,5-T	Chlorneb	Dursban	Kepone
2,4,5-Trichlorobiphenyl	Chlorobenzilate	Endosulfan sulfate	Leptophos
2,4,6-Trichlorophenol	Chlorothalonil	Endosulfan –A	Lindane
2,4-D (70)	chlorpyrifos methyl	Endosulfan –B	Linuron
2,4-DB	cis-Nonachlor	Endrin (2)	Malathion
3-Hydroxycarbofuran	cis-Permethrin	Endrin Aldehyde	Metalaxyl
4,4'-DDD	Clomazone	EPN	Metazachlor
4,4'-DDE	Clopyralid	EPTC	Methiocarb
4,4'-DDT	Coumaphos	Esfenvalerate	Methomyl
alpha-BHC	Crotoxyphos	Ethalfuralin	Methoxychlor
			Methyl paraoxon

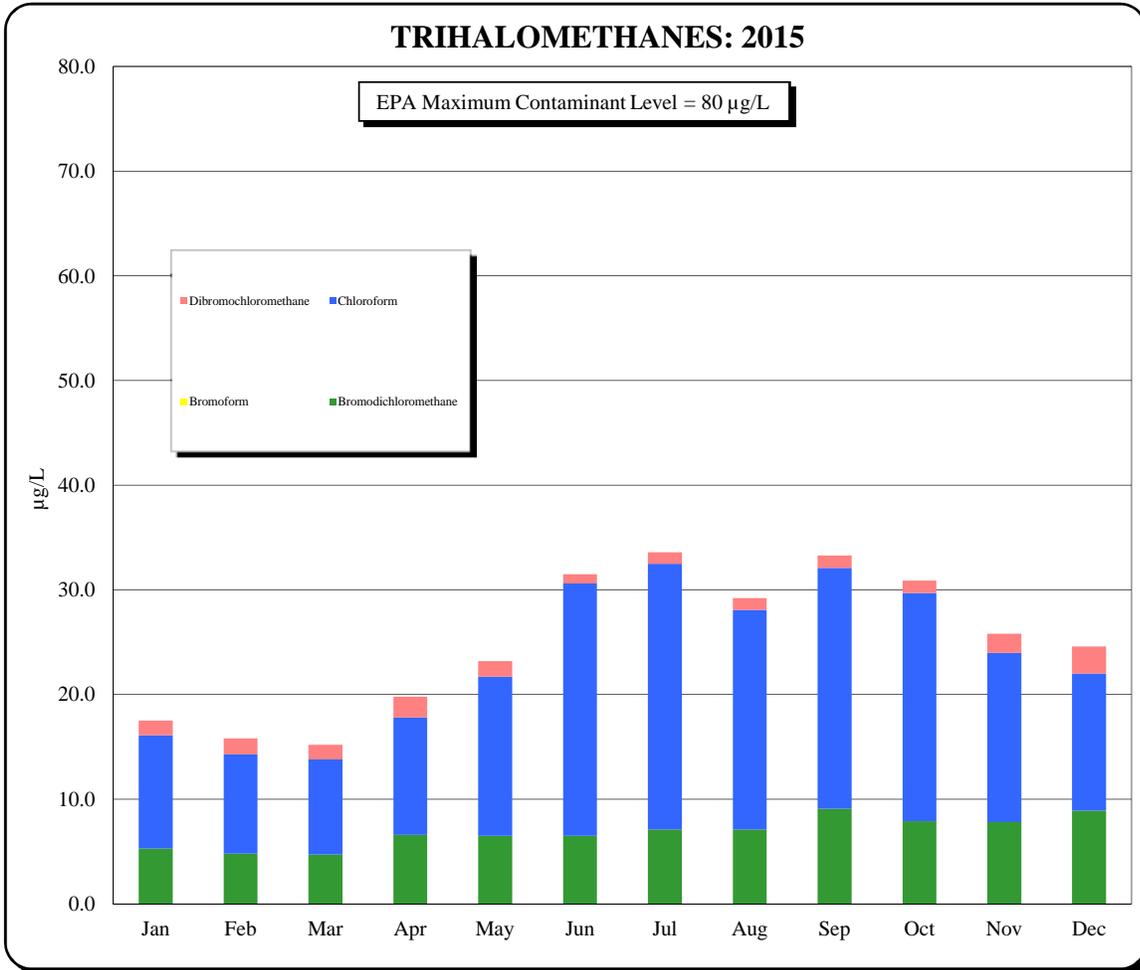
TREATED WATER QUALITY SUMMARY:  
TREATMENT PLANT EFFLUENT AVERAGES – 2015 (Continued)

Methyl parathion	Propargite	1,2,4-Trimethylbenzene	Methyl tert-butyl ether (MTBE)
Metolachlor	Propazine	1,2-Dichloropropane (5)	n-Butylbenzene
Metribuzin	Propiconazole isomer a	1,3,5-Trimethylbenzene	n-Propylbenzene
Metsulfuron-methyl	Propiconazole isomer b	1,3-Dichloropropane	o-Chlorotoluene
Mevinphos	Propoxur	1,3-Dichloropropene	o-Dichlorobenzene (600)
MGK 264 isomer a	Prothiofos	1,4-Dioxane	p-Chlorotoluene
MGK 264 isomer b	Siduron, Total	1-Chlorobutane	p-Dichlorobenzene (78.5)
MGK 326	Silvex (50)	2,2-Dichloropropane	Pentachlorobenzene
Mirex	Simazine (4)	2-Hexanone	Pentachloroethane
Molinate	Simetryn	2-Nitropropane	p-Isopropyltoluene (Cymene)
Monocrotophos	Stirofos	4-Methyl-2-Pentanone (MIBK)	Propionitrile
Monuron	Sulfotep	Acrylonitrile	sec-Butylbenzene
Naled	Tebuthiuron	Allyl chloride	Styrene (100)
Napropamide	Terbacil	Anilazine	tert-Amyl Methyl ether (TAME)
Neburon	Terbufos	Anthracene	tert-Butyl alcohol
N-nitrosomorpholine	Terbutryn	Benzene (5)	tert-Butylbenzene
N-nitrosopiperidine	Thidiazuron	Bromobenzene	Tetrachloroethene (5)
Norflurazon	Thiobencarb	Bromoethane	Tetrahydrofuran
Oryzalin	Thionazin	Bromomethane	Toluene (1000)
Oxadiazon	trans-Nonachlor	Carbon disulfide	trans-1,2-Dichloroethene (100)
Oxamyl (200)	Triademefon	Chlorobenzene (100)	trans-1,3-Dichloropropene
Oxychlorane	Triadimenol	Chlorodifluoromethane (CFC 22)	trans-1,4-Dichloro-2-butene
Oxyfluorfen	Tribufos	Chloroethane	Trichloroethylene (5) (TCE)
Paclobutrazol	Trichloronate	Chloromethane	Trichlorofluoromethane
Parathion	Tricyclazole	cis-1,2-Dichloroethene (70)	Vinyl acetate
Pebulate	Trifluralin	cis-1,3-Dichloropropene	Vinyl Chloride (2)
Pendimethalin	Vernolate	Dibromomethane	Xylenes (10000)
Pentachlorophenol (1)	Vinclozolin	Dichlorodifluoromethane (CFC-12)	<b>Pharmaceuticals/Hormones (µg/L, ng/L)</b>
Pentachloronitrobenzene	Z-Phosphamidon	Dichloromethane (5)	17 alpha-Estradiol
	<b>Volatile Organic Compounds (VOC) - from solvents, feedstock/ fuels, Flame retardants (µg/L, ng/L)</b>		
Permethrin Isomers		Diisopropyl ether	17 alpha-Ethynyl estradiol
Permethrin, cis & trans	1,1,1,2-Tetrachloroethane	Epichlorohydrin	17-beta-Estradiol
Phorate	1,1,1-Trichloroethane (200)	Ether	Acetaminophen (Tylenol)
Phosmet	1,1,2,2-Tetrachloroethane	Ethyl Benzene (700)	Antipyrine
Picloram	1,1,2-Trichloroethane (5)	Ethyl tert-butyl ether	Atenolol
Profluralin	1,1-Dichloroethane	Hexachloroethane	Azithromycin
Prometon	1,1-Dichloroethene (7)	Hexachlorobutadiene	Bacitracin
Prometryn	1,1-Dichloropropene	Isopropylbenzene (Cumene)	Bezafibrate
Pronamide	1,2,3-Trichlorobenzene	m-Dichlorobenzene	Caffeine
Propachlor	1,2,3-Trichloropropane	Methyl iodide	
Propanil	1,2,3-Trimethylbenzene		
	1,2,4-Trichlorobenzene (70)		

TREATED WATER QUALITY SUMMARY:  
TREATMENT PLANT EFFLUENT AVERAGES – 2015 (Continued)

Carbadox	Oleandomycin
Carbamazepine	Oxytetracycline
Carboxin	Paraxanthine
Chloramphenicol	Penicillin G
Chlorotetracycline	Penicillin V
Ciprofloxacin	Phenanthrene
Clofibric acid	Prednisone
cis-Testosterone	Primidone
Cotinine	Progesterone
Dexamethasone	Roxithromycin
Diazepam (Valium)	Salicylic acid
Diclofenac	Salinomycin
Diethylstilbestrol (DES)	Simvastatin
Dilantin	Sulfachloropyridazine
Diltiazem	Sulfadiazine
Doxycycline	Sulfadimethoxine
Enrofloxacin	Sulfamerazine
Erythromycin	Sulfamethazine
Estradiol	Sulfamethizole
Estriol	Sulfamethoxazole
Estrone	Sulfasalazine
Fluoxetine (Prozac)	Sulfathiazole
Gemfibrozil	trans-Testosterone
Ibuprofen	Tetracycline
Iopromide	Theobromine
Lasalocid	Theophylline
Levothyroxine (Synthroid)	Thiabendazole
Lincomycin	trans-Testosterone
Meprobamate	Triclocarban
Monensin	Triclosan
Naproxen (Aleve)	Trimethoprim
Narasin	Tylosin
Norfloxacin	Virginiamycin M1

DISTRIBUTION SYSTEM AVERAGE TRIHALOMETHANES - 2015



Trihalomethanes (THMs) are organic compounds formed when chlorine disinfectant is added to the water. The use of chlorine and other chlorine-based disinfectant compounds is mandated by health regulatory agencies to eliminate microbiological contaminants from drinking water. The creation of THMs is a consequence of this necessary practice. THMs are comprised of four individual compounds. EPA has established 80 mg/L as the MCL for Total Trihalomethanes (the sum of the four individual compounds). The amounts present in the Denver distribution system are consistently below the 80 mg/L level.

WATER QUALITY SAMPLE COLLECTION AND ANALYTICAL PROCEDURES - 2015

Samples Collected:

Watershed	5,544
Treatment plant	4,443
Distribution system	18,953
Other	6,538
	<u>35,478</u>

Analyses Performed:

Microbiological	11,208
Chemical	56,885
	<u>68,093</u>

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# Transmission and Distribution

## 2015 Facts

Miles of pipe installed, net of reductions .....	17.5
Miles of pipe in system .....	3,091.7
Miles of recycled water mains in system .....	67.2
Number of valves operated and maintained .....	82,250
Number of recycled water valves in system .....	1,512
Number of hydrants operated and maintained .....	20,269
Leak Detection Program:	
Miles of pipe surveyed .....	808
Visible leaks pinpointed .....	131
Non-visible leaks detected .....	62

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TRANSMISSION AND DISTRIBUTION MAINS<sup>1</sup> - 2015

SUMMARY OF PIPE BY MATERIAL

Kind of Pipe	Length in Feet		Length in Miles	
	12-31-14	Net Change	12-31-15	12-31-15
Cast iron	5,960,389	(64,594)	5,895,795	1,116.6
Cement Asbestos	1,658,720	949	1,659,669	314.3
Cement Mortar coated steel	121	-	121	-
Concrete <sup>4</sup>	16,267	(5,333)	10,934	2.1
Copper	1,296	110	1,406	0.3
Ductile iron	3,184,440	33,713	3,218,153	609.5
Embedded Cyl Prestressed	79,141	(33)	79,108	15.0
Galvanized	4,307	-	4,307	0.8
Lined Cyl Prestressed	235,473	(4,275)	231,198	43.8
Non-Cyl Prestressed	7,553	5	7,558	1.4
Pretensioned Concrete	69,835	(91)	69,744	13.2
Polyvinyl chloride	3,089,094	126,358	3,215,452	609.0
Reinforced Concrete Cyl	288,486	(14)	288,472	54.6
Reinforced Concrete Non-Cyl	72,922	(11)	72,911	13.8
Steel <sup>3</sup>	1,539,353	7,295	1,546,648	292.9
Steel -tape coated	-	-	-	-
Steel - enamel coated	-	-	-	-
Unknown <sup>2</sup>	24,648	(1,788)	22,860	4.3
	<u>16,232,045</u>	<u>92,291</u>	<u>16,324,336</u>	<u>3,091.7</u>

SUMMARY OF PIPE BY DIAMETER

Diameter of Pipe in Inches	Length in Feet		Length in Miles	
	12-31-14	Net Change	12-31-15	12-31-15
0.75	159	(25)	134	-
1	336	(7)	329	0.1
1.5	395	-	395	0.1
2	1,919	(11)	1,908	0.4
3	5,160	6	5,166	1.0
4	118,518	1,245	119,763	22.7
6	4,759,207	141	4,759,348	901.4
8	4,666,336	72,811	4,739,147	897.6
10	126,691	1,688	128,379	24.3
12	3,319,120	15,078	3,334,198	631.5
14	40,024	(5)	40,019	7.6
15	4,502	-	4,502	0.9
16	559,159	2,518	561,677	106.4
18	56,244	(5,637)	50,607	9.6
20	133,301	(19)	133,282	25.2
24	474,793	6,140	480,933	91.1
27	1,400	(1,361)	39	-
30	419,232	108	419,340	79.4
33	-	-	-	-
36	496,532	(4,912)	491,620	93.1
40	59	-	59	-
42	200,839	3,824	204,663	38.8
45	76	-	76	-
46	22,109	-	22,109	4.2
48	122,000	538	122,538	23.2
51	6,361	(2)	6,359	1.2
54	177,144	8	177,152	33.6
57	12,979	-	12,979	2.5
60	185,833	70	185,903	35.2
63	17,586	-	17,586	3.3
66	78,569	(3)	78,566	14.9
67	1,007	-	1,007	0.2
72	112,058	(34)	112,024	21.2
78	-	-	-	-
84	18,229	12	18,241	3.5
88	-	-	-	-
90	32,851	(242)	32,609	6.2
96	397	(39)	358	0.1
108	57,886	-	57,886	11.0
120	3,034	335	3,369	0.6
144	-	66	66	-
150	-	-	-	-
	<u>16,232,045</u>	<u>92,291</u>	<u>16,324,336</u>	<u>3,091.7</u>

<sup>1</sup>Mains within the City and Total Service Contract Areas.

<sup>2</sup>Unknown pipe material is assumed to be cast iron.

<sup>3</sup>Steel pipe is no longer separated out by pipe coating. That information is tracked separately.

<sup>4</sup>The Conduit Rectification Project has allowed concrete pipe to be more discretely defined as variations of Cylindrical Prestressed and Reinforced.

VALVES<sup>1</sup> - 2015

SUMMARY OF VALVES BY TYPE

Type of Valve	12-31-14	Net Change	12-31-15
Air vacuum valve	3,088	92	3,180
Ball valve	43	(2)	41
Blowoff valve	3,172	99	3,271
Butterfly valve	1,791	11	1,802
Check valve	95	1	96
Cone valve	130	-	130
Gate valve	47,883	(695)	47,188
Hub valve	24	-	24
MacDougall blowoff valve	147	(2)	145
Pito (Corp stop)	625	(5)	620
Pressure regulating valve	291	-	291
Unknown	-	-	-
Vacuum valve	16	-	16
Gate valve - Resilient Seat	23,408	1,487	24,895
Altitude valve	1	-	1
Corp Stop	505	3	508
Surge valve	22	-	22
Slide gate valve	12	-	12
Plug valve	1	(1)	-
Sleeve valve	5	-	5
Knife valve	3	-	3
	<u>81,262</u>	<u>988</u>	<u>82,250</u>

SUMMARY OF VALVES BY DIAMETER

Diameter of Valve in Inches	12-31-14	Net Change	12-31-15
0.75	70	1	71
1	1,332	(11)	1,321
2	3,503	76	3,579
2.5	-	-	-
3	167	3	170
4	1,788	12	1,800
6	37,973	354	38,327
8	19,153	408	19,561
10	612	12	624
12	14,184	133	14,317
14	105	-	105
15	2	-	2
16	504	-	504
18	141	(2)	139
20	253	(1)	252
24	694	(3)	691
27	-	-	-
30	252	1	253
36	233	(2)	231
42	88	2	90
48	76	(1)	75
54	45	1	46
60	45	2	47
66	4	-	4
72	22	-	22
84	7	-	7
96	6	-	6
108	3	-	3
120	-	3	3
	<u>81,262</u>	<u>988</u>	<u>82,250</u>

<sup>1</sup>Valves within the City and Total Service Contract Areas.

# FIRE HYDRANTS<sup>1</sup> - 2015

## FIRE HYDRANTS

<u>Size in Inches</u>	<u>Total Hydrants</u>		
	<u>12-31-14</u>	<u>Net Change</u>	<u>12-31-15</u>
4	41	-	41
6	19,989	239	20,228
	<u>20,030</u>	<u>239</u>	<u>20,269</u>

## FIRE HYDRANT BRANCH PIPE

<u>Size in Inches</u>	<u>Kind of Pipe</u>	<u>Length in Feet</u>		
		<u>12-31-14</u>	<u>Net Change</u>	<u>12-31-15</u>
4	Cast iron	807	(24)	783
4	Ductile iron	101	-	101
6	Cast iron	88,091	(1,922)	86,169
6	Cement asbestos	3,059	-	3,059
6	Ductile iron	265,436	7,409	272,845
6	Polyvinylchloride	929	-	929
6	Steel	18,520	245	18,765
6	Unknown	12,999	(286)	12,713
8	Steel	385	-	385
		<u>390,327</u>	<u>5,422</u>	<u>395,749</u>

## SUMMARY OF FIRE HYDRANT BRANCH PIPE BY MATERIAL

<u>Kind of Pipe</u>	<u>Length in Feet</u>		
	<u>12-31-14</u>	<u>Net Change</u>	<u>12-31-15</u>
Cast iron	88,898	(1,946)	86,952
Cement asbestos	3,059	-	3,059
Ductile iron	265,537	7,409	272,946
Polyvinylchloride	929	-	929
Steel	18,905	245	19,150
Unknown	12,999	(286)	12,713
	<u>390,327</u>	<u>5,422</u>	<u>395,749</u>

## SUMMARY OF FIRE HYDRANT BRANCH PIPE BY DIAMETER

<u>Size in Inches</u>	<u>Length in Feet</u>		
	<u>12-31-14</u>	<u>Net Change</u>	<u>12-31-15</u>
4	908	(24)	884
6	389,034	5,446	394,480
8	385	-	385
	<u>390,327</u>	<u>5,422</u>	<u>395,749</u>

<sup>1</sup>Fire hydrants and branch pipe within the City and Total Service Contract Areas.

RECYCLED WATER MAINS AND VALVES - 2015

RECYCLED WATER MAINS

SUMMARY OF PIPE BY MATERIAL

Kind of Pipe	Length in Feet		
	12-31-14	Net Change	12-31-15
Copper	117	-	117
Ductile Iron	25,812	117	25,929
PVC	192,485	823	193,308
Steel	135,491	213	135,704
	<u>353,905</u>	<u>1,153</u>	<u>355,058</u>

SUMMARY OF PIPE BY DIAMETER

Size	Kind of Pipe	Length in Feet		
		12-31-14	Net Change	12-31-15
2"	Copper	83	-	83
2"	PVC	60	(55)	5
2"	Steel	17	-	17
3"	Copper	34	-	34
3"	PVC	481	(468)	13
4"	Ductile Iron	151	45	196
4"	PVC	7,022	(259)	6,763
4"	Steel	34	(8)	26
6"	Ductile Iron	4,619	106	4,725
6"	PVC	15,781	(1,172)	14,609
6"	Steel	461	20	481
8"	Ductile Iron	2,158	44	2,202
8"	PVC	32,610	3,605	36,215
8"	Steel	277	(46)	231
10"	Ductile Iron	44	63	107
10"	PVC	363	(196)	167
10"	Steel	81	12	93
12"	Ductile Iron	308	-	308
12"	PVC	44,908	(190)	44,718
12"	Steel	9,903	26	9,929
14"	Steel	13	-	13
16"	Ductile Iron	76	(31)	45
16"	PVC	25,082	933	26,015
16"	Steel	119	-	119
18"	PVC	91	(49)	42
18"	Steel	28	(1)	27
20"	PVC	33,697	8	33,705
20"	Steel	254	32	286
24"	PVC	31,439	(425)	31,014
24"	Steel	5,713	35	5,748
30"	Ductile Iron	1,525	(126)	1,399
30"	PVC	68	(27)	41
30"	Steel	23,619	106	23,725
36"	DI	16,930	16	16,946
36"	PVC	419	(419)	-
36"	Steel	29,256	36	29,292
42"	PVC	302	(302)	-
42"	Steel	36,325	(6)	36,319
48"	PVC	164	(164)	-
48"	Steel	8,023	(5)	8,018
54"	Steel	21,289	15	21,304
84"	Steel	78	-	78
		<u>353,905</u>	<u>1,153</u>	<u>355,058</u>

RECYCLED WATER VALVES

SUMMARY OF VALVES BY TYPE

Type of Valve	12-31-14	Net Change	12-31-15
Air vacuum valves	266	74	340
Blowoff valve	174	14	188
Butterfly valve	217	-	217
Check Valve	35	1	36
Corp Stop	98	4	102
Cone	6	-	6
Gate valve	558	40	598
Pitot	18	-	18
Plug Valve	3	-	3
PRV	4	(1)	3
Sleeve Valve	1	-	1
	<u>1,380</u>	<u>132</u>	<u>1,512</u>

SUMMARY OF VALVES BY DIAMETER

Diameter of Valve	12-31-14	Net Change	12-31-15
1"	115	-	115
2"	220	45	265
2.5"	-	5	5
4"	146	36	182
6"	400	19	419
8"	124	12	136
10"	20	5	25
12"	147	9	156
16"	29	1	30
18"	1	-	1
20"	47	-	47
24"	55	-	55
30"	19	-	19
36"	28	-	28
42"	13	-	13
48"	7	-	7
54"	9	-	9
	<u>1,380</u>	<u>132</u>	<u>1,512</u>

## BREAKS IN MAINS, WATER CONTROL AND LEAK DETECTION SERVICES - 2015

### DENVER MAIN BREAKS

<u>Size</u>	<u>Pipe Material</u>	<u>Number of Breaks</u>
3"	Cast Iron	-
4"	Cast Iron	2
4"	Ductile Iron	2
4"	Cement Asbestos	1
6"	Ductile Iron	11
6"	Cement Asbestos	9
6"	PVC	1
6"	Cast Iron	118
8"	Cement Asbestos	7
8"	Ductile Iron	2
8"	PVC	3
8"	Cast Iron	50
12"	Cement Asbestos	2
12"	Cast Iron	47
12"	Ductile Iron	6
16"	PVC	-
16"	Ductile Iron	-
16"	Steel	1
20"	Steel	-
		262

### TOTAL SERVICE MAIN BREAKS

<u>Size</u>	<u>Pipe Material</u>	<u>Number of Breaks</u>
4"	Cast Iron	-
4"	Ductile Iron	3
6"	Ductile Iron	6
6"	Cast Iron	20
6"	Cement Asbestos	-
8"	Cement Asbestos	1
8"	Ductile Iron	1
8"	Cast Iron	12
8"	PVC	-
10"	Cast Iron	1
12"	Cast Iron	1
12"	Ductile Iron	3
16"	Ductile Iron	1
		49

### WATER CONTROL SERVICES

	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>
Service Calls	7,818	7,565	8,989	11,892	10,994
Service Leaks	542	337	719	402	385
Service Turn Ons	349	319	649	844	661
Service Turn Offs	601	614	1,588	935	1,094
Valve Leaks	128	59	64	58	64
Fire Hydrants Hit	109	155	146	146	148
Fire Hydrants Packed and Greased	17,351	28,110	22,153	23,360	25,574
Fire Hydrants Excavated for Replacement	41	116	160	435	301
Fire Hydrants, Miscellaneous Repairs	592	1,125	2,718	1,171	737
Total Fire Hydrants Tested and Repaired	18,093	29,506	25,177	25,112	26,760

### LEAK DETECTION PROGRAM

	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>
Non-Visible Leaks Detected	62	110	61	93	122
Non-Visible Water Leaks Loss (1000's of Gallons) <sup>1</sup>	16,262	28,908	16,030	24,440	32,061
Visible Leaks Pinpointed	131	160	116	137	199
Miles Surveyed	808	1,290	615	1,022	802
Savings Generated from Saving Lost Water <sup>1</sup>	\$ 31,120	\$ 55,212	\$ 30,618	\$ 46,681	\$ 61,237
Savings Generated from Pinpointing Leaks <sup>1</sup>	91,700	112,000	81,200	95,900	139,300
Total Savings Generated from Leak Detection Program <sup>1</sup>	\$ 122,820	\$ 167,212	\$ 111,818	\$ 142,581	\$ 200,537

<sup>1</sup>Estimated.

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