

2017 | BUDGET

Cheesman Reservoir



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Denver Water
Colorado**

For the Fiscal Year Beginning

January 1, 2016

A handwritten signature in black ink, reading "Jeffrey R. Enos".

Executive Director

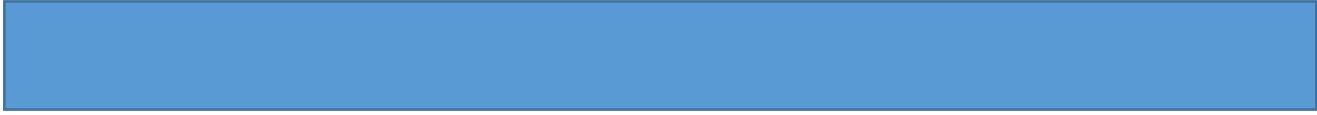
Distinguished Budget Presentation Award

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to Denver Water, Colorado for its annual budget for the fiscal year beginning January 1, 2016. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communications device.

This award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.

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Introduction



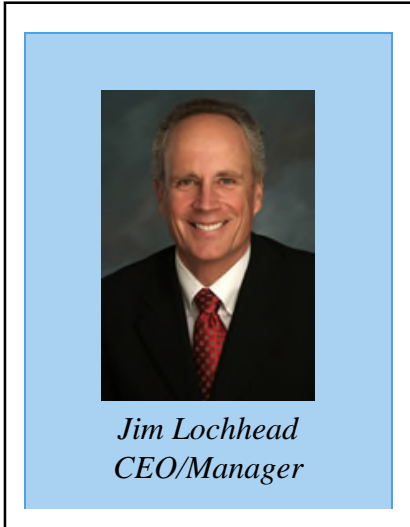
INTRODUCTION

To our customers and other interested readers:

Denver Water was founded in 1918, making us the oldest utility in the State of Colorado. We have a nearly 100-year-old track record of operating a robust and reliable system, while delivering high-quality water to our customers. Our Mission is to expertly manage and supply an essential natural resource to sustain our vibrant community -- because water connects us all.

Always moving forward:

In order to be a leader in our industry, we need to be in a continuous state of improvement. In 2014, we identified seven, three-year breakthrough objectives to further the desired outcomes of our Strategic Plan. 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 in 2016. Each breakthrough objective is supported by one or more related goals. The following is documentation of our progress for 2016.



- **Improve top-box customer satisfaction score by 10 percent from 2013 scores.**
 - Customer Care’s top-box satisfaction has increased eight points over the last two years. Not only are these satisfied customers, but top-box satisfaction indicates these are customers who are willing to advocate on behalf of Denver Water.
 - Street Maintenance’s overall satisfaction on work performed was 74 percent, a 1-percentage-point decrease from the same time frame in 2015. We expanded outreach into specific neighborhoods through the “Next Door” online application to include engineering and pipe replacement projects. We added maps of our pipe replacement projects to DenverWater.org to keep customers informed of project schedules.
 - Field Interaction’s overall satisfaction on work performed was 95 percent, a 7-percentage-point increase from the same time frame in 2015. We began to distribute small toilet repair kits to customers who could benefit from repairing leaks. We are also improving the dispatch process so techs can better meet commitments for customer appointments.
 - We established a 2016 stretch-goal for customer outage hours of less than 30,000 hours. Actual outage hours were 43,524. This is consistent with the downward trend from 2011 outage hours of 54,144. We continue to evaluate processes to reduce customer outage hours.

- **Achieve full alignment of budget development and execution with strategic priorities and True North metrics; incorporate processes to control spending.**
 - Denver Water deployed Phase One of the Organizational Reporting and Communications Alignment (ORCA) project to provide consistent, accurate, timely budget and actual financial information to everyone at Denver Water who is accountable for budgeting and spending. We now have budget and accounting data that uses a consistent data structure, in one system.
 - We continue making improvements to budget development and management processes, using visual management, weekly standup meetings, budget calendars published early in the year, standard formatting for financial reporting and revisions to budget development and management standard work.
- **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.
 - **Compensation:** We completed a compensation study, which aligns jobs to the market and creates a salary structures conducive to a pay-for-performance model.

We completed conversion to a Paid Time Off (PTO) benefit program, saving Denver Water \$5 million in liability moving forward.

We amended changes to our pension plan for 2018, to support full funding of the plan in 15 years.
 - **Community outreach and diversity/inclusion:** HR focused efforts in improving diversity in our candidate pools. Denver Water strives for equal opportunity in all hiring practices. HR has also partnered with multiple external stakeholders to improve our hiring diversity.
- **Transform to a true culture of safety with no lost-work-day injuries by 2017.**
 - Many of the injuries in 2016 were caused by slips/falls, strain/overexertion and injuries getting in and out of vehicles. We hired an industrial ergonomist to work with field crews and provide recommendations to reduce injuries throughout 2017.
 - We are also working to reduce vehicle accidents by hosting safety-immersion sessions focusing on safe driving.
- **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.
 - The project is on time and on budget, with construction on a new Warehouse, Meter Shop, Fleet and Trades buildings. We plan to occupy those buildings in mid-2017.
- **Create a water supply, treatment and delivery strategy for the future.** Initiate a new IRP that expands on the prior IRP by integrating the planning of our entire system with all stakeholders, driving capital spending and embracing a vision for urban water efficiency, including drinking water, wastewater and stormwater.

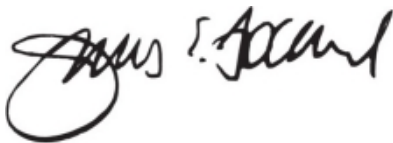
- We completed research of other utility planning methods. We also formulated the IRP's two-year planning process, project objectives and formed a scope of work, budget and project schedule. We also contracted with a technical consultant and a strategy consultant. The project is on schedule and on budget.
- The project team has nearly completed the first four major tasks of the IRP including work-plan development, service-level assumptions documentation, planning-futures creation and current system-assessment documentation. The next step is to develop a gaps-and-opportunities analysis for each planning future.
- **Become a sustainable organization** by managing and reducing our environmental impact, measured by becoming a Gold Leader in Colorado's Environmental Leadership Program.
 - Denver Water hired a sustainability program manager to develop Denver Water's first Sustainability Plan. We also helped with development of an Environmental Stewardship Statement, Denver Water's 2015 Greenhouse Gas Inventory, and coordinated with our Green Team and Environmental Compliance to study best sustainability practices at other organizations.
 - We also developed new policies to support LEED and WELL goals associated with the OCR project, wrote language for Green Bonds that will be issued in 2017 and evaluated contracts with sustainability implications.
 - The Environmental Compliance team developed environmental management systems for the four water treatment plants and trained staff at those locations. In addition, Denver Water achieved Silver Partner certification from the Colorado Department of Public Health and Environment's Environmental Leadership Program.

Conclusion

Denver Water adopted our current Strategic Plan five years ago, and we achieved many of our key priorities. Now we have refreshed our Strategic Plan for the next five years to help the organization set 2018 organizational initiatives and divisional goals.

This is another example of how we must be nimble and adaptable in an ever-changing environment full of challenges. You can count on our organization of passionate, dedicated experts to meet those challenges head on in 2017.

Sincerely,



Jim Lochhead
CEO/Manager

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With questions concerning the budget document please contact:

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About Denver Water



ABOUT DENVER WATER

Denver Water proudly serves high-quality water and promotes its efficient use to 1.4 million people in the city of Denver and many surrounding suburbs. Denver Water serves about a quarter of the state’s population but uses less than 2% of all water, treated and untreated, in Colorado.

- Denver Water is Colorado’s oldest and largest water utility.
- Denver Water was established in 1918 after Denver residents voted to buy the water system from a private company.
- Denver Water is a separate entity from the city of Denver and is funded by water rates and new tap fees, not taxes.
- Denver Water derives its authority from the Charter of The City and County of Denver (Article X).
- Denver Water’s primary water sources include: South Platte River, Blue River, Williams Fork River and Fraser River watersheds.
- Other water sources include: South Boulder Creek, Ralston Creek and Bear Creek watersheds.



HISTORY

Early Settlers

Long before the city of Denver was established, the South Platte River and Cherry Creek were oases for people who traveled the semi-arid Great Plains. These early travelers could do without many things, but not water. That's why pioneers, and the American Indians before them, camped along the banks of Cherry Creek and the South Platte River. The first residents of the area drank water directly from the creek and river. Surface wells and buckets of water sufficed for a while as a delivery system, but they soon proved inadequate. Irrigation ditches were the next step forward.

In 1867, City Ditch was completed, connecting the South Platte in the Littleton area to Capitol Hill. Inevitably, people started questioning water quality in open systems, and in this case it was with good cause. Shortly after City Ditch was completed, the city became alarmed that loose pigs were contaminating the ditch, raising the threat of cholera. The solution? City Council banished the pigs. In 1870, when the rapidly growing community had a population of almost 5,000, the Denver City Water Company was formed.

In 1872, with a large well, a steam pump and four miles of mains, Denver City Water Company began to provide water to homes. Contracts and companies came and went, with concerns about hydrant pressure turning up in the editorial pages of the papers.

Battle to Provide Water

Over the next two decades, 10 water companies fought, collapsed or merged. In 1892, the battle between two water companies became so fierce that the Citizens Water Company, hoping to drive the American Water Works Company of New Jersey out of business, culminated a price-cutting war by offering water for nothing. The Citizens Water Company eventually drove its competitor under.



Workers build a wood-stave pipe in this undated photo. In the early 1900s, many of Denver Water's conduits and large pipes were made of wood.

Finally, the Denver City Water Company was merged into the Denver Union Water Company in October 1894, along with several smaller companies serving various parts of growing Denver. Headed by Walter S. Cheesman and David Moffat, the Denver Union Water Company — predecessor of Denver Water — emerged to establish a stable system.

In 1886, the first infiltration (water treatment) system was installed on Cherry Creek, and in 1889 the Platte Canyon

Filtration Plant was added to the system. This facility, high in the foothills, was renamed the Kassler Treatment Plant. By 1906, Denver water was being chlorinated to prevent cholera and typhoid.

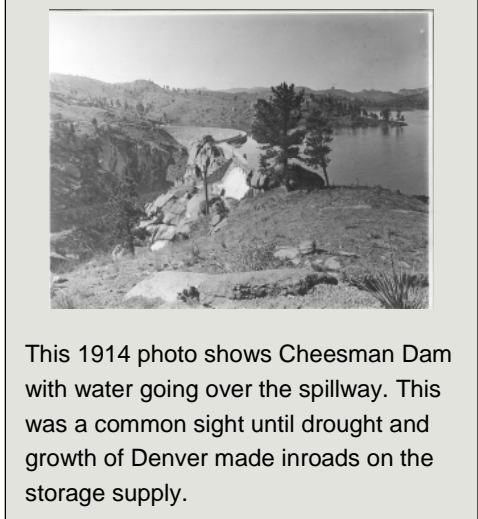
Perhaps the most important engineering feat of the early years was the construction of Cheesman Dam and Reservoir on the South Platte River. When Cheesman was completed in 1905, it was hailed as the solution to Denver's water storage problems.

In the coming years, the system would expand to meet new demand, but Cheesman remains a major accomplishment and keystone for Denver's water needs.

It provides nearly 80,000 acre-feet of water to Denver and remains an important water storage facility in the system.

Denver Water is Born

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.



This 1914 photo shows Cheesman Dam with water going over the spillway. This was a common sight until drought and growth of Denver made inroads on the storage supply.



Workers pose for a photo in the Moffat Tunnel in this 1930 photo.

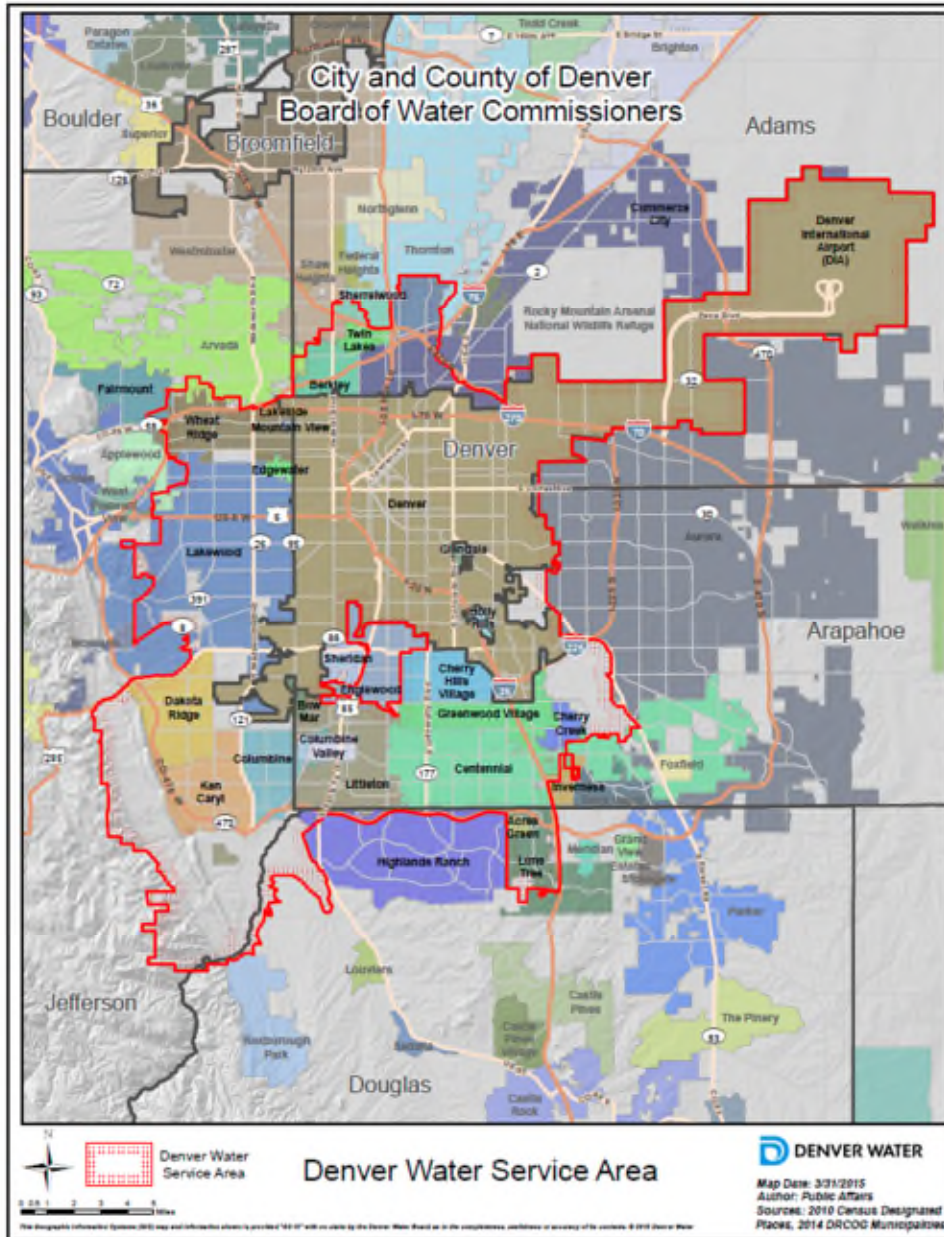
From that time on, Denver Water planned and developed a system to meet the needs of the people of Denver and the surrounding areas. Before World War II, Moffat Tunnel and Eleven Mile Canyon Reservoir were added to the system. Gross, Dillon and Williams Fork reservoirs were added in midcentury. The 23-mile Harold D. Roberts Tunnel was completed in 1962, bringing water to Denver from the other side of the Continental Divide.

Today, Denver Water's service area covers more than 335 square miles, including the City and County of Denver and several suburban distributors.

A system of reservoirs networked by tunnels and canals provides 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.

SERVICE AREA MAP



COMMUNITY PROFILE



DEMOGRAPHICS - 2016

Population	683,096
Households	296,530

GEOGRAPHY - 2016

Square Miles	156
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HOME PRICE - 2016






Median Home Price	\$365,900
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WORKFORCE - 2016	
Labor Force	373,109
Employment	359,291
Unemployment Rate	3.8%

9 industries drive Metro Denver's economy

 Aerospace	 Aviation	 Beverage Production	 Bioscience	
 Broadcasting & Telecom	 Energy	 Financial Services	 Healthcare & Wellness	 IT-Software

Why industries thrive in Metro Denver

 Nation's 2nd-Most Highly Educated Workforce	 Quality Lifestyle = Easy Employee Recruitment	 Connectivity with expansive mass transit system	 Diverse Industries = Solid Economic Growth	 30 Federal Research Laboratories & Research Centers
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Source: Metro Denver Economic Development Corporation

For more information see: <http://www.metrodenver.org>

MISSION AND VALUES

Denver Water's Mission Statement

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.



STRATEGIC PLAN

We use the following guiding principles to evaluate all our decisions and purposefully move us toward our vision to be the best water utility in the nation.

We are customer-centric. We strive to earn the support and trust of our customers – everyone who pays for our service or uses our water. They are our top priority, and we are motivated to serve them.

We are industry leaders. We understand, help develop, implement and share best industry practices. We are forward thinking – we anticipate future trends, and look for and responsibly implement progressive solutions. We are adaptable, resilient and experts in our work.

We take the long-term view. We weigh the consequences of our decisions and actions against multiple scenarios to preserve future options and the sustainability of our community. We provide the best possible outcome for our customers, as well as future generations.

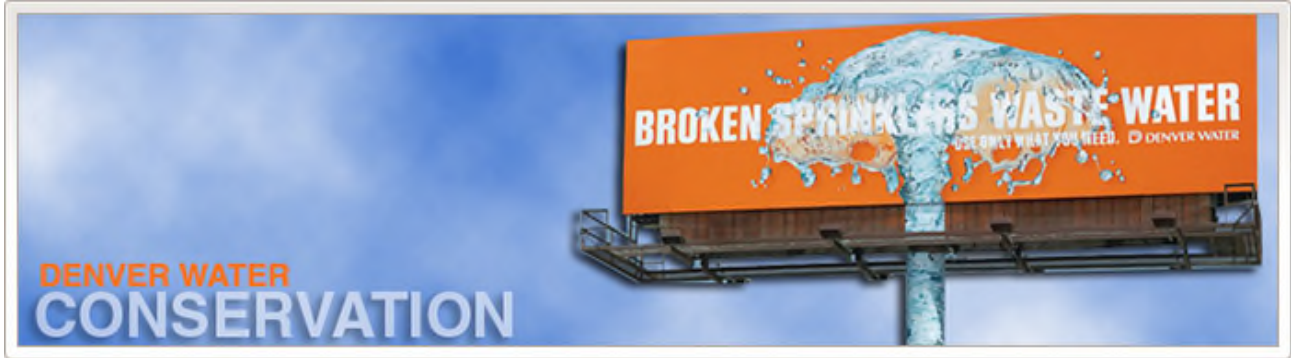
Our Mission

To expertly manage and supply an essential natural resource to sustain our vibrant community — because water connects us all.



The new Strategic Plan was adopted by the Board at the February 8, 2017 Board Meeting.

CONSERVATION



Creating a culture of conservation in Denver dates back to 1936 when Denver Water advertised on street trolleys asking customers to help save water. The modes of transportation have changed, but the message remains the same as does our commitment to helping customers use this precious resource wisely.

At some point in the past decade, Denver Water’s signature orange box asking customers to Use Only What You Need became advertising legend in the metro area, winning countless awards, prompting dozens of requests to buy the rights for the campaign, and even eliciting interest for use on specialty license plates.

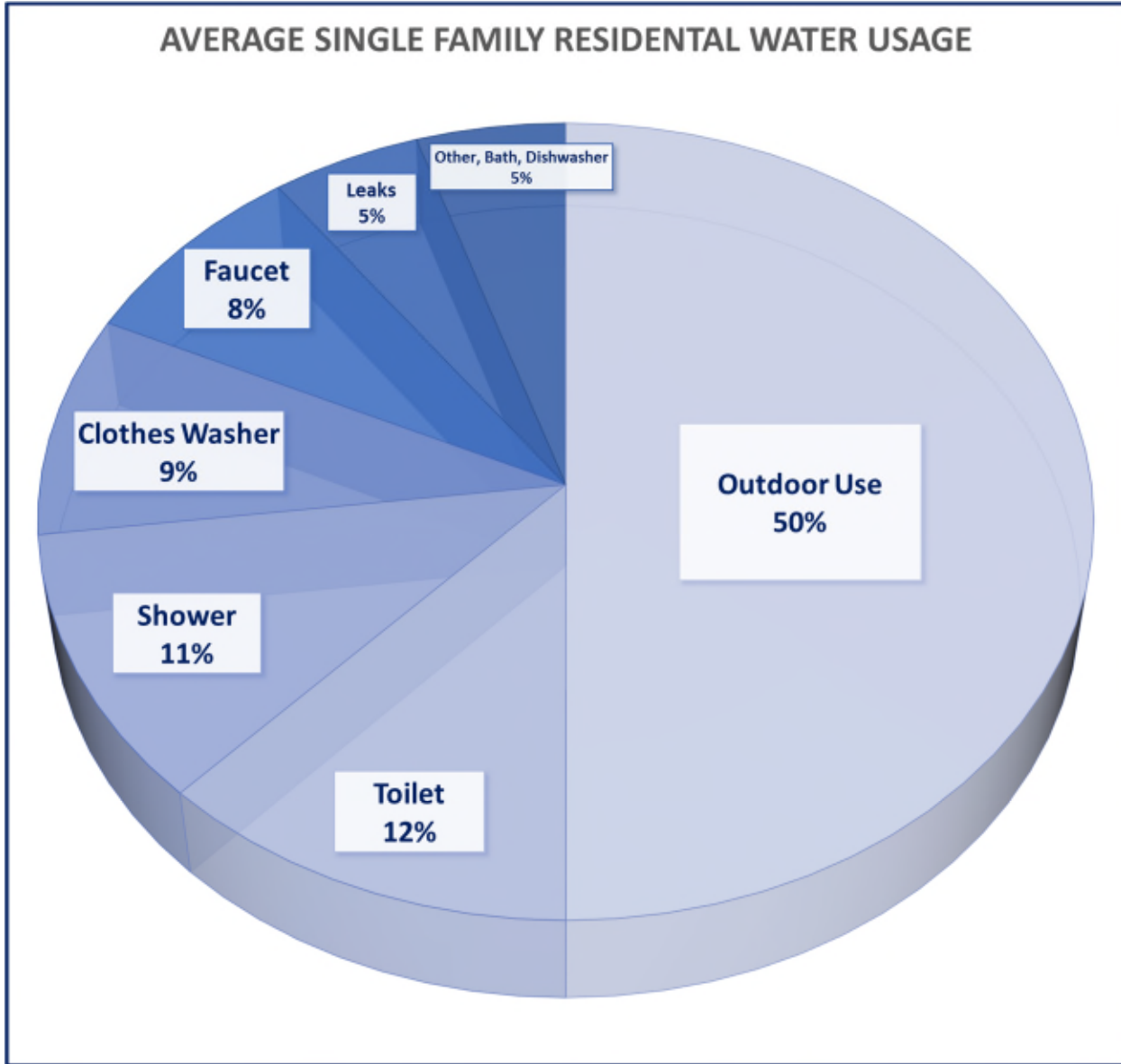
The campaign is coming to a close, making way for a more broad-range message that will go beyond conservation and focus on other issues, including water quality, recreation and long-range planning, among others. It’ll still be unexpected, clever and fun, but it’ll be more individualized and make better use of the digital world. Think less billboard, more hashtag.



Denver Water's Conservation Plan

- Denver Water's conservation plan aims to accelerate the pace of water conservation in its service area and reduce overall water use from pre-2002 drought usage by 22 percent by 2016.
- The plan is a significant part of Denver Water's long-term water supply planning. Denver Water's ability to provide long-term, reliable supplies for its customers rests on three strategies for augmenting existing supplies: conservation, recycled water and developing new supplies.
- Denver Water has had an active conservation program since the 1970s, but the recent drought and evidence of climate change reminds us that we live in a semi-arid region. Denver Water's service area, which includes more than a million people, gets by on an average annual precipitation of only 15 inches supplemented by water stored in reservoirs.
- In 2006, the Denver Water Board of Commissioners set a new conservation goal to reduce water use to 165 gallons per person per day* by 2016. This is a 22 percent reduction from average pre-2002 drought use of 211 gallons per person per day. Coincidentally, Denver Water customers hit the goal of 165 gallons per person per day during the drought, but we did it in part by making emergency sacrifices, not just by reducing waste.
 - *Gallons per person per day is calculated using total treated water consumed by Denver Water customers divided by the population in our service area. It includes all uses: residential, commercial, industrial and institutional.*
- Studies show that after communities make significant emergency changes in how they use water, when the crisis is over, usage will creep back toward pre-drought levels unless conservation becomes a habit. In order to have the water we need for the future, we all need to build conservation into our lifestyles.
- Denver Water does enforce water waste rules and has implemented a section in its Operating Rules that speaks specifically to water conservation. Some components of the conservation program are mandatory, including restrictions on the time of day and number of days that irrigation can occur and the incorporation of soil amendment on property before a new tap can be set. Of course, during severe conditions, Denver Water will impose mandatory drought restrictions.
- To build community awareness about the need to conserve water, Denver Water has continued its Use Only What You Need ad campaign.
- Summer watering rules and schedules are mailed to all Denver Water customers each spring.

WATER USAGE



Denver Water analyzes how customers use water now and how that use may change in the future. By researching customer water-use patterns, we are able to better plan for an adequate supply of clean, reliable water well into the future.

Water use from year to year is heavily influenced by the weather. About half of single-family residential water use is outdoors, and a hot, dry year can mean customers need to use more water than usual.



Organization



BOARD OF WATER COMMISSIONERS



Paula Herzmark
President
Commissioner since 2009



John Lucero
First Vice President
Commissioner since 2007



Greg Austin
Vice President
Commissioner since 2009



Thomas Gougeon
Vice President
Commissioner since 2004



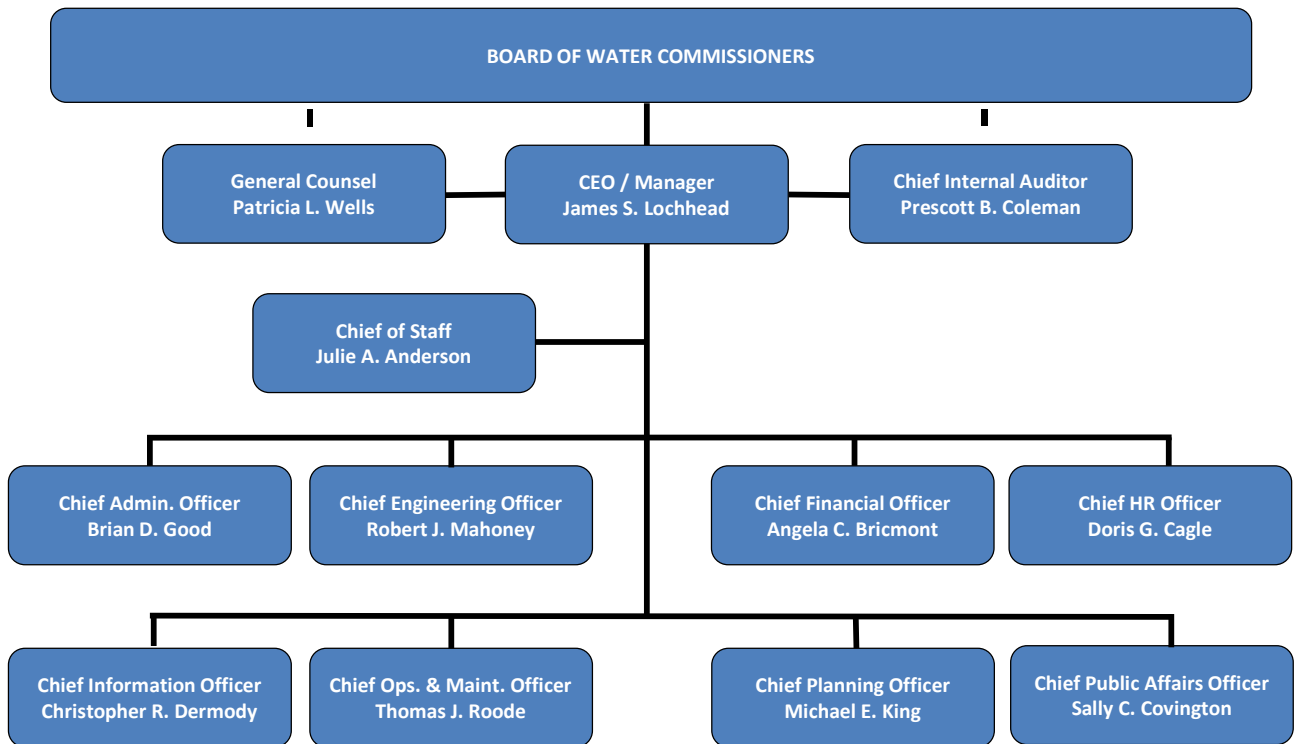
Penfield Tate III
Vice President
Commissioner since 2005

The mayor of Denver appoints Denver's five-member Board of Water Commissioners to staggered six-year terms. When a commissioner's term expires, he or she continues to serve until the mayor reappoints or replaces him or her.

The Board's purpose is to ensure a continuous supply of water to the people of Denver and its suburban customers. Among other duties, commissioners are responsible for setting water rates and monitoring the cost and maintenance of the system. The Board holds its public meetings generally twice a month. Commissioners are paid \$600 annually (\$25 per meeting) for their service — the same amount of money they have been paid since the current Denver Charter was adopted in 1959.

DENVER WATER ORGANIZATION

Denver Water is run by a five-member Board of Water Commissioners, which is charged with ensuring a continuous supply of water to the people of Denver and Denver Water’s suburban customers. The Board designates a CEO/Manager to execute its policies and orders.



DIVISION SUMMARIES

CEO/Manager

The CEO/Manager is the chief executive officer for Denver Water, secretary to the Board of Water commissioners and custodian of all records. He carries out all other duties and responsibilities as assigned by the Board as it fulfills its charter obligations.

The CEO/Manager executes the policies and decisions of the Board and reviews and recommends to the Board changes in rules and regulations with respect to all matters appropriate for its action.

In addition, the CEO/Manager gives overall direction to employees and oversees the work necessary to provide an adequate supply of water to the residents of the City and County of Denver, and areas economically and socially integrated with the city with whom Denver Water has a water service contract.

The CEO/Manager represents the Board in ongoing relationships with all levels of government, community organizations and the public served, and recommends to the Board a rate structure and other income producing procedures that will assure adequate revenues to meet operating and maintenance costs, finance of ongoing capital improvement programs, and the principal and interest payments on long-term debts.

Administrative Services

Administrative Services allows Denver Water to efficiently and effectively deliver services internally and to our customers. The division oversees facilities management: sustainability, environmental compliance, security and recreation. It also oversees organizational functions including purchasing and contracting, records and document administration, safety, emergency management, risk management, and the print shop and mailroom.

Chief of Staff

The chief of staff oversees the successful implementation of key strategic initiatives and is responsible for monitoring and ensuring the attainment of organizational goals. Anderson also oversees continuous improvement for the organization and functions as a strategic business advisor to members of the executive/senior management team.

Engineering

Engineering is responsible for the design, construction and related engineering aspects of physical additions or improvements to the water system. It provides surveying and mapping services, engineering functions, contract administration support, as-built drawings, land acquisition services and GIS database administration for system assets, among other duties. Engineering is composed of seven sections: Survey, Programs and Projects, Construction Management, Distribution and Property Management, Asset Recording, Administration, and Technical Support Services.

Finance

Finance manages financial resources and acts as the disbursing authority for the CEO/Manager. The division is responsible for creating long-range financial plans, controlling and disbursing funds, and for planning, developing and administering water rates, among other duties. Finance is composed of four sections: Budget, Accounting, Treasury Operations and Rate Administration.

Human Resources

The Human Resources division is responsible for interpreting, updating and enforcing Denver Water's personnel policies; maintaining and revising Denver Water's classification and pay plans; establishing, maintaining and processing employees' personnel records; implementing policies, procedures and programs relative to recruiting, hiring, managing and retaining Denver Water employees; developing training and education programs for personal, professional and organizational development; implementing programs related to wellness, counseling, support, employee relations and equal opportunity; administering Denver Water's employee compensation, benefits and retirement programs; finding solutions to employee and managerial concerns while monitoring and developing a healthy work environment; and developing community outreach efforts with the goal of establishing Denver Water as an employer of choice.

Information Technology

The Information Technology division plans, develops, implements and supports all information technology-enabled business systems and operational technology-enabled water process instrumentation and industrial control systems, including enterprise infrastructure and communication systems for Denver Water. This involves providing appropriate resources to deliver secure technology solutions that produce net productivity gains and enhanced information management capabilities, while minimizing the risk of obsolescence and nonsupport.

Internal Audit

Internal Audit reports to the Board directly and to the CEO/Manager administratively. This structure allows Internal Audit to provide independent and objective assurance and consulting services to Denver Water, per the Internal Audit Charter. Internal Audit conducts audit engagements that review and evaluate whether appropriate risk management, governance and internal control procedures are in place and functioning. Owing to its unique position in the organization, Internal Audit provides advice and recommendations to improve internal control, but it is not permitted to make operational or policy decisions.

Each year, Internal Audit works closely with the Board and management to develop an internal audit plan, which follows a structured audit planning process. These audits are scheduled and executed throughout the year, following the internal audit process.

Office of General Counsel

The Office works closely and proactively with employees and managers at all levels of Denver Water, and has a direct reporting responsibility to the CEO/Manager and the Board. Several areas of legal practice are involved in providing legal counsel to Denver Water, including water rights, contracts, civil rights, tort claims, real estate, natural resources, and municipal, employment, construction, environmental and regulatory law. The Office represents Denver Water in litigation, administrative and regulatory hearings, and internal appeal hearings.

Operations and Maintenance

Operations and Maintenance is responsible for operating and maintaining the physical and natural assets used to deliver water to Denver Water customers. These assets include rivers, canals, reservoirs, dams, tunnels, pipelines, valves, hydropower, tanks, pump stations and treatment plants. Operations and Maintenance establishes and implements criteria for the proper operation of all assets to the satisfaction of outside regulating agencies and Denver Water customers. It is composed of five sections: Source of Supply, Water Quality and Treatment, Water Distribution, Support Services, and Business Operations. Support Services provides fleet services, warehouse and trade shop functions, including mechanical, electrical, plumbing, welding, carpentry and grounds maintenance to Denver Water.

Planning

The Planning division identifies the future water and facilities needs of Denver Water and develops strategies for meeting those needs. As it plans for the future, Planning must consider how new water rights, infrastructure and resource management alternatives will work with the Board's existing raw water collection and treated water distribution systems. The division is composed of seven sections: Treated Water Planning, Demand Planning, Water Rights, Water Resources Analysis, Raw Water Supply, Environmental Planning, and Water Resources Planning.

Public Affairs

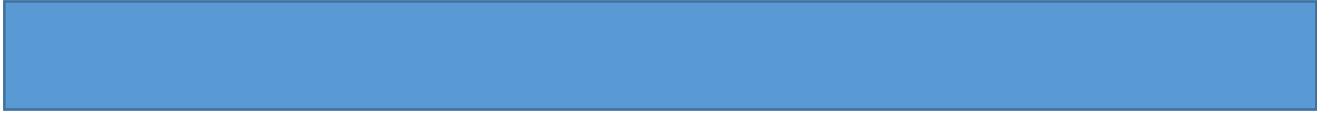
The Public Affairs division develops and maintains strategically effective relationships with a broad range of publics, including customers, stakeholders, governments, communities, news and social media, related organizations and employees. The division also is responsible for issues management, internal and executive communications, youth education, and public outreach functions. The division is composed of four sections: Customer Relations, Communications and Marketing, Government and Stakeholder Relations, and Conservation.

REGULAR EMPLOYEES

Regular Employee Count				
Division	2014 Budget	2015 Budget	2016 Budget	2017 Budget
Administrative Services	-	-	-	54.0
Engineering	174.0	169.8	167.8	161.8
Finance	59.0	59.8	60.1	36.5
Human Resources	27.0	34.0	33.8	33.0
Information Technology	85.0	113.3	115.4	115.4
Manager & Staff	26.0	29.0	29.2	26.2
Operations & Maintenance	553.0	515.5	516.0	490.0
Planning	52.0	52.6	52.5	53.0
Public Affairs	154.0	147.5	148.8	148.8
Total	1,130.0	1,121.5	1,123.6	1,118.7

Note: As of 2016, Customer Relations and Public Affairs merged into one division, Legal rolls up to Manager & Staff and Administrative Services was created as a new Division.





Financial



BUDGET PROCESS

The budget development process is the formal method through which Denver Water ensures alignment between fiscal resources and organizational priorities for the upcoming year. It results in an Approved Budget, which is the defined plan of revenue and expense activities for the year. The Approved Budget is the main internal control document used to monitor and manage revenues and expenditures for Denver Water.

The general timeline for budget development is as follows:



Each year, Denver Water creates a multi-year financial plan to determine the level of revenue adjustments needed to meet annual revenue requirements. The annual revenue requirements include operating expenses, debt service on existing and proposed bonds, and capital expenditures. These expenditures are offset through miscellaneous revenues such as hydropower, customer-related fees, system development charges (SDC), bond proceeds, participation, and interest income. The net requirement is the amount recovered through the user rates.

Operating expense budgets capture the day-to-day, ongoing expenses incurred to run the business. Budget targets for operating expenses are developed annually by reviewing prior year expenditures, determining what expenditures are no longer needed and adding new expenditures for the upcoming year. For this review, expenditures are classified into expense categories and are evaluated to ensure alignment with the organizational goals.

Project budgets, which are generally capital expenditures but can also be operating, are funded by debt, system development charges, or reserves. They are incurred with the intent of improving future operations. Budget targets for capital projects are based on the prioritized list of projects found within the Long Term Capital Forecast. Each year, the system managers prioritize needs and develop a 2-year detailed forecast for capital projects, along with a higher level forecast for years 3 through 10.

FINANCIAL POLICIES

The Board has established financial policies that constitute the basic framework for the financial management of Denver Water. These policies are intended to assist members of the Board and Denver Water’s staff in evaluating current activities and proposals for future programs, and are reviewed on an annual basis and modified to accommodate changing circumstances or conditions. A summary of these policies is presented below:

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.

Revenues

Denver Water is completely funded through rates, fees, and charges for services provided by Denver Water. There are no transfers to or from the city’s general fund. Water rates pay for operation and maintenance expenses, repair, capital replacements and modifications to existing facilities, debt service, a portion of the costs of new facilities, and water supply.

Expenditures

In planning expenditures, Denver Water follows the city charter’s mandate to keep rates as low as good service will permit. This means Denver Water will properly maintain its facilities and continue to seek ways to operate more efficiently.

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.” The Board’s practice is to maintain reserves that are sufficient to provide:

- 25 percent of the next year’s operating costs.
- The greater of average annual depreciation cost and 2 percent of current total capital assets (before depreciation) for replacement capital and equipment purchases.
- 50 percent of expected annual debt service for next year.
- \$10 million in exposure reserve.

Capital Policy

Initial acquisition costs of assets are capitalized if they have a service life of more than one year and a cost of \$50,000 or more. Costs not meeting these criteria are expensed. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the respective asset classes.

Risk Management

The Board is exposed to various risks of loss, including general liability (limited under the Colorado Governmental Immunity Act to \$350,000 per person and \$990,000 per occurrence), property damage, employee life, medical, dental, and accident benefits.

The Board is self-insured for workers' compensation and medical and dental health benefits for its employees. In addition, an insurance policy was purchased to provide employees with long-term disability coverage. The Board has also purchased stop loss insurance to limit its maximum loss exposure for medical claims.

The Board carries commercial property and casualty insurance which includes property and equipment, crime fiduciary and utility excess general liability for catastrophic losses, including floods, fires, earthquakes, and terrorism for major facilities.

Investments

The Board established an Investment Policy for funds not needed for current operations and delegated its authority to invest these funds to the Chief Finance Officer. The Investment Policy establishes the investment objectives, the standards of care, broker and dealer requirements, custody and safekeeping requirements, permitted investments, and investment parameters. The primary objectives, in order of priority, are safety of principal, liquidity, and yield.

Debt Policy

The Board adopted a debt policy in 2013 establishing the philosophy, objectives and practices to issue debt. In accordance with the Debt Policy, debt may be issued to fund capital improvements that expand the system or are otherwise unusual in nature or amount and to refund existing debt. Denver Water is not subject to legal debt limits.

Basis of Accounting

The Board's 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 statement of net assets, revenues are recorded when earned, and expenses are recorded at the time liabilities are incurred. This is different from the basis of budgeting. Denver Water's budget is prepared using the budget basis in which revenues are recorded when they become available and expenditures are recorded at the time liabilities are incurred.

Accounting Standards

The Board's financial statements are prepared in accordance with principles generally accepted in the United States of America (Generally Accepted Accounting Principles). Additionally, the Board applies all applicable pronouncements of the Governmental Accounting Standards Board.

Chart of Accounts

The Chart of Accounts used by Denver Water generally follows the structure presented by the National Association of Regulatory Utility Commissioners for Class A Water Utilities.

FUND STRUCTURE

Denver Water is an “enterprise” of the City within the meaning of Article X, Section 20 of the Colorado Constitution. Although the Board approves the rates and the annual budget, no funds are appropriated. The Board maintains a single fund as mandated by the City Charter which states:

“There is hereby created a Water Works Fund into which shall be placed all revenues received from the operation of the Water Works system and plant together with all monies received by the Board from other sources...”

Denver Water defines fund balance for the Water Works Fund as the balance at the beginning of the period, plus the total sources of funds, less total uses of funds for the period. Within the Water Works Fund there are legally restricted funds and Board designated funds. As outlined above, the Board targets reserves to pay for operating, capital, self-insurance and debt service in an emergency, in addition to the restricted and designated funds. Any excess funds above these target amounts are considered available for future operating and capital projects.

2016 Investment Balance Summary	
\$ in thousands	2016 Actual
Beginning Balance 01/01	240,889
Total Sources	406,728
Total Uses	378,901
Cash Balance Adjustment	18,678
Ending Investment Balance 12/31	\$ 287,394
Less: Board Designated Cash	
Blue River Decree Litigation	4,350
Total Board Designated Cash	4,350
Less: Bond Reserve	12,047
Available Investment Balance	\$ 270,997
Less: 50% of next year's annual debt service minus Bond Reserve	20,902
Less: Operating/Insurance Reserve <small>(25% of Operating + \$10,000,000)</small>	53,465
Less: Part II/III Capital Reserve <small>(Greater of Average Amortization or 2% of Capital less Depreciation)</small>	60,618
Available for Future Operating & Capital	\$ 136,012

DEBT INFORMATION

Denver Water issues debt to fund capital improvements and to refund existing debt. Denver Water has the discretion to issue debt for purposes other than capital improvements, if deemed necessary by the Board. Operating expenses and capital improvements of a normal recurring nature are included in the calculation of the revenue requirement from rates and are financed on a “pay-as-you-go” basis.

The Treasury section of the Finance division monitors the marketplace and evaluates the appropriateness of various financing sources for specific capital projects. The evaluation considers the expected life of the asset, the nature of any covenant requirements, the impact on Denver Water’s financial flexibility and the organization’s capacity to support the projected level of debt.

Existing debt may be refunded depending on market conditions and liquidity requirements. Debt is generally refunded for periods not to exceed the useful life of the assets purchased by the debt. Advance refunding of debt is considered when the net present value of savings is greater than 3% and the refunding conforms to statutory regulations.

One of the objectives of Denver Water’s Debt Policy is to maintain a revenue bond rating at Aa/AA or better by the major rating agencies. In order to maintain or exceed this rating, Denver Water uses the following guidelines in its financial planning activities:

- a. The Debt Ratio (Total Debt divided by the sum of net fixed assets plus net working capital) should not exceed 40%.

- b. Water rates are established to provide Net Revenues sufficient to produce Annual Debt Service Coverage 1.8x to 2.00x.

Debt Principal and Interest Obligations (in millions of dollars)			
Year	Principal	Interest	Total
2017	\$ 22.0	\$ 19.1	\$ 41.1
2018	\$ 22.5	\$ 18.0	\$ 40.5
2019	\$ 22.2	\$ 16.9	\$ 39.1
2020	\$ 17.6	\$ 15.8	\$ 33.4
2021	\$ 16.9	\$ 15.0	\$ 31.9
2022	\$ 16.6	\$ 14.2	\$ 30.8

BUDGET COMPARISON

COMPARISON OF SOURCES AND USES OF FUNDS					
	2015 Budget	2015 Actual	2016 Budget	2016 Actual	2017 Budget
SOURCES OF FUNDS					
Operating	\$ 269,255,927	\$ 242,225,402	\$ 273,111,853	\$ 274,298,744	\$ 269,481,322
Hydropower	4,422,000	3,606,655	4,528,000	4,009,125	4,607,001
Participation and Reimbursements	4,415,001	10,794,701	8,129,000	2,334,688	-
SDC	17,294,000	36,108,723	20,294,000	38,751,565	34,035,416
Interest	1,235,000	977,478	2,260,000	1,638,158	847,639
All Other Revenue	6,640,001	12,715,922	6,310,000	7,207,080	7,230,017
Non-Operating	7,654,384	5,474,986	6,384,000	7,250,406	5,434,834
Subtotal Sources of Funds	\$ 310,916,313	\$ 311,903,866	\$ 321,016,853	\$ 335,489,766	\$ 321,636,229
Bond Proceeds	42,000,000	30,000,000	56,923,000	71,238,348	207,184,764
Total Sources of Funds	\$ 352,916,313	\$ 341,903,866	\$ 377,939,853	\$ 406,728,114	\$ 528,820,993
USES OF FUNDS					
OPERATING EXPENDITURES					
Regular Wages	\$ 79,485,838	\$ 82,878,013	\$ 83,516,809	\$ 85,019,494	\$ 87,949,669
Applied Labor	-	-	(3,647,000)	(6,752,385)	(9,876,681)
Benefits	38,966,801	39,348,597	39,713,297	37,311,722	45,414,575
Subtotal Personnel Costs	\$ 118,452,639	\$ 122,226,610	\$ 119,583,106	\$ 115,578,831	\$ 123,487,563
Materials and Supplies	\$ 18,342,469	\$ 18,525,025	\$ 18,667,841	\$ 18,626,902	\$ 18,076,163
Utilities	10,403,662	9,430,359	10,409,575	9,218,251	9,258,239
Professional and Other Services	39,500,429	39,388,214	44,644,571	44,141,116	45,684,612
Contract Payments	2,871,102	3,873,995	2,504,965	2,015,835	2,527,024
Refunds and Other	7,411,679	3,880,038	1,054,844	1,479,330	2,235,943
Subtotal Operating Costs	\$ 78,529,340	\$ 75,097,631	\$ 77,281,796	\$ 75,481,435	\$ 77,781,981
Debt Service	48,822,316	47,919,191	43,835,247	41,120,947	45,455,772
Total Operating Costs	\$ 245,804,295	\$ 245,243,432	\$ 240,700,149	\$ 232,181,213	\$ 246,725,315
CAPITAL EXPENDITURES (EXCLUDING SALARIES AND BENEFITS)					
Distribution	\$ 49,944,602	\$ 44,231,788	\$ 50,536,828	\$ 42,136,497	\$ 71,652,913
Treatment	6,920,910	4,187,962	6,221,500	8,659,862	16,004,000
Collection	14,668,412	15,697,984	20,045,002	19,224,129	13,831,662
Expansion	10,419,697	7,928,722	19,751,500	11,768,275	14,957,020
Operations Support	7,297,075	13,332,813	38,093,002	55,326,229	52,627,225
Information Technology	8,963,631	4,332,215	5,634,307	2,853,020	5,876,224
Applied Labor ¹	-	-	3,647,000	6,752,385	9,876,681
Total Capital	\$ 98,214,326	\$ 89,711,483	\$ 143,929,139	\$ 146,720,397	\$ 184,825,725
Total Uses of Funds	\$ 344,018,621	\$ 334,954,915	\$ 384,629,289	\$ 378,901,610	\$ 431,551,040

1) Applied Labor was not implemented until 2016

CAPITAL EXPENDITURES

BUDGET BY SYSTEM AND PROGRAM	
<i>Totals include applied labor</i>	Budget
COLLECTIONS	
Dams Reservoirs Tunnels	5,845,487
Gross Enlargement	2,550,612
Hydropower	5,138,080
Raw Water	2,324,268
Recreation	210,000
TOTAL COLLECTIONS	\$ 16,068,447
DISTRIBUTION	
Conduits	14,234,452
Mains	21,351,145
Pump Stations	4,253,663
Treated Water Storage	31,397,219
Vaults	5,522,072
TOTAL DISTRIBUTION	\$ 76,758,551
EXPANSION	
Downstream Reservoirs	14,336,017
New Supply Development	957,000
TOTAL EXPANSION	\$ 15,293,017
INFORMATION TECHNOLOGY	
Operations Asset Management	314,584
Foothills	1,153,358
Infrastructure and Technology Services	2,101,100
ICS	2,876,907
TOTAL INFORMATION TECHNOLOGY	\$ 6,445,949
OPERATIONS SUPPORT	
Building and Facilities	1,329,740
Fleet	6,507,225
OCR	44,547,300
Emergency/Unplanned Capital	500,000
TOTAL OPERATIONS SUPPORT	\$ 52,884,265
TREATMENT	
Foothills	1,171,142
Marston	1,371,910
Moffat	3,139,454
North End Solution	11,669,750
Recycling	23,240
TOTAL TREATMENT	\$ 17,375,496
TOTAL CAPITAL PROJECTS	\$ 184,825,725

CAPITAL BY SYSTEM

COLLECTIONS	
<i>Totals include applied labor</i>	Budget
Dams Reservoirs Tunnels	
Antero Res Rehabilitation	3,478,260
Ralston Dam Modifications	2,289,000
8in Howell Bunger Valve Gross	36,710
Marston Construct Multi Level	16,172
High Line Canal Diversion Dam	13,160
Marston South Dam Toe Drain	12,185
Total Dams Reservoirs Tunnels	5,845,487
Gross Enlargement	
Gross Reservoir Expansion	2,550,612
Total Gross Enlargement	2,550,612
Hydropower	
Dillon Hydro Prtctv Relay Rpl	3,777,880
Williams Fork Penstock Slide	845,280
Strontia-Elec & Cntrl Upgrade	346,280
Roberts Tun EI&C & 2nd Hydro	168,640
Total Hydropower	5,138,080
Raw Water	
Radial Gate at S. Boulder Div	768,250
C20 Diversion Slide Gate and	689,288
Siphon 1 Vlv Replcmnt (Ph 3)	316,490
Moffat - Siphon No. 1	155,210
Moffat Tnnl Siphon 2 Accss Imp	143,940
Ranch Crk Diversion Canal Imp	108,200
Moffat- Jim Creek Siphon	55,970
Vasquez Canal Piping	50,040
South Boulder Canal - Hwy 72	36,880
Total Raw Water	2,324,268
Recreation	
Syst Wide Recreation Imprvmt	210,000
Total Reception	210,000
TOTAL COLLECTIONS	\$ 16,068,447

DISTRIBUTION	
Totals include applied labor	Budget
Conduits	
Conduit 16&22 Replacement	10,166,416
C94 Assessment and Repairs	2,078,880
Conduit Improvement Program	1,000,040
Replc rectifer on C96 & C94	627,206
WISE DIA Connection	227,500
Aerial Crossing Replacements	87,290
DIA Conduits & Mains	39,200
C17 Clean & Bypass Gates	7,920
Total Conduits	14,234,452
Mains	
Main Replacements	8,668,534
2017 Repl Contract Wk	4,025,020
Main Relocations	3,342,185
Main Improvements	2,401,000
Stapleton Dist. 16 & 20 in Mns	1,231,000
Specialized Main Improvements	903,230
Fire Hydrant Replacement	516,000
Replace PRV - misc	100,000
Corrosion Control Remote Mntr	59,356
Corrosion prevention	27,820
Fire hyd adds w_i Den & TSA	22,500
Valve Replacements	20,000
Main ext w_i Den & TSA	17,000
Main Extensions	10,000
Valve adds w_i Denver & TSA	7,500
Total Mains	21,351,145
Pump Stations	
Highlands PS Modifications	1,511,657
Chatfield PS Modifications	1,478,762
Hillcrest PS Modifications	606,514
Einfeldt Stndby Generator	253,340
Marston PS Elec. & Mech. Upgrds	148,390
Lamar Pump Sta Arc Flash Reduc	135,000
Bellevue PS Modifications	70,000
64th Ave. PS Modifications	50,000
Total Pump Stations	4,253,663

DISTRIBUTION - continued	
Treated Water Storage	
Replace Hillcrest Tanks	26,797,189
Replace strge res. at Ash	4,432,870
Capitol Hill Res Embank Restre	167,160
Total Treated Water Storage	31,397,219
Vaults	
2016/17 Vault Modifications	2,081,090
2017/18 Vault Modifications	1,209,940
DIA Vault Program	1,000,740
Vault Mods-C4 &C49 29 & Sherid	629,060
2015/16 Vault Modifications	415,644
2018/19 Vault Modifications	185,598
Total Vaults	5,522,072
TOTAL DISTRIBUTION	\$ 76,758,551

EXPANSION	
<i>Totals include applied labor</i>	Budget
Downstream Reservoirs	
Lupton Lakes Development	7,826,777
DRWSP North Complex EI&C	5,804,070
DSRS- Tanabe Fencing	357,720
N.Complx Dunes & Tanabe WQ Mit	146,680
S.Complx Bambei-Walker WQ Mit	101,120
DSRS- Howe Haller A/B Roads	81,900
Gravel Pit Bambei Walker Res	17,750
Total Downstream Reservoirs	14,336,017
New Supply Development	
Water Rights Invstgtn & Dev	330,000
WISE Project with Aurora	252,000
Wtr Right -Maint and Eval	200,000
Mediation Settlement	100,000
IRP- Strontia Fish Flow Recov	75,000
Total New Supply Development	957,000
TOTAL EXPANSION	\$ 15,293,017

INFORMATION TECHNOLOGY	
<i>Totals include applied labor</i>	Budget
Operations Asset Management	
LMS for Plants WTMS Rplcmnt	314,584
Other Projects <\$25k	-
Total Operations Asset Management	314,584
ORCA	
ORCA	1,153,358
Total ORCA	1,153,358
Infrastructure and Technology Services	
Hardware	2,101,100
Total Infrastructure and Technology Services	2,101,100
ICS	
Ctrl Instrumentation and Tele	2,278,089
System Wide RTU Upgrades	598,818
Total ICS	2,876,907
TOTAL INFORMATION TECHNOLOGY	\$ 6,445,949

OPERATIONS SUPPORT	
<i>Totals include applied labor</i>	Budget
Building and Facilities	
Decntrlztn Stn Ashlnd Prkg Ext	661,160
Constrct New Water Qlty Facil	589,580
Williams Fork Caretaker House	75,000
Cheesman House Addition	4,000
Total Building and Facilities	1,329,740
Fleet	
Vehicle Replacements	6,507,225
Total Fleet	6,507,225
Operations Complex Redevelopment	
Operations Complex Redevelopment	44,547,300
Total OCR	44,547,300
Emergency/Unplanned Capital	500,000
TOTAL OPERATIONS SUPPORT	\$ 52,884,265

TREATMENT	
<i>Totals include applied labor</i>	Budget
Foothills	
Foothills Dry Bed Return Flow	752,020
FH TP Floc & Sed Svc Wter&Line	230,850
Foothills Backwash Modulating	69,012
FH TP Flocc. Basin Valves	50,000
Foothills TP Filter Backwash I	29,680
FH TP Res 3 Ovrflw Sanit. Srvy	22,300
FH TP Rapid Mix Flow Valve Act	12,280
FH Sub Station 1 2 3 Replace	5,000
Other Projects <\$25k	-
Total Foothills	1,171,142
Marston	
Marston Treatment Plant Ele Up	1,173,320
WTP Corrosion Control Study	143,940
Marston Chlorine scrubbers	39,650
Marston WQ Testing Platform	15,000
Specialized Equip & Tools	-
Other Projects <\$25k	-
Total Marston	1,371,910
Moffat	
Moffat Centrifuge	2,589,480
Moffat Treatment Plant Ele Up	286,460
Moffat Chlorine Scrub Mod	263,514
Moffat Program	-
Total Moffat	3,139,454
North End Solution	
N Syst Renewal Water TP Upg	11,669,750
Total North End Solution	11,669,750
Recycling	
Rcycling TP Upgrade PON & POA	23,240
Total Recycling	23,240
TOTAL TREATMENT	\$ 17,375,496



Acronyms & Glossary



ACRONYMS

ACP

Accelerated Conservation Plan

AF

Acre-Foot

AMWA

Association of Metropolitan Water Agencies

AWWA

American Water Works Association

BABS

Build America Bonds

BPPI

Budget and Planning Process Improvement

CAFR

Comprehensive Annual Financial Report

CAC

Citizens Advisory Committee

CBSM

Community Based Social Marketing

CFS

Cubic Feet per Second

COP

Certification of Participation

CIP

Capital Improvement Plan

CPR

Capital Program Review

CWA

Clean Water Act

DIA

Denver International Airport

ECMS

Enterprise Content Management System

EIS

Environmental Impact Statement

EPA

Environmental Protection Agency

EPACT

Energy Policy Act

EMS

Environmental Management System

ERT

Encoder Receiver Transmitter

ETMS

Enterprise Time Management System

FERC

Federal Energy Regulatory Commission

FLPMA

Federal Land Policy Management Act

GAAP

Generally Accepted Accounting Principles

GAD

Gallons Per Account Per Day

GASB

Governmental Accounting Standards Board

GCD

Gallons Per Capita Per Day

GIS

Geographic Information System

G.O. Bonds

General Obligation Bonds

IRP

Integrated Resource Planning

MGD

Millions of Gallons Per Day

NARUC

National Association of Regulatory Utility
Commissioners

NEPA

National Environmental Policy Act

NPDES

National Pollution Discharge Elimination System

NRCS

Natural Resource Conservation Service

NWRS

National Water Resource Association

OPEB

Other Post-Employment Benefits

PACSM

Platte and Colorado Simulation Model

POS

Point of Service

PRV

Pressure Regulating Valve

RIE

Rapid Improvement Event

RCRA

Resource Conservation and Recovery Act

SDBE

Small Disadvantaged Business Enterprise

SDWA

Safe Drinking Water Act

SDC

System Development Charge

SEIS

Systemwide Environmental Impact Statement

SMWBE

Small Minority Women Business Enterprise

VSA

Value Stream Assessment

GLOSSARY

A3

This rapid-deployment tool complements organizational strategy by displaying the connections between overall priorities and tactical Lean efforts. Individuals or small teams diagram a process or problem using only what they are able to fit on a standard A3-sized (approx. 11 by 17 inch) piece of paper. This method requires that the team communicate well to depict the process simply, and results in a high-level view of the current steps in the process.

accounting standards

The Board's financial statements are prepared in accordance with principles generally accepted in the United States of America (GAAP). Additionally, the Board applies all applicable pronouncements of the Governmental Accounting Standards Board.

acre-foot

Volume of water equal to one foot in depth covering an area of one acre, or 43,560 cubic feet; approximately 325,851 gallons. One acre-foot is roughly the amount needed to serve 2.5 families each year.

annual yield

Maximum basic demand the water supply could meet throughout a period of historical or synthesized hydrological conditions.

average winter consumption

The amount of water used on average by a customer during the winter; provides a good indication of indoor water use.

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 of contribution to investment balances.

basis of accounting

The Board's 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 statement of net assets, revenues are recorded when earned, and expenses are recorded at the time liabilities are incurred. This is different from the basis of budgeting. Denver Water's budget is prepared using the budget basis in which revenues are recorded when they become available and expenditures are recorded at the time liabilities are incurred.

block

A volume of water used in setting water rates; a quantity or volume of water sold at a particular rate.

Blue Belt

A person who has received Lean training and is responsible for identifying areas of waste and taking actions for improving those identified areas.

bonds

Debt instruments. According to Denver Water’s charter, the Board may issue revenue bonds that are secured solely by their revenue. In the past, it was able to issue general obligation bonds that were secured by the full faith and credit of the City and County of Denver.

budget

A financial plan for a specified period of time (fiscal year) that assigns resources to each activity in sufficient amounts so as to reasonably expect accomplishment of the objectives in the most cost-effective manner.

capital expenditure

Expenditures having a depreciable life of over one year and a cost of over \$5,000.

capital improvement plan

Details projects and equipment purchases and provides prioritization, scheduling and financing options.

capital leases

A lease having essentially the same economic consequences as if the lessee had secured a loan and purchased the leased asset.

capital policy

Initial acquisition costs of assets are capitalized if they have a service life of more than one year and a cost of \$5,000 or more. Costs not meeting these criteria are expensed. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the respective asset classes.

cash flow adjustment

The cash flow adjustment is the difference between expenditures as booked and disbursed. Expenditures are budgeted and reported on a modified accrual basis (as booked). Total expenditures are then converted to a cash basis (disbursed) for purposes of determining year-end designated 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.” The Board’s practice is to maintain reserves that are sufficient to provide: 25 percent of the next year’s operating costs; the greater of average annual amortization cost; 2 percent of current total capital assets (before depreciation) for replacement capital and equipment purchases; 50 percent of expected annual debt service for next year; \$10 million in exposure reserve.

certificate of participation

Evidence of assignment of proportionate interests in rights to receive certain revenues pursuant to a lease purchase agreement.

chart of accounts

The chart of accounts used by Denver Water generally follows the structure presented by the National Association of Regulatory Utility Commissioners for Class A Water Utilities.

Clean Water Act

The federal law that establishes how the United States will restore and maintain the chemical, physical and biological integrity of the country’s waters (oceans, lakes, streams and rivers, ground water and wetlands). The law provides protection for the country’s waters from both point and nonpoint sources of pollution.

conduit

A 24-inch- (or larger) diameter pipe carrying raw or potable water from or to treatment facilities, reservoirs and delivery points feeding a distribution system.

contract payments

Consists of contract payments for construction, materials purchased for contractor installation, acquisition of land and land rights and water rights.

corporate culture

Values that set a pattern for a company's activities, opinions and actions.

cost control center

A term used to denote a responsibility center. It is an organizational unit that has been placed in charge of accomplishing certain specified tasks. Example: Water Control Section.

Customer Information System

The multifaceted, multimillion-dollar project to modernize our aging Customer Information System (CIS) and enhance the system's capabilities, performance and security. Among numerous other objectives, an up-to-date CIS has boosted our ability to track customer account information, analyze water savings and administer more sophisticated rate designs aimed at achieving our demand-management and revenue goals. A more contemporary CIS also accommodates the switch from bimonthly to monthly billing.

customer taps

A physical connection to a distribution main that, together with appropriate license affects water service to a licensed premise.

debt guidelines

Denver Water has no legal debt limits. However, the Board has adopted debt guidelines to guide the timing and use of debt in the future. The guidelines set forth a policy that prevents debt proceeds from being used to pay operating and maintenance expenditures. The guidelines instruct that debt proceeds will be used only for current refunding, advanced refunding and payment for non-recurring capital projects that expand the system or are otherwise unusual in nature or amount.

debt service

Principal and interest on debt and payments under capital leases.

demand side management

Term used to describe policies aimed at increasing long-term supply by decreasing customer demand for water, typically through conservation programs.

direct materials

Includes materials and supplies purchased for direct use and fuel and oil for vehicles and equipment (non-stores issues only).

disbursements

Money paid out for expenses, liabilities or assets.

discretionary employee

The charter of the City and County of Denver allows the Board to establish a classification of employees who have "executive discretion," who shall number no more than 2 percent of all people employed, and shall serve solely at the pleasure of the Board.

diversity training

Objective of providing skills for managing and working with people of all races, genders and cultures.

division

Largest organizational unit reporting to the CEO/Manager.

employee benefits

Employee benefits are expenditures paid by Denver Water for workers' compensation, social security, retirement, employee assistance program, health and other insurances. It does not include employee withholdings or unemployment insurance.

encoder receiver transmitter

An electronic device that receives a signal from a water meter, encodes the current reading into a digital signal, and transmits it to a meter reader.

Endangered Species Act

The federal law that sets forth how the United States will protect and recover animal and plant species whose populations are in dangerous decline or close to extinction. The law protects not only threatened and endangered species but also the habitat upon which species depend.

enterprise fund

A type of propriety fund or a governmental unit that carries on activities in a manner similar to a private business.

EPA Section 319

Environmental Protection Agency program to provide funds to agencies to assist in clean water protection.

expenditures

In planning expenditures, Denver Water follows the city charter's mandate to keep rates as low as good service will permit. In practice, this means Denver Water will properly maintain its facilities and continuously seek ways to operate more efficiently.

federal statutes

Statutes enacted by Congress relating to matters within authority delegated to federal government by the U.S. Constitution.

fund

An accounting entity with a set of self-balancing accounts that is used to account for financial transactions for specific activities or government functions. By charter, Denver Water is reflected in the city's financial statement in a single fund known as the water works fund.

fund balance

The balance in the water works fund. Fund balance is calculated each year by adding total sources of funds to the balance at the beginning of the year and then subtracting total expenditures.

general equipment

Computer equipment; office furniture and equipment; transportation equipment; storehouse equipment; construction and maintenance tools and equipment; chemical laboratory equipment; power-operated equipment; communication equipment; garage and shops equipment; and miscellaneous equipment.

general obligation bonds (go bonds)

A security representing the promise to repay borrowed money secured by the full faith and credit of the governmental borrower.

Geographic Information System

A component of our enterprise asset management system. This system is used in large part to record the geographic location and many other attributes of distribution and collection system assets. From the GIS, we produce many types of maps, as well as analysis related to our assets, and the world around them.

goals

Overall end toward which effort is directed.

Governmental Accounting Standards Board (GASB)

A board that establishes the generally accepted accounting principles for state and local governmental units.

gross revenue

All income and revenues, from whatever source, including system development charges and participation payments, excluding only money borrowed and used for providing capital improvements or other revenues legally restricted to capital expenditures.

historical timing adjustment

Estimate of budget variances primarily due to changes in capital construction schedules and the timing of obtaining permits and acquiring rights-of-way.

hydropower

Hydroelectric power of/or relating to production of electricity by water power.

infill

Undeveloped areas within the Denver Water service area that we would be expected to serve in the future.

integrated resource planning (IRP)

A method for looking ahead using environmental, engineering, social, financial and economic considerations. Includes using the same criteria to evaluate both supply and demand options while involving customers and other stakeholders in the process.

interest requirements

As used in the debt guidelines, scheduled interest payments during the 12-month period following the date of calculation.

introductory employee

An employee who is newly appointed to a position and is serving an introductory period, generally of six month's duration.

investment balance

The total sum held in cash and investments net of uncleared warrants.

investments

The Board has protection of principal as its primary investment policy objective. The Board designates its authority to invest money deposited in the water works fund to the CEO/manager and the director of Finance. According to the current investment policy, U.S. government obligations, government-sponsored federal agency securities, commercial paper, corporate fixed income securities, money market funds and repurchase agreements are permissible investments. The official policy outlines allowable credit risk and maximum maturities for each investment type.

just-do-its

Lean changes that can be made on-the-spot to improve processes and don't require team participation.

lean

A collection of principles and methods that focus on the identification and elimination of nonvalue added activity (waste) in any activity.

lease payments

Periodic payments made in order to obtain use of a facility or piece of equipment.

long-term debt

Debt with a maturity of more than one year from date reported.

Managing for Daily Improvement

A condensed, small-scope improvement effort on a single project that can be completed in a very short time-frame, often a matter of a few days or even hours. Managing for Daily Improvement events focus on a small part of a process or work cell. Improvements are implemented rapidly in order to realize short-term results.

master plan

Expenditures identified by projects and activities that are necessary to accomplish Denver Water's overall operating goals and objectives. The master plan, or program budget, is divided into a capital work plan and an operations and maintenance work plan.

master plan item

A specific activity or project that is identified in the master plan.

Maximo

Maximo (work and maintenance management system) is a component of our enterprise asset management system, and is used to manage work activities and programs related to operational assets.

mobile workforce

Mobile workforce (the service suite system) is a component of our enterprise asset management system that enables scheduling, dispatching, sharing of work order information and work completion reporting for our field workers.

modified accrual basis

Accounting method in which revenues are budgeted and recorded when received and expenditures are recorded when incurred, regardless of when payment is made.

municipal water utilities

Public entities whose responsibility is to deliver water to the customers.

net revenues

Gross revenue less operating and maintenance expenses.

non-operating revenue

As used in this document, revenue received from payments for services such as main inspections, installation of taps, calculating and mailing of sewer bills and other such services.

Non-potable

Water not suitable for drinking. (See also potable).

objectives

Something toward which effort is directed – an aim, goal or end of action.

operating reserves and restricted funds

The amount of cash and invested funds available at any point in time. The balance is the water works fund as defined in this glossary.

operating revenue

Revenue obtained from the sale of water.

operation and maintenance (O&M) work plan

A category of master plan items not capital in nature, that are normally ongoing activities and pertain to the general operations of Denver Water.

other expenditures

Expenditures for items such as payroll deductions, sales tax, insurance claims, cash over and short, and budget adjustments.

other services

Expenditures for items such as training, employee expenses, rents and leases, ditch assessments, convention and conference expenses, subscriptions, maintenance and repair agreements, and memberships.

participation agreement

An agreement in which a distributor or developer pays for the cost of the distribution facilities such as conduits, treated water reservoirs or pump stations required to provide service within that district from the nearest existing available source.

potable

Water that does not contain pollution, contamination, objectionable minerals or infective agents and is considered safe for domestic consumption; drinkable. (See also nonpotable).

principal and interest requirements

As used in the debt guidelines, interest requirements plus the current portion of long-term debt. (Includes general obligation bonds, certificates of participation, and capital leases).

professional services

Consists of consultant payments for consultants to provide services such as facility design, legal work and auditors.

program

An organized group of activities and the resources to carry them out, aimed at achieving related goals.

program budget

A method of budgeting in which the focus is on the project and activities that are required to accomplish Denver Water's mission, goals and objectives. It provides for consideration of alternative means to accomplish these criteria. It also provides a control device for higher level management and cuts across organizational lines. Resources are allocated along program lines and across organizational lines.

program element

Series of smaller categories of activities contained in the program such as raw water, water treatment, etc.

project employee

A contract worker assigned to a project of more than one year's duration and receiving a limited benefits package.

rapid improvement event

Five-day activity that focuses on eliminating waste in a targeted system or process, improving productivity, and achieving sustained improvement.

raw water

Untreated water.

recycled water

Application of appropriately treated effluent to a constructive purpose. In Colorado, the source of recycled water must be another basin. Also, to intercept – either directly or by exchange – water that would otherwise return to the stream system for subsequent beneficial use. Sometimes recycled water is called reclaimed, gray or reuse water.

refunds

Includes system development charge refunds and customer refunds.

regular employee

An employee who has satisfactorily completed an introductory period and has been approved by the Board to receive the rights and privileges of a tenured employee.

regular pay

Includes all straight-time salaries and wages earned, leaves, tuition refunds, suggestion awards, swing and graveyard shift payrolls, and safety equipment allowances. Regular pay consists of all payroll items except for overtime pay.

reservoir

An impoundment to collect and store water. Raw water reservoirs impound water in a watershed; terminal reservoirs collect water where it leaves a watershed to enter the treatment process; and treated-water reservoirs are tanks or cisterns used to store potable water.

revenues

Denver Water's system is completely funded through rates, fees and charges for services provided by Denver Water. There are no transfers to or from the city's general fund. Water rates pay for operation and maintenance expenses, repair, capital replacements and modifications to existing facilities, debt service and a portion of the costs of new facilities and water supply.

risk management

The Board is exposed to various risks of losses, including general liability (limited under the Colorado Governmental Immunity Act to \$150,000 per person and \$600,000 per occurrence); property damage; and employee life, medical, dental and accident benefits. The Board has a risk-management program that includes self-insurance for liability, employee medical, dental and vision. The Board carries commercial property insurance for catastrophic losses including floods, fires, earthquakes and terrorism for scheduled major facilities.

Safe Drinking Water Act (SDWA)

Federal legislation passed in 1974 that regulates the treatment of water for human consumption and requires testing for and elimination of contaminants that might be present in the water.

stores issues

Includes materials and supplies issued from inventory, as well as fuel and oil for vehicles and equipment.

strategic plan

Process that is a practical method used by organizations to identify goals and resources that are important to the long-term wellbeing of its future.

system development charges

A one-time connection charge that provides a means for financing a portion of the source of supply, raw water transmission facilities, treatment plants and backbone treated water transmission facilities required to provide service to a new customer. Sometimes called a tap fee.

tap

A physical connection made to a public water distribution system that provides service to an individual customer.

temporary employee

An employee hired as an interim replacement or temporary supplement of the workforce. Assignments in this category can be of limited duration or indefinite duration, but generally do not exceed one year.

type of expenditure

A classification of resources or commodities that will be budgeted and charged to projects and activities by cost control centers.

utilities and pumping

Consists of gas, electric and telephone, electricity wheeling charges, replacement power purchased and power purchased for pumping.

value stream assessment

The act of developing a high-level visual representation, from start to finish, of the process flow involved in delivering a desired outcome, service or product to customers.

warehouse purchases

Adjustments related to the timing of purchases and issues of warehouse stock. Denver Water maintains a warehousing operation that purchases materials and supplies into stock. These items are then issued and charged to jobs as needed. The warehouse purchases and issues adjustment is required to insure that the total of materials as issued balances to the amount of purchases made for the warehouse stock.

water conservation

Obtaining the benefits of water more efficiently, resulting in reduced demand for water. Sometimes called “end-use efficiency” or “demand management.”

water revenues

Revenues generated through billing process from the sale of water.

water works fund

A fund into which are placed all revenues received for the operation of the water works system and plant together with all money coming into the fund from other sources. The city charter creates the water works fund, in which all activities of Denver Water are reported in the city’s financial statements. All revenues and expenditures of Denver Water flow through the water works fund. The balance of the water works fund is referred to in this budget document as the designated balances, capital and land sales account.

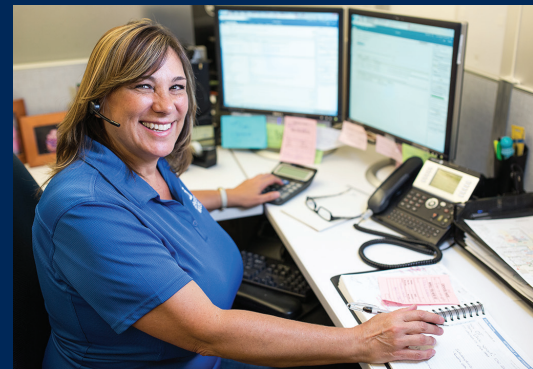




Appendix



DENVER WATER STRATEGIC PLAN



Our Vision: Denver Water Aspires to be the Best Water Utility in the Nation

Denver Water is the nation's premier, forward-thinking water resource manager. We sustain a vibrant metropolitan area in a semi-arid climate at the base of the Rocky Mountains. We play an integral role in building communities and advancing economic and social health.

Our customers are our top priority. They rely on us to manage a scarce and valuable natural resource – essential to their health and wellbeing. We will continually earn our customers' trust by listening to them and acting in their best interest. We exist to serve them.

Our vast and complex system includes the natural environment that sustains our water supply. Along with maintaining our infrastructure, we protect the health of the environment. We collect, treat and deliver water with minimal interruption, meeting the highest standards of quality and taste, and we partner with our customers and community to achieve maximum efficiency of water use.

Challenges face us – known and unknown – such as population growth, warming climate, periodic drought, competition for water resources, security threats, and changing regulatory and political environments. To meet these challenges, we foster and build the trust and support of local, regional and national interests by doing the right thing. In an ever-changing world, we continuously improve, we step up, and we lead.

Financial strength is a cornerstone to our vision. We employ accountable governance and control mechanisms to maintain a financial plan that supports long-term capital investments and ensures effective and efficient operations. We prudently manage rates to avoid large fluctuations and ensure they are fair and affordable across customer classes. We are fiscally responsible; we will not sacrifice long-term interests for short-term expediency.

We live in and serve our community. Our families and friends are part of the social fabric that makes up the diverse cultures and neighborhoods throughout our water system. This sense of community, family and friendship drives our passion for service. Because we care about the community we serve, we are committed to its economic and social health. We collaborate, we engage and we partner. As a result, customers trust, value and support our commitment to delivering clean, safe, great-tasting water, without fail.

We use the following guiding principles to evaluate all our decisions and purposefully move us toward our vision to be the best water utility in the nation.

We are customer-centric. We strive to earn the support and trust of our customers – everyone who pays for our service or uses our water. They are our top priority, and we are motivated to serve them.

We are industry leaders. We understand, help develop, implement and share best industry practices. We are forward thinking – we anticipate future trends, and look for and responsibly implement progressive solutions. We are adaptable, resilient and experts in our work.

We take the long-term view. We weigh the consequences of our decisions and actions against multiple scenarios to preserve future options and the sustainability of our community. We provide the best possible outcome for our customers, as well as future generations.

Our Mission

To expertly manage and supply an essential natural resource to sustain our vibrant community — because water connects us all.

Excellent Operations

An organization that is effective, efficient and strategically driven

Goal	Objectives
<p>We strategically align our projects and programs, to provide the best value to our customers</p>	<p>We consistently tie our decisions to our Strategic Plan to ensure we implement the right projects and programs, at the right time and at the optimum cost</p>
	<p>We have a visionary, adaptable long-range planning approach that considers the challenges of a warming climate and ensures diversity in supply and delivery, and efficiency in use</p>
	<p>We sustain healthy watersheds and an excellent collection, treatment and delivery system to provide high quality water at an affordable rate</p>
<p>We employ best business practices in our day-to-day operations to increase efficiency and delivery of service to our customer</p>	<p>We place the highest priority on safety</p>
	<p>We are passionate in providing outstanding customer service and making it easy for our customers to do business with us</p>
	<p>We are driven to continuously improve in everything we do. We use standard work, work plans, asset and risk management practices, metrics and operational reporting to effectively and efficiently manage the business</p>
<p>We lead the utility industry in environmental stewardship and sustainability</p>	<p>We execute a robust environmental sustainability plan and a healthy built environment across all our systems and operations</p>

Strong Financials

An organization that is financially strong and stable

Goal	Objectives
We sustain a financial plan that supports our strategic objectives	We effectively manage our debt and cash reserves to ensure the successful execution of our capital and long-range financial plans
	We carefully manage rates and fees to optimize revenue stability from year to year, ensure equity and affordability across customer classes, and promote water use efficiency
We make financial decisions keeping in mind the best long-term interests of our customers	We develop and execute our operating budget to ensure alignment with our strategic priorities
	We maintain a strong control environment by effectively tracking, managing and transparently reporting our financial resources, transactions and performance

Inspired People

An organization that is passionate about our customers and our community

Goal	Objectives
<p>We are inspired by our mission, vision and values and we know we are a part of something meaningful and larger than our own self-interest</p>	<p>We draw strength from our diversity and we utilize the unique gifts and contributions of our people</p>
	<p>We foster autonomy, creativity, initiative, innovation, calculated risk-taking and recognition of success</p>
	<p>We have a culture and organizational structure that removes barriers, advances strategic goals at all levels and is adaptable to changing business needs</p>
	<p>We value candid communication and debate as critical to our ability to make the best decisions for our customers</p>
<p>We have leadership that inspires, fosters meaningful work and develops our people</p>	<p>We have inspirational leaders at all levels who maintain a strategic focus, strengthen management practices and align initiatives and goals to the Strategic Plan</p>
	<p>We develop our people to realize their maximum potential, fulfill our mission and enhance Denver Water's reputation</p>
	<p>We communicate to our people in ways that are clear, concise, transparent and delivered within the context of our values</p>
	<p>We attract, grow and retain top talent</p>

Trusted Reputation

An organization with satisfied and supportive customers and strategically effective relationships

Goal	Objectives
We play an integral role in building communities and advancing economic and social health	We have transparent and efficient business practices and inclusive and competitive procurement processes, resulting in the best value for our customers and communities
	We are a community partner through active outreach and engagement with business, governmental, education and non-governmental organizations
	We foster strong relationships with government officials at the local, regional, state and national levels, and we ensure close coordination with the City of Denver as a key partner and customer
We are the public's trusted source on water	We are a thought leader in local, regional, state and national issues that affect our mission, through research, forums and organizations and in legislative and regulatory matters
	We actively engage our community and customers through public education, media and targeted communication
We go beyond what is expected operating with the highest ethics and integrity	We resolve all issues ethically to achieve the best result for all sides
	We are trusted leaders and willing partners with our neighbors in Colorado and throughout the West
	We effectively engage our Board to enable it to lead our organization with vision

STRATEGIC PLAN ACHIEVEMENTS

Customer	Key Priorities	Achievements
Satisfied and Supportive Customers	Meet future needs of our customers	<ul style="list-style-type: none"> • Denver Water and dozens of entities on the West Slope completed six years of negotiations with the finalization of the Colorado River Cooperative Agreement, a major step toward permitting the Gross Reservoir enlargement. The Agreement was recognized by the last four Colorado Governors, by the environmental community, and by the West Slope as a new, positive way of doing business. • We continue to make steady progress in the permitting of the Gross Reservoir expansion project, a key element in our system reliability and sustainability to meet the future needs of our customers in the face of a warming climate. The Corps of Engineers issued a final environmental impact statement, and we anticipate a record of decision in 2017. We obtained our 401 certification from the state, reached a comprehensive settlement of issues with the US Forest Service, obtained our endangered species biological opinion from the US Fish and Wildlife Service, and filed our Federal Energy Regulatory Commission application. • We further developed our Downstream Reservoir Complexes (repurposed gravel pits) that will allow Denver Water to retain mountain storage and help sustain Denver Water in future droughts. • Working with Aurora Water and the South Metro Water Supply Authority, we completed negotiations with several entities and are ready to deliver water through the WISE project — increasing our drought resiliency and reducing the dependence of south metro water users on non-tributary groundwater. • We continue to engage in negotiations and policy development with the seven Colorado River basin states, federal government and Mexico toward sustainable management of the Colorado River. We were instrumental, with other basin utilities, in implementing the Colorado River System Conservation Program — an innovative partnership to gather and test data on temporary, voluntary and compensated water saving pilot projects that can benefit the water levels in Lake Powell. These strategies will help preserve the Upper Basin’s Compact entitlement, resulting in greater security for Denver Water’s Colorado River supplies. • We began an 18-month process to develop a new Integrated Resource Plan (IRP), expanding beyond water supply planning with a new emphasis on using the IRP to inform capital planning and operational decisions across our system and allowing us to deliver the right projects at the right time. • In coordination with our overall asset management strategy, we published the 2nd edition of the Infrastructure Master Plan. This, together with the IRP, will allow the System Managers to assess our entire system and prioritize capital expenditures. • In response to a severe drought in 2013, we deployed an organization-wide team to address operational, water supply, financial and communication aspects. The result was the development of a much stronger drought contingency plan, allowing us to preserve our water supplies and avoid additional costs to our customers.

Satisfied and Supportive Customers, cont'd.	Efficient water use and conservation	<ul style="list-style-type: none"> • We expanded our widely recognized conservation ethic, saving on potable water capital expenditures and meeting our commitment to environmental sustainability. <ul style="list-style-type: none"> ○ Our customers reached our 2016 conservation goal, reducing water use by 22 percent and saving 25,000 acre-feet of water per year through active and passive conservation programs. ○ Our Recycled Water Treatment system saved 1.8 billion gallons of potable water. ○ We began promoting total water use efficiency throughout the metropolitan area, using the right water quality for the right purpose.
	Excellent collection, treatment and delivery system	<ul style="list-style-type: none"> • Since 2012, employing continuous improvement principles, we increased our pipe installation productivity by 42%, from 1 foot of pipe per labor hour to 1.42 feet per labor hour, delivering better infrastructure at less cost to our customers. • We cut customer outages hours 19%, from 54,000 in 2011 to 43,524 in 2016, significantly reducing the time our customers are out of water service. • By making infrastructure improvements to our systems and using pilot experiments to modify operations, we saved approximately \$600,000 in chemical and power costs since 2014. • Taking advantage of favorable interest rates and construction costs, we were able to save our customers millions of dollars by accelerating needed capital improvements. We completed tank replacements at Ashland, Highlands, Lone Tree, and Hillcrest. And we completed major dam safety work at Platte Canyon, Williams Fork, Cheesman, Antero, High Line, Ralston, Dillon and Meadow Creek.
	Customer-centric approach at all levels of the organization	<ul style="list-style-type: none"> • We increased overall customer satisfaction with Denver Water from 87 percent to 92 percent and top box satisfaction from 63 percent to 71 percent. This increase is a direct result of several customer service initiatives, including: <ul style="list-style-type: none"> ○ Implementing regular customer feedback surveys to understand their needs and steps we can take to better serve them; ○ Through the Customer Experience Value Stream, focusing on improving the end-to-end customer experience across Denver Water by eliminating or minimizing pain points for our customers; and, ○ Administering a customized training program to more than 50% of Denver Water employees to equip them with tools to create an outstanding service experience for our customers. • We developed and implemented an industry leading response to the critical issue of lead service lines. Even though these lines are owned by our customers, our concern for their health drives us to partner with others to encourage the eventual removal of all lead service lines.

Financial	Key Priorities	Achievements
A financially strong and stable organization	Excellent short and long-term financial health	<ul style="list-style-type: none"> • Denver Water’s customers benefitted from \$32M in net present value savings from bond refunding over the last 5 years and an additional \$8.5M from being upgraded to AAA. We are one of only ten utilities nationwide to receive these ratings, and our customers will continue to save an estimated \$54M in the future, based on planned bond issuances through 2024. • We implemented a new rate structure which, when complete, will increase the fixed revenue portion of our rates from 6% to 20%, enhancing revenue stability from year to year and helping to avoid large fluctuations in rates for our customers. • We partnered with our Distributors to replace the existing cost of service model with a new percentage calculation of the “additional amount” charged to outside city customers, providing increased clarity, simplicity and security.
	Maintain the public’s trust by spending money wisely	<ul style="list-style-type: none"> • We improved the value we deliver to our customers by implementing continuous improvement to increase efficiency and productivity, and eliminate waste in our processes. Our results include: <ul style="list-style-type: none"> ○ Decreasing our operational cost per customer account by 11%, from \$34.25 in 2010 to \$30.50 in 2015, saving over \$5 million. ○ Reducing the number of budgeted positions by 17, from 1,141 to 1,124, saving over \$1.9 million in salaries and benefits. ○ Lowering our annual rate increases from 10% in 2010 to 3% in 2016. ○ Reducing costs on the Operations Complex Redevelopment project by over \$12.8 million, 33% below the original project estimate. • Our annual financial statements received clean audit opinions from the external auditors. • Between 2012 and 2016, we completed more than \$500 million in needed capital projects, improving the efficiency and reliability of our system. • We successfully deployed a new financial system (ORCA), correcting a decades-old problem. We now have one source of information for budget development, management and Board reporting and for improved transparency and accountability.

<p>A financially strong and stable organization, cont'd.</p>	<p>Budgeting and spending driven by strategic priorities</p>	<ul style="list-style-type: none"> • We implemented a new approach to capital project prioritization, budgeting and delivery that utilizes system metrics and asset and risk management principles, resulting in over \$10 million of project savings in 2016. • Our Fiscal Responsibility initiative will ensure alignment of our strategic objectives with our budget, create standard work and reporting, improve the competitive selection processes in procurement, and develop performance metrics. We are working to implement this initiative by the end of 2017.
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Organizational	Key Priorities	Achievements
An effective, efficient, and strategically driven organization	Leadership that maintains a strategic focus and strengthens management practices at all levels	<ul style="list-style-type: none"> • The Executive Team implemented true north metrics for the organization, developed and prioritized one- and three-year initiatives tied to the Strategic Plan, and developed an organizational dashboard to track performance. • To retain and attract top employees and maintain fiscal responsibility to our ratepayers, we developed a Total Rewards Philosophy that guided a variety of organizational initiatives and allowed us to modernize our total rewards package. <ul style="list-style-type: none"> ○ We implemented performance-based pay. ○ We implemented a paid time off system for 2017, giving employees more flexibility in how they use their time and saving \$5 million in future liability. ○ The Board approved changes to our pension in 2018 to support full funding of the plan in 15 years. ○ We enabled a new loan feature to the 401K plan, giving employees more access to their assets, at no cost to Denver Water. ○ We implemented a compensation study, significantly reducing the number of job titles, creating new salary ranges and aligning pay to market. ○ We held employee health care benefit costs significantly below national averages while providing high quality and affordable health options to employees.
	A collaborative, healthy, highly capable, motivated workforce	<ul style="list-style-type: none"> • We planned and began construction on the Operations Complex Redevelopment project, which includes a significant focus on collaborative work spaces and a healthy working environment, such as the incorporation of well-building standards and a wellness center on campus. • Under our Employer of the Future initiative, we developed a variety of programs, including uniform reimbursement, alternative work schedules and telecommuting, core leadership programs, eLearning and enhanced training and wellness programs. We re-invigorated the Inclusion Committee, formalized our internship program, established the Employee Assistance Fund and instituted Supervisory, Values and Spot Award programs. • We placed a high priority on employee safety and an emphasis on training and safe practices to keep our employees safe and going home each day to their families.

<p>An effective, efficient, and strategically driven organization, cont'd.</p>	<p>A flexible organization, capable of adapting to future challenges and opportunities</p>	<ul style="list-style-type: none"> • We made organizational changes designed to increase efficiency and delivery of service to our customers. <ul style="list-style-type: none"> ○ We created a separate Customer Relations Division that subsequently merged back into Public Affairs after improvements in the delivery of service in both divisions. ○ We created an Administrative Services Division focused on internal organizational services; and, ○ We created a new Chief of Staff position to better manage operations.
	<p>Business processes and assets that increase our efficiency and effectiveness</p>	<ul style="list-style-type: none"> • Over 740 employees launched and managed over 21 Value Streams, resulting in more than 180 Rapid Improvement Events to engage all levels within Denver Water in the journey of continuous improvement. • We reduced our Fleet operating costs by 20% through several measures: <ul style="list-style-type: none"> ○ We utilized better tracking technology and real-time alerts to fleet managers for critical alarms such as required maintenance, excessive idling and major speeding violations; ○ We changed the capital spending strategy for the fleet program to maintain a six-year asset life, resulting in a lower total cost of ownership; and ○ We decreased vehicle down time from 4.77 days in 2014 to 1.68 days in 2016. • Fleet customer feedback is at its highest levels, and our vehicles are on the streets more regularly serving our customers. • We reduced warehouse inventory by 50%, from \$10 million to \$5 million, by implementing just-in-time delivery to point of use, clearing of obsolete items and bar coding technology, reducing idle assets. • We implemented mobile workforce automation (mPlatform), supporting over 250 employees performing over 300,000 field work activities per year, reducing work time, eliminating unnecessary drive time, improving customer service and achieving ROIs in excess of 4X over a five-year period. • We implemented many new technology improvements to increase efficiency and customer service, including: <ul style="list-style-type: none"> ○ Electronic payment capabilities for vendor payments; ○ WiFi communications throughout the operational campus and other facilities; ○ Web self-service portals for customers and title companies to conduct business with us online; ○ A new water operations monitoring and control system; ○ A new eLearning system to help managers plan and employees take training needed to better perform in their jobs; and ○ Project management tools to enable Engineering to collaborate online with design and construction firms.

	Business processes and assets that increase our efficiency and effectiveness, cont'd.	<ul style="list-style-type: none"> • We published the 2nd Edition of the Capital Projects Construction Standards, reducing design schedules and saving money through smaller, more efficient contract documents and consultant fees. In the first year of publication, these standards saved over 1 million sheets of paper and countless design hours.
	Be environmentally responsible in delivering on our mission	<ul style="list-style-type: none"> • Our redeveloped Operations Complex will include the most forward-looking and sustainable practices of any campus in Colorado, including on-site wastewater treatment and reuse, rainwater capture, green infrastructure, and LEED platinum construction for the new administration building. • We hired a sustainability manager, developed a sustainability philosophy, and will deliver a sustainability plan in 2017, reflecting our ethic of environmental stewardship and ultimately reducing our energy usage and carbon footprint resulting in direct cost savings over time. • We partnered with the Greenway Foundation to provide an important new water supply from Chatfield Reservoir for environmental purposes in the urban reach of the South Platte River, moving us toward the goal of creating a gold medal fishery in the middle of Denver. • Ahead of the requirements of the Colorado River Cooperative Agreement, we proceeded with the Learning by Doing program in Grand County, in partnership with local and environmental groups. This solidifies our commitment to collaboration and the long-term health of the rivers that supply our water system. • We developed environmental management systems for all four water treatment plants, resulting in improved environmental performance, enhanced compliance, increased efficiency and reduced costs.
	Appropriate risk management for our system and operations	<ul style="list-style-type: none"> • We implemented a risk management strategy for the organization, which should lower insurance costs, decrease the number of incidents and reduce the impact of manmade and natural disasters. • We developed continuity of operations plans for all divisions, which define how operations will continue in the event normal facilities are not available due to a disaster or emergency. Four divisions tested these plans. • We conducted multiple tabletop dam emergency exercises, including a full functional exercise with over 60 participants from multiple jurisdictions on the ground in Grand County. • We completed off-site IT continuity testing, and successfully tested our IT disaster recovery processes.

External	Key Priorities	Achievements
Strategically effective relationships and reputation	An excellent reputation	<ul style="list-style-type: none"> • We engaged with the business community through the Metro Denver Chamber of Commerce and Metro Economic Development Council to develop business and key leadership support on challenges and issues that we face. • We refined and expanded our brand to provide consistency of our image to our communities. To do so, we created a refreshed Denver Water logo and developed a brand promise, drivers and creative identity. • We generated more than 1,500 media stories — resulting in more than 6 million impressions — that reinforced Denver Water’s brand and built widespread awareness of us as experts. • We transitioned to content journalism, a model based on continuous process improvement by which Denver Water creates brand-driven informative, engaging stories on multiple platforms to respond to a changing media environment and speak directly and more effectively to our customers and other audiences. • We expanded our Youth Education program outreach by more than 45 percent to build an ethic of valuing water in the younger generation. • We engaged the public and local jurisdictions along the High Line Canal to plan a future for the canal that will maximize the public benefits of recreation, ecology and stormwater management. • We received numerous awards: <ul style="list-style-type: none"> ○ American Water Works Association Partnership for Safe Water Directors Award to the Moffat WTP ○ The State of Colorado Water Fluoridation Quality Award ○ The CDPHE Award for Excellence in the practice of fluoridation ○ The Bronze and Silver Colorado Environmental Leadership Awards ○ EPA WaterSense Award ○ Association of Municipal Water Agencies’ Platinum Award for water utility excellence ○ Trout Unlimited River Stewardship Award ○ PRSA Gold Pick Award for outstanding blog content

<p>Strategically effective relationships and reputation, cont'd.</p>	<p>Relationships that are managed to achieve our strategic objectives</p>	<ul style="list-style-type: none"> • We engaged elected public officials at the local, regional and national levels to inform them of the value we provide to the Denver metro region, educate them on water issues, and foster their support to build stronger and more effective relationships with Denver Water. • We created a central point of contact for distributor relations that has significantly contributed to a better relationship based on the distributors being key business partners. • We grew our MWBE program and established a new External Advisory Committee for our MWBE and SBE program in order to provide a voice and opportunities to our local business communities.
	<p>Play a key role in issues important to our success</p>	<ul style="list-style-type: none"> • As the state's largest water provider, we were heavily engaged in influencing the State Water Plan in order to assure our customers' interests were represented. • We participated in several national associations that influence best practices in water utility management, law, regulation and policy. The organizations include the American Water Works Association, the Association of Municipal Water Agencies, the Water Utility Climate Alliance, the Western Urban Water Coalition and the Water Research Foundation. • We spearheaded the effort to pass SB 15-103, phasing in the sale of WaterSense water fixtures so that buildings built today are efficient tomorrow. • Through an extensive public process, the Board approved continued fluoridation in our water, enhancing our reputation as a thoughtful and engaged utility that cares deeply about our customers' well-being.