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#### **Distinguished Budget Presentation Award**

The Government Finance Officers Association of the United States and Canada (GFOA) presented an Award of Distinguished Budget Presentation to Denver Water, Colorado for its annual budget for the fiscal year beginning January 1, 2010. 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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GOVERNMENT FINANCE OFFICERS ASSOCIATION
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Denver Water
Colorado
For the Fiscal Year Beginning
January 1, 2010
All allow P. Enon
President Executive Director

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To Our Customers and Other Interested Readers:

Last spring, I was honored to be tapped as Denver Water's new CEO/Manager, becoming the 15th person to lead Colorado's oldest and largest water utility. Weeks after my appointment, retiring CEO/Manager Chips Barry died in a tractor accident. His death shocked us all. Chips was a respected leader who oversaw several notable achievements at Denver Water, such as building the state's largest recycled water system, monitoring recovery from several devastating wildfires in our watershed and leading the scramble to recover from a devastating drought.



Last spring, I was honored to be tapped as Denver Water's new CEO/Manager, becoming the 15th person to lead Colorado's oldest and largest water utility.

Although his death marked a sobering time in Denver Water's history, he left an organization full of dedicated employees with one goal: to deliver customers high-quality water at a good value. We are proud to continue that mission, and we're committed to doing it responsibly – by helping customers use water wisely, by serving as responsible stewards of the environment and by positioning Denver Water to operate, maintain and enhance the system to meet the challenges of the future.

Before coming to Denver Water, I worked as a water rights attorney on the West Slope. I understand the politics and the complicated water dynamics on both sides of our great state. Although our state sometimes seems divided, we live in a world of interdependence. We need to reach out and be ready to overcome future challenges, such as climate change, population growth and economic uncertainty. As we move forward, we will focus on several core priorities:

- Maintain our system. Some of our facilities are a century old. Although they are wellconstructed, they must be maintained, replaced and upgraded in accordance with engineering and technological innovation and evolving government regulation. We must also maintain the security of our system and our ability to effectively respond to system emergencies.
- Be financially secure. We must maintain adequate cash reserves to respond to opportunities, unforeseen events and weather-related impacts. We must make wise use of debt and maintain adequate debt capacity. And we must maintain a stable rate and system development charge structure.
- Maintain the yield of our system and the flexibility of our operations.
- Serve our future customers from a broad portfolio of supply. A resilient system will require diversity. It will require that we develop our supplies conjunctively, incrementally and opportunistically.
- Steward the resources upon which we depend and the environment we impact. We must "green" our operations. We must protect and enhance the health of our watersheds. We must protect and maintain our properties and the public amenities of our system. And we must be cognizant of the economic and social impacts of our actions.

- Partner with the City and County of Denver, regional municipalities, water and nonwater utilities, Northern Colorado, Southeastern Colorado and the West Slope to enhance synergies, efficiencies and system resiliency and further the sustainable development of the Front Range.
- Expand our leadership in research, innovation and the analysis of regional, national and worldwide trends in order to anticipate opportunities and risks.

Focusing on these priorities will help us become a water utility that acts strategically and serves as a positive force for a prosperous future for Colorado, much like our system's founders did for us. I'm proud, and excited, to lead this utility as we continue a mission we subscribed to almost a century ago: Providing our customers with a safe and reliable water supply, 24 hours a day, each and every day.

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#### Diverse Plan to Help Meet Future Water Needs

Denver Water's ability to provide long-term, reliable water supplies rests on three strategies: conservation, recycled water and new supply.

#### Conservation

Denver Water's conservation plan aims to accelerate the pace of water conservation in our service area and reduce overall water use from pre-drought usage (2001) 22 percent by 2016. So far, we are on pace to reach our goal. In 2010, customers used about 19 percent less water than they were using before the 2002 drought – and there are 10 percent more of them.

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Denver Water uses several techniques to help create a culture of conservation. One employee is charged with improving the water efficiency of municipal buildings within the City and County of Denver. Another employee is dedicated to helping suburban government customers conserve. We also offer plenty of incentives for customers to reduce their water use. Each year, thousands of people take advantage of our rebates for high-efficiency toilets, washing machines and outdoor water-saving fixtures. Commercial and industrial customers who use significant amounts of water can enter into an incentive contract with us and earn thousands of dollars for each acrefoot of water saved. We also have strict irrigation rules – no watering between 10 a.m. and 6 p.m. and never more than three times a week – and we send out a crew of Water Savers to enforce those rules. Denver Water's Use Only What You Need advertising campaign has won several awards for helping customers take note of their water use and think about ways to use water wisely.

#### Recycle

Every year, we continue to expand our recycled water system. The recycled water treatment plant opened in 2004 to provide industrial and irrigation customers – those who don't need drinking water – with high-quality recycled water. By recycling treated water from Metro Wastewater's plant, we're freeing up drinking water for other purposes. Once the recycled water distribution system is complete, expected in the next decade, our recycled water system will free up enough drinking water to serve almost 43,000 households.

In 2010, we revised our Recycled Water Master Plan, and we expanded our recycled water system to serve irrigation customers, including:

- East High School
- Sixth Avenue, between Uinta Parkway and Roslyn Street
- Ulaanbaatar Park
- Fifth Avenue median
- Stanley British Primary Soccer Field
- Montclair Recreation Center Playing Fields
- Denver Public Schools Westerly Creek School grounds

And in 2011, we plan to add the Rocky Mountain Arsenal to our recycled water system. The arsenal, now a natural area, needs the water to fill lakes and to mitigate wetlands in the natural area.

In 2011, we plan to add the Rocky Mountain Arsenal to our recycled water system.

#### New Supply

If faced with an emergency, such as wildfire or drought, Denver's water system and service to customers are at risk. Because 80 percent of Denver's water is on the south end of the system, the majority of Denver's water supply relies upon the unimpeded operation of Strontia Springs Reservoir, a key supply component of our southern delivery system. When an emergency occurs above this reservoir, the operation of the entire system is threatened, as the Hayman and Buffalo Creek fires highlighted in recent years.

Thankfully, Denver Water was able to maintain service through previous wildfires and drought. We may not be so lucky next time.

The Moffat Collection System Project will help resolve that imbalance in the system. Rather than building a new reservoir, the project would expand Gross Reservoir, located on the north end of Denver Water's system. The project also will provide an additional 72,000 acre-feet of water storage, enough to serve about 45,000 Denver area households annually, while providing a safety net if problems arise elsewhere in the system.

The Moffat Collection System Project will help resolve that imbalance in the system.

The U.S. Army Corps of Engineers is currently reviewing public comments regarding the Draft Environmental Impact Statement and supervising additional studies. The Corps plans to release a Final Environmental Impact Statement in 2011.

Another major supply project is our Downstream Reservoir Water Storage Project. In 2010, we continued work on the project, which allows us to store and release reusable water in our system through the use of old gravel pits that have been remodeled to store water. This \$175 million project allows us to keep upstream water while releasing water from the gravel pits north of the city to meet downstream water requirements. There are three complexes in the project, which have an estimated total storage volume of 33,192 acre-feet of water. We opened our first complex, the South Reservoir Complex, in 2009, and we continued design and construction of the North Reservoir Complex in 2010. In the following years, we plan to continue working on the North Reservoir Complex so we can open it around 2016. The final complex, Lupton Lakes, is slated to begin operation sometime around 2020, depending on the removal of the gravel reserves.

#### Major 2010 Projects and Accomplishments

#### Lone Tree Clear Water Reservoir

Next year, Denver Water will begin construction on a 10-million-gallon treated water storage reservoir in Lone Tree, making it the second basin at that site. The project, which is expected to cost \$8 million, will double the storage capacity at that facility. Denver Water's 2010 hydraulic modeling analysis found the Lone Tree facility, which is fed only through pumps, needed additional reserve storage. Without this storage, our ability to continually serve all customers in this area is at risk. The new basin is scheduled to begin operation in May 2012.

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#### **Recycled Water Conduit 302**

In fall 2010, crews broke ground on a major conduit installation project. Conduit 302 will serve as the backbone infrastructure for recycled water delivery on the east side of Denver Water's service area. The 36/30-inch conduit will deliver recycled water to Stapleton, the Rocky Mountain Arsenal, and the Montbello and Gateway Park neighborhoods. Eventually, crews will extend the conduit to Denver International Airport. The \$10 million project, which includes the installation of 33,000 feet of conduit, is expected to be complete by October 2011.

#### Cheesman Dam Upgrades

The 105-year-old Cheesman Dam needs important upgrades to maintain dam safety, provide a viable water supply and ensure smooth operations. This year, we started construction on a twoyear, \$18.3 million project to upgrade the dam's valve system, which was installed when the dam was built in 1905, and to install underwater trash racks to prevent debris from clogging the valves. Crews also installed new control systems and a control building, and updated the dam's electrical systems. Because we needed the water in Cheesman for the summer irrigation system, much of the work had to be done underwater, using specialized divers. The teams of divers spent 30 days at a time, all summer long, living inside of a compressed living chamber and taking turns working underwater on the dam.

#### Strontia Springs Reservoir Dredging Project

Since the 1996 Buffalo Creek Fire and the 2002 Hayman Fire, more than 1 million cubic yards of sediment have washed into Strontia Springs Reservoir, limiting the amount of water storage available in the reservoir and creating water quality problems for the downstream treatment plants. To combat those problems, we began a major dredging operation in late summer that will remove 625,000 cubic yards of sediment – enough to cover a football field to a height of 200 feet – from the bottom of Strontia Springs Reservoir and pipe it down Waterton Canyon to our Kassler complex, where the sediment will be temporarily stored. The \$30 million project, which will be paid partially by Aurora Water because it owns a 15 percent share of the reservoir, may extend into 2012 if crews are able to pull more than the planned 625,000 cubic yards of sediment from the reservoir.

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#### Williams Fork Reservoir Upgrade Project

Major construction work began at Williams Fork Dam in December 2009, when crews started a two-year, \$17 million project to install a new hydro turbine and expand and repair the outlet works at the dam. The dam's outlet works, where operators control the amount of water flowing from the reservoir into the river, was installed during the dam's original construction in the 1930s. Making repairs to the building's aging electrical and mechanical systems, as well as to the 50-year-old valves, will bring the outlet works up to current state standards and help it run more efficiently. The new 0.5 megawatt hydro turbine will increase the power of the plant's generating capacity to 3.6 megawatts, enough electricity to power more than 3,000 homes. The new turbine also will allow us to generate electricity during reduced winter flows, when the water level is too low to generate power with the existing 3.1 megawatt turbine.

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#### **Cement-Mortar Lining Project**

In 2010, Denver Water rehabilitated more than 30,000 feet of pipe, some of which was a century old, in the Washington Park neighborhood. To rehabilitate a pipe, crews scrape the inside of the pipe down to bare metal and line the inside of the pipe with a layer of cement mortar. Workers then finish by flushing and disinfecting the main before reconnecting it to the system. Pipes cannot always be rehabilitated; sometimes they must be replaced. But depending on the situation, rehabilitation costs are 10 to 40 percent less than open-trench replacement. Cementmortar lining makes pipes more useful by improving fire flow capacities and water quality issues. In 2011, Denver Water plans to rehabilitate 40,000 feet of pipe in the Platte Park and West Highland neighborhoods. Since 1963, Denver Water has cleaned and lined more than 110 miles of pipe.

#### Pipe Replacement

By late fall, our Transmission and Distribution crews had exceeded their 2010 goal of replacing 53,500 feet of pipe – all without help from a contractor. Keeping our distribution system maintained by replacing old, leaky pipes helps us distribute water to customers efficiently and reduces the number of expensive and inconvenient repairs caused by main breaks.

#### **Conduit 3 Response**

When a FasTracks contractor working in northwest Denver hit one of our 30-inch conduits, causing it to rupture, Denver Water crews wasted no time isolating the break and testing the water in the area to ensure it hadn't been contaminated. The Colorado Department of Public Health and Environment issued a boil water advisory that day, which meant Denver Water had to notify all customers in that area as fast as possible. In response, more than 100 employees went door-to-door to homes and business in the area, advising people to boil their water. Those who weren't home received a door hanger. We issued a Reverse 911 call with a Spanish message to people in the area. And employees handed out bottled water to customers who had no water because of the broken pipe. Within a day, the contractor had repaired the pipe and the boil advisory had been lifted. But our employees' fast and dedicated response proved, once again, that serving high-quality water to our customers all day, every day, is our most important priority.

#### Forest Health Partnership

In the fall, Denver Water and the U.S. Forest Service announced plans to equally share an investment of \$33 million, over a five-year period, in restoration projects on more than 38,000 acres of National Forest lands. Recent wildfires and the state's 3 million acres of pine beetle-infested forests have emphasized the need to protect forest health. This partnership will accelerate and expand the U.S. Forest Service's ability to restore forest health in watersheds critical for Denver Water's water supplies and infrastructure. Forest thinning and other wildfire fuels reduction projects will take place around and upstream of Denver Water reservoirs. Restoration also will help the forests become more resistant to future insect and disease, reduce wildfire risks and maintain habitat for fish and wildlife. The average residential household will pay a total of \$27 over the course of the five-year project to cover Denver Water's portion of the plan's proposed costs.

This partnership will accelerate and expand the U.S. Forest Service's ability to restore forest health in watersheds critical for Denver Water's water supplies and infrastructure.

#### **Employee Compensation Study**

Work has started on a process to evaluate our current employee compensation program and identify alternative compensation models. An employee workgroup is working with Human Resources to recommend adjustments to the current system that will ensure Denver Water offers compensation that is competitive with the marketplace, provides the flexibility to reward employees who contribute to the achievement of our strategic objectives, and is fiscally responsible to our ratepayers. We hope to implement the plan in 2012, and executive staff will provide regular updates to the Board and employees as this process moves forward.

#### **Green Operations**

An employee-led group has spearheaded the charge to help our operations become more environmentally friendly. Earlier this year, Denver Water's Green Team provided employees with an RTD Eco Pass, which encourages them to ride the bus or light rail instead of commuting to work. The team hosted a green fair, in which vendors provided information on green services and products, and various Denver Water teams and sections hosted tables to share information on what Denver Water is doing internally to improve the sustainability of our operations. The team also is developing a sustainability plan for Denver Water, which will reduce costs and help us use resources more efficiently. And each year, the Green Team completes a greenhouse gas inventory for The Climate Registry to measure Denver Water's carbon footprint. Doing so helps us identify ways to lessen our impact on the environment.

#### **Customer Service**

Our customer service employees handle hundreds of customer calls each day and interact with residents face-to-face on a daily basis. The call center of 18 employees (which can increase to 24 during the busy summer months) takes anywhere between 14,000 calls per month during the cold months and 22,000 calls per month during peak irrigation season. These calls range from topics about water bills to stop/start service to water service questions. We also have a field service department of 35 employees who handle an average of 9,000 visits to customer properties each month, responding to high-bill complaints, notifying residents about potential turnoffs and answering other concerns. Ten employees read 250,000 meters each month, and 15 employees in the meter shop test and repair hundreds of meters each month to ensure bills are accurate. Customer service employees also are in the midst of a three-year ERT replacement project. Encoder receiver transmitters (ERTs) are automated meter reading devices that electronically transmit water consumption data to meter readers as they drive by in their trucks. Crews are replacing 85,000 ERTs that are nearing the end of their battery-powered life with new ones that, thanks to technological advances, will have a 20-year lifespan.

#### Taste Test Winner

Denver Water placed first in a taste test among water utilities in Colorado, Wyoming and New Mexico at the American Water Works Association Rocky Mountain Section's annual conference. Our sample received the highest scores based on appearance, smell, taste and overall impression, and will move on to represent the Rocky Mountain Section in the 2011 AWWA "Best of the Best" national taste test.

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#### Efficient Staff

From 1977 to 2009, our number of customers has grown 44 percent. Yet thanks to technological advancements and efficient operational changes, the number of employees has grown only 26 percent during that same time period. Our 1,100 employees are doing more with less, but they remain committed to doing their jobs as efficiently and responsibly as possible.

#### 2011 goals and objectives

#### Complete the Integrated Resource Plan

In 2008, the staff and Board began updating Denver Water's Integrated Resource Plan, a comprehensive plan that will guide decisions related to the water system over the next 40 years. This long-range planning effort continued throughout 2009, and publication of the completed plan is slated for 2011.

The IRP will scrutinize water-demand projections and demand-management alternatives, and identify water efficiency opportunities and new facility needs. It also will examine potential challenges to the water system, such as climate change effects, more severe and frequent droughts, changes in demographics and water use patterns, watershed alterations such as those caused by beetle kill and forest fires, Colorado River water shortages, and economic and regulatory changes.

The IRP will scrutinize water-demand projections and demand-management alternatives, and identify water efficiency opportunities and new facility needs.

In addition, the IRP will revisit the Board's goals regarding system reliability, strategic water reserves, and Denver Water's role in regional and statewide water activities. The updated IRP will address future supply uncertainties by planning for a range of alternative outcomes, rather than taking the more traditional approach of projecting a single outcome and planning for that. A sophisticated new demand model enhances our understanding of the key determinants of water use and thus helps us better prepare for a variety of changing demand patterns. The final plan will include strategies for implementing and paying for each alternative outcome, and it will examine three types of costs related to these strategies: financial, environmental and social.

#### Secure Approvals to Enlarge Gross Reservoir

Denver Water has proposed the Moffat Collection System Project, a plan aimed at addressing an expected water supply shortage, helping customers through future droughts and providing a safety net if problems arise on the south end of the system (as the Hayman and Buffalo Creek fires highlighted in recent years). The project would almost triple the capacity of Gross Reservoir, located west of Boulder, providing Denver Water with 18,000 acre-feet of additional supply – enough water to serve about 45,000 households annually.

The U.S. Army Corps of Engineers has released a Draft Environmental Impact Statement for the project. The Corps is currently reviewing public comment regarding the Draft Environmental Impact Statement and is supervising additional studies. The Corps plans to release a Final Environmental Impact Statement in 2011. Though some preliminary design work was required for an adequate description of the proposed project, the permit from the Corps, the Federal Energy Regulatory Commission amendment (which regulates the hydropower plant at the reservoir) and several other permits are needed before the project's design can be completed and construction can begin.

#### Continue to Finalize Mediation with the West Slope

In 2010, after more than three years of negotiation, we completed the first phase of the "global" mediation with West Slope entities including headwaters counties and water users and agricultural interests in the Grand Junction area. The agreement will resolve water management issues on the West Slope, the source of about half of Denver Water's supply, and supply Denver Water with additional water supply for its customers. In 2011, the parties to the agreement will go through their public approval procedures and we will begin implementation.

#### Complete Denver Water's Strategic Plan

In 2011, we plan on completing and implementing Denver Water's strategic plan. The plan will incorporate our organization's mission and values, as well as its goals, objectives and action plans. It will identify our strengths, weaknesses, opportunities and challenges and will specify methods to measure our progress toward achieving those goals. The plan also will designate who is responsible for each piece and when that employee is expected to accomplish it.

#### Continue Work for WISE

The WISE Partnership consists of Denver Water, the City of Aurora, and the South Metro Water Supply Authority, which is made up of 14 water providers in Douglas County. WISE, which stands for Water, Infrastructure and Supply Efficiency, is a regional water supply project that will provide a reliable new supply by combining unused capacities in Aurora's Prairie Waters Project with as-available unused water supplies from Denver and Aurora. WISE will provide different benefits to each partner. The new supply provided by WISE will be used in most years by South Metro to help reduce its reliance on nonrenewable groundwater. Aurora will benefit by putting to use its excess Prairie Waters capacities, keeping costs down for its customers. Denver Water will use WISE as a new water reserve supply, which can be used during emergencies, such as system outages or extreme droughts. All the partners will benefit from a greater degree of regional cooperation.

In 2011, WISE partners plan to secure the use of infrastructure that is important to the project and develop a water delivery agreement between the partners.

Our 2011 budget outlines a fiscally responsible plan that will allow us to be resilient to future challenges while responsibly meeting the needs of our customers. As always, we will monitor water rates, capital expenditures, debt levels and investment balances to ensure we continue providing reliable service to our customers, all day, every day.

Sincerely,

May S JOCUMer

Jim Lochhead Denver Water's Manager/CEO

#### Total Sources of Funds for 2011 are Budgeted at \$278.5 Million.

The 2011 budget for Water Sales is \$246.0 million, which comprises 88.3% of the total sources of funds. This figure is based on a conservative treated water demand forecast that is 5 percent less than post drought "normal" and a 10.4% revenue adjustment beginning on March 3, 2011. We have also used a very conservative estimate to project 2011 System Development Charges (SDCs). Based on the continued downturn in the housing market, we estimate that SDC collections will continue to be only 37 percent of the amount we would expect in a normal year.

Non-operating revenues are budgeted at \$6.1 million which is significantly higher than the amount received in previous years. This increase reflects the projected receipt of \$2.6 million in interest subsidies related to the Build America Bonds Denver Water issued in 2009 and 2010.

The 2011 budget for Non-Operating Revenue reflects the projected receipt of \$2.6 million in interest subsidies related to the Build America Bonds Denver Water issued in 2009 and 2010.

In 2011, Denver Water expects to see the beginning of a recovery in the interest received on our Water Works Fund investments. Our projection of \$1.1 million is based on an assumption of .6%, but is still significantly lower than our pre-recession interest income.

Denver Water was able to take advantage of a favorable bond market in 2010 and issued debt for both our 2010 and 2011 Capital Improvement Plans. As a result, no bond proceeds are expected in 2011.

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#### Uses of Funds:

Total Uses of Funds for 2011 are budgeted at \$347 million. Total 2011 Payroll Expenditures including regular wages, paid leaves of absence, and overtime and disability payments—are projected at \$75.0 million, the same amount expended in 2010. In recognition of the current economic situation and in an effort to keep costs as low as possible, the Board approved a 2.4% market adjustment to employee wages for 2011 and reduced yearly step increases. Total Payroll costs are being held down by increasing the number of vacancies we hold and replacing highly paid employees that leave with more entry level employees.

Of the total amount budgeted for payroll expenditures, 12 percent will be assigned to staff working with capital projects and 88 percent will be allocated to employees engaged in other utility activities.

**Operations and Maintenance (O&M)** Costs for 2011 are budgeted at \$198.6 million, 2 percent more than the amount budgeted in 2010. The principal driver of this increase is a multi-year project to regain lost capacity in Strontia Springs Reservoir by dredging sediment from the bottom and pumping it down Waterton Canyon to the old Kassler facility. The 2011 costs for this project are \$20.6 million. It is atypical for Denver Water to have such a large project in the operating budget. Without this project the operating budget for 2011 would be \$178 million, or 4.3% less than the 2010 budget. This is due to a concerted effort to reduce costs where possible and mitigate rate increases. A detailed discussion of cost reduction efforts for 2011 is included in the section on the Operating Expense budget.

The 2011 budget for conservation programs reflects a temporary leveling of our efforts to accelerate conservation savings. The Board remains committed to achieving its goal of achieving a 22 percent reduction in customer water use by 2016, but leveled spending in 2011 in an effort to keep costs down.

Employee health care costs continue to rise and are projected to be \$16.5 million in 2011. Changes to employee and retiree medical plans were made in 2011 to shift significantly more of the costs of health care to employees. Despite these plan design changes, the 2011 budget for health care is projected to be 21% higher than in 2010.

The ten largest projects have a combined annual budget of \$47 million and comprise 46 percent of the 2011 capital budget.

Spending on **Capital Projects** in 2011 is budgeted at \$101.9 million. The 2011 Capital Improvement Plan calls for work on 173 projects. The ten largest projects have a combined annual budget of \$47 million and comprise 46 percent of the 2011 capital budget.

Debt service and related costs are budgeted at \$46.4 million, which is net of a \$2.6 million interest subsidy related to our Build America Bonds issued in 2009 and 2010.

#### **Investment Balance**

Based on projected 2011 Sources and Uses of funds, we estimate that Denver Water's Investment Balance, or cash reserves, will decrease by \$68.4 million to \$157 million by the end of 2011. This draw down of reserves reflects the debt proceeds received in 2010 related to 2011 Capital Improvement projects.

#### **Board of Water Commissioners**



Penfield Tate III, President, Appointed October 2005

Penfield Tate III is a former state legislator and a shareholder in the Public Finance Group at the law firm of Greenberg Traurig. He is a graduate of Colorado State University and Antioch School of Law. He has served on the boards for the Colorado Bar Association, State of Colorado Banking Board, Cerebral Palsy of Colorado, Colorado Housing and Finance Authority, Five Points Community Center and Metropolitan State College of Denver Foundation. He has been the executive director of the Colorado Department of Administration, an aide to former Denver Mayor Federico Peña and a trade regulation attorney for the Federal Trade Commission.

#### John Lucero, First Vice President, Appointed September 2007

John Lucero is the deputy director of the mayor's office of economic development. He served as a broker associate at Lucero Real Estate, Inc., a local real estate company that offers residential, commercial, development and investment real estate expertise. Lucero also is a former director of the Denver Board of Realtors, where he received the 2007 President's Distinguished Service Award and has been a member of numerous committees. He also has served on several committees for the Colorado Association of Realtors and the Colorado Association of Hispanic Real Estate Professionals. Lucero currently serves as a member of the Denver Zoning Code Task Force and was a member of the mayor's transition team for Community Planning and Development in 2003.





#### Thomas A. Gougeon, Vice President, Appointed August 2004

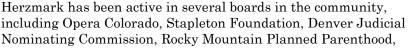
Tom Gougeon is president of the Gates Family Foundation. He was a principal in Continuum Partners LLC, a Colorado-based development company known for mixed use and transit oriented "green" building projects. Gougeon served as chief executive officer of the Stapleton Redevelopment Foundation, assistant to the mayor of Denver, executive director of a charitable foundation and was a research associate at the Denver Research Institute in community planning and natural resource economics.

Gougeon also worked at the U.S. Environmental Protection Agency,

where he worked on the Clean Air Act, western energy development and public lands issues. He is a former chair of the Nature Conservancy of Colorado and Volunteers for Outdoor Colorado, and he has served on the board of the Denver Urban Renewal Authority and many other community organizations. He holds a bachelor's degree in economics from the University of Denver and a master's degree in city and regional planning from Harvard University.

#### Paula Herzmark, Vice President, Appointed April 2009

Paula Herzmark is the executive director of the Denver Health Foundation, a nonprofit organization that supports Denver Health. She previously worked as the chief executive officer of the Robert E. Loup Jewish Community Center, as well as the president and chief executive officer of Prime Time Cable Corp., a private cable television company. She also served in Gov. Richard Lamm's cabinet as the executive director of the Colorado Department of Local Affairs for five years, after having served as the governor's legislative liaison.



National Jewish Hospital, the Denver Health and Hospitals and the Downtown Denver Partnership.



#### Greg Austin, Vice President, Appointed: July 2009

Greg Austin is a former partner in the Denver law firm Holland & Hart LLP. He retired from the partnership in 2001 but continued serving as "of counsel" to the firm until July 2009. Austin left Holland & Hart from 1973 to 1977 to serve as general counsel to the U.S. Small Business Administration, and later as solicitor (general counsel) of the U.S. Department of the Interior. Austin serves on the board of directors of Craig Hospital, Rocky Mountain Public Broadcasting System, the Denver Police Foundation and the Holland & Hart Foundation. He also is a member of the Secretary of State's Advisory Committee and has served on the Colorado State Treasurers Advisory Commission.

# LAST 20 COMMISSIONERS

Charles G. Jordan	1983 to 1985	Ronald L. Lehr	1993 to $1999$
D. Dale Shaffer	1978 to 1985	Joe Shoemaker	1995 to 2001
John A. Yelenick	1969 to 1987	Andrew D. Wallach	2001 to $2003$
Marguerite S. Pugsley	1978 to 1987	Daniel E. Muse	2000 to 2003
Elizabeth Hennessey	1985 to 1989	Richard A. Kirk	1993 to $2005$
Malcolm M. Murray	1987 to 1993	William R. Roberts	1997 to 2005
Donald L. Kortz	1987 to 1993	Denise S. Maes	1995 to 2007
Monte Pascoe	1983 to 1995	Harris D. Sherman	2005 to $2007$
Romaine Pacheco	1989 to 1995	Susan Daggett	$2007 \ {\rm to} \ 2009$
Hubert A. Farbes, Jr.	1985 to 1997	George Beardsley	2004 to $2009$

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## Contact Us

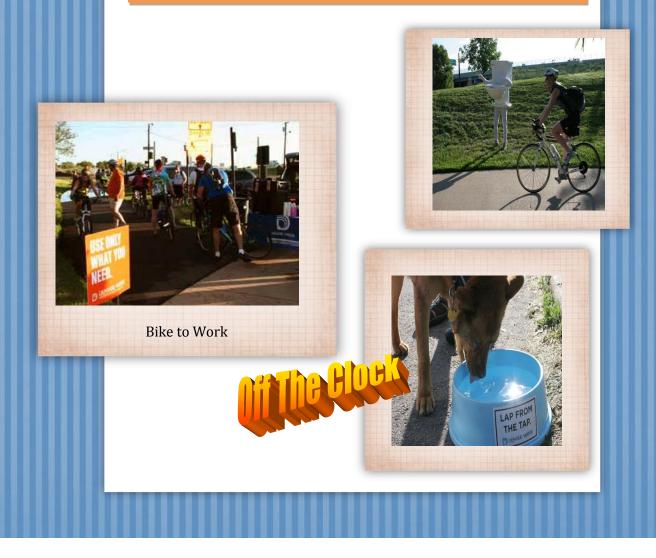
<b>Denver Water</b> 1600 W 12 <sup>th</sup> Avenue Denver, Colorado 80204-3412 www.denverwater.org	303-628-6000
Jim S. Lochhead, CEO/Manager	303.628.6500
Marie L. Bassett, Director of Public Affairs	303.628.6656
Christopher R. Dermody, Director of Information Technology	303.628.6262
Carla Elam Floyd Director of Human Resources	303.628.6234
Brian D. Good, Director of Operations and Maintenance	303.628.6503
Angela C. Bricmont, Director of Finance	303.628.6411
David L. Little, Director of Planning	303.628.6533
Robert J. Mahoney, Director of Engineering	303.628.6611
Patricia L. Wells, General Counsel	303.628.6464

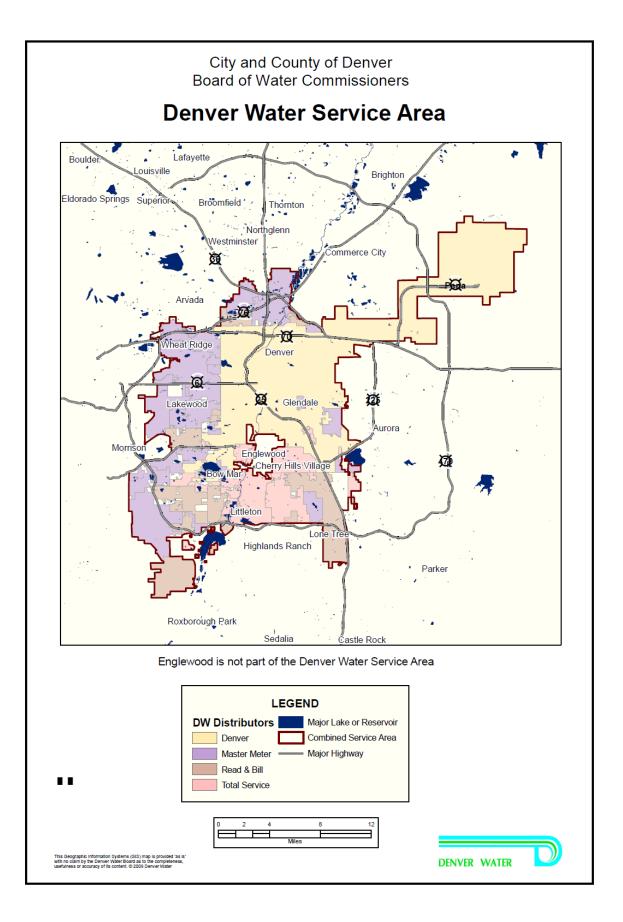
#### WITH QUESTIONS CONCERNING THE 2009 BUDGET DOCUMENT PLEASE CONTACT:

Grace Wilcox, Manager of Budget 303.628.6245 grace.wilcox@denverwater.org

# About Denver Water

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#### Denver Water:

Denver Water was established in 1918 (Denver citizens purchased water system from a private company).

*Is Colorado's oldest and largest water utility.* 

Is responsible for the collection, storage, quality control and distribution of drinking water to nearly one-fourth of all Coloradoans.

Ensures a continuous supply of water to the City and County of Denver and Denver Water customers who live in the surrounding suburbs.

Other sources: Fraser River, Williams Fork River, South Boulder Creek, Ralston Creek, Bear Creek.

#### Water Rates & Fees:

Set by Board of Water Commissioners.

Since its inception, the Board has set rates at a level sufficient to service its debt and meet its expenses of operation and maintenance.

City Charter requires the Board to recover full costs plus an additional amount to customers who live outside the City and County of Denver.

#### Finances:

Denver Water operates from the Water Works Fund, which ensures financial separation between Denver Water and the City. The general city government has no access to the Water Works Fund and the Water Board has no access to the City's general fund.

Denver Water generates revenues from sale of water to Denver and suburban customers and from the sale of hydropower to electric utility companies.

#### General



#### History:

Denver water is an independent City agency which serves a total of 1.2 million people in the Denver metro area. Created in 1918, Denver residents voted to create a five-member Board of Water Commissioners and buy the Denver Union Water Company's water system.

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

#### Our Collection System:

Collection system covers about 4,000 square miles or 2.5 million acres.

#### **Collection System:**

Denver Water's primary source of supply is surface water from the Central Rocky Mountains. Its watershed extends over 3, 100 miles on both the



east and west slope of the Rocky Mountains.

The watershed is comprised of 3 separate water collection

systems. The South Platte collection system which includes Antero, Eleven Mile, Cheesman and Strontia Springs Reservoirs, provide approximately 50% of the surface water in the Denver Water Source of Supply system. The Roberts Tunnel collection system which transports Dillon Reservoir water under the continental divide through a 23mile long tunnel and eventually flows into the North Fork of the South Platte River provides approximately 21% of the surface water in Denver Water's source of supply system. The remaining 30% of Denver water's Source of Supply is provided by the Moffat collection system. The Moffat collection system brings water from the Williams Fork and Frasier rivers and relies on an extensive collection of tunnels to eventually transport the water to Gross and Ralston reservoirs. In 2004 Denver Water added a new water supply in the form of non-potable recycled water. The recycled water plant will eventually be able to treat and distribute 30 million gallons per day.

#### Extends Eight Counties:

Park County: 1.2 million acres Grand County: 390,000 acres Jefferson County: 280,000 acres Summit County: 210,000 acres Douglas County: 120,000 acres Clear Creek County: 70,000 acres Gilpin County: 60,000 acres Other counties: 20,000 acres

#### Primary Water Sources:

South Platte River Blue River Williams Fork River Fraser River



#### Denver Water and the Community:

Denver Water serves more than a million people in Denver and its surrounding suburbs. The majority of Denver's water comes from rivers and streams fed by mountain snowmelt. The South Platte River, Blue River, Williams Fork River and Fraser River watersheds are Denver Water's primary water sources, but it also uses water from the South Boulder Creek, Ralston Creek and Bear Creek watersheds.

Denver Water produces one-third of the state's treated water supply, which is about 234,000 acrefeet per year. An acre-foot equals 325,851 gallons of water and is enough for about 2 ½ households for one year. Denver Water customers use about 265,000 acre-feet of water a year, which is about 2 percent of all water, treated and untreated, in Colorado.

#### Our Distribution System:

2,954 miles of water mains (pipelines).

*35.3miles of non-potable pipes in the system.* 

18 pumping stations.

34 underground reservoirs in various city locations.

#### Treatment Plant Capacity:

Marston: 250 million gallons per day

Moffat: 185 million gallons per day

Foothills: 280 million gallons per day

#### Recycled Water Treatment Plant:

Recycled water is used for industrial purposes and for outdoor irrigation in parks, golf courses and other public spaces.

Treatment at the Recycle Plant incorporates biologically aerated filtration: coagulation, sedimentation, filtration and disinfection, to produce water that meets State regulatory requirements.

Recycling water enables Denver Water to use more of the water in its reservoirs to provide drinking water to Denver-area residents.

#### Water Use:

Average annual use for typical family home: 125,000 gallons per year (a little less than half an acre foot).

\*Acre foot is a volume of water equal to one foot in depth covering an area of one acre or approximately 325,851 gallons

#### Total Water Use by Category:

48% Single Family Homes

21% Business & Industry

17% Multifamily Homes

9% Public Agencies

5% Unaccounted

# Residential Water Use by Category:

54% Landscaping

13% Toilets

11% Laundry

10% Shower/baths

6% Faucets

 $5\%\,Leaks$ 

1% Dishwashers

Activity	Number of	Circumstances	Water Used"	Total Us
	Times"			(gallons
Toilet	Five	Conventional toilet	3.5 - 5 gallons per flush	17.5 - 25
		Low-flow toilet	1.6 gallons per flush	8
		High-efficiency toilet	1.28 gallons per flush	6.4
Shower	One (8 minutes long)	Pre-1993 showerhead	3 - 8 gallons per minute	24 - 64
		Standard showerhead	2.5 gallons per minute	20
		Low-flow showerhead	1.5 gallons per minute	12
Bath	Once	Tub 1/4 to 1/3 full	7.5 - 15 gallons	7.5 - 15
		Fulltub	30 - 45 gallons	30 - 45
Shaving	Once	1 full basin	1gallon	1
		Running water, five minutes	2.2 gallons per minute	11
Brushing teeth	Twice	Brush and rinse	0.25 - 0.5 gallon	0.5-1
		Running water, two minutes	2.2 gallons per minute	4.4
Hand washing	Seven (15 seconds)	Standard aerator	2.2 gallons per minute	7.7
		Low-flow aerator	0.5 gallon per minute	0.875
Per person per da	y .			
litchen				
Activity	Number of Times"	Circumstances	₩ater Used"	Total Us (gallons
Cooking	Washing produce	One full kitchen basin	1-2 gallons	1-2
		Running water, three minutes	2.2 gallons per minute	6.6
Dishwasher	Once - full load	Water-conserving model	4.5 - 7 gallons	4.5 - 7
		Standard cycle	10 - 14 gallons	10 - 14
Dishwashing by hand	Once	Full basin/wash and rinse	2 - 4 gallons	2-4
		Running water, five minutes	2.2 gallons per minute	11
Perday				
liscellaneous				-
Activity	Number of Times	Circumstances	Water Used	Total Us (gallon:
Laundry	Once	Front-load washer	13 - 20 gallons/load	13 - 20
		Conventional top- loader	35 - 50 gallons/load	35 - 50
Carwashing	Once	Five full two-gallon buckets	10 gallons/wash	10
		Hose for 5 minutes	5/8-inch hose	32
Lawn watering		spells, Kentucky bluegra:		

#### Where Your Water Goes

www.denverwater.org

#### **Denver Community Profile**

#### Metro Denver

Square Miles	4,531
Population 2008	2,788,865
Population 2009	2,833,765
Population 2010*	2,877,742
Labor Force	1,546,648
Employment	1,384,905
Average Annual Wage	\$51,686
Median Age	35.6
Households	1,144,992
* Projected.	

#### Population

Metro Denver Counties	Population
Adams	444,869
Arapahoe	573,762
Boulder	300,136
Broomfield (City/County)	56,960
Denver (City/County)	615,109
Douglas	295,479
Jefferson	547,449
Total	2,833,765

Sources: U.S. Department of Commerce, Bureau of the Census; Colorado Division of Local Government, State Demography Office.

#### Population by Age, 2009

Age	Metro Denver	
0-14 years	21.2%	
15-29 years	20.8%	
30-44 years	22.0%	
45-59 years	21.6%	
60-74 years	10.2%	
75-89 years	3.9%	
90 years & older	0.4%	
Median Age	35.6	
Sources: U.S. Department of Commerce, Bureau of the		
Census: Colorado Division of Local Government State		

Census; Colorado Division of Local Government, State Demography Office.

#### Cultural Diversity Population Composition

Race	Metro Denver		
White	67.6%		
Black	4.8%		
American Indian	0.6%		
Asian	3.4%		
Hispanic Origin*	21.8%		
* Persons of Hispanic Origin may be of any race. Source: U.S. Census Bureau, Population Estimates Program.			

#### Major Employers - Metro Denver

Company	Employment
HealthONE Corporation	9,180
Lockheed Martin Corporation	8,200
Qwest Communications	7,500
Exempla Healthcare	6,230
Centura Health	5,830
Kaiser Permanente	5,570
Denver Health	5,100
United Airlines	5,000
IBM Corporation	4,300
Frontier Airlines	4,220
Source: Development Research Partners	Fobruary 2009

Source: Development Research Partners, February 2009

#### Labor Force

Total	Metro Denver	Colorado
Total	1,546,648	2,730,477
Employed	1,470,229	2,596,309
Unemployed	76,419	134,138
Unemployment Rate	4.9%	4.9%
Source: Colorado Department of Labor and Employment, Local Area		

#### Income

Income 2007	Metro Denver	Colorado
Per Capita Personal	\$47,327	\$41,192
Median Household	\$58,875	\$55,212

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Colorado Per Capita Personal

Income. Released April 2009. U.S. Census Bureau, American Community Survey, 2007.

#### Climate

The region has a semi-arid, four-season climate with<br/>mild emperatures and 300 days of annual sunshine.Coldest MonthJanuary, 43 degrees averageWarmest MonthJuly, 88 degrees averageAverage Humidity40%Average Precipitation15.81 inchesAverage Snowfall60.3 inchesAverage % Sunshine69%

#### Source: U.S. National Oceanic and Atmospheric Administration, 2009.

#### Metro Denver Housing

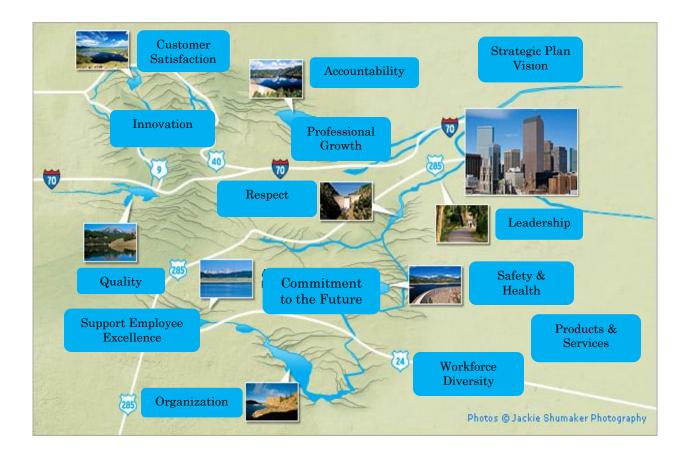
 Home Price, 2008
 \$219,300 Median

 Apartment Rent, 4Q 2008
 \$889 Average Monthly

 Sources: Colorado Comps, National Association of Realtors., The Group,
 Inc., and the Colorado Department of Local Affairs, Division of Housing.

www.metrodenver.org

## **Mission and Values**



- **Mission:** Denver Water will provide our customers with a reliable, high-quality water supply and excellent service. We will be responsible and creative stewards of the assets we manage. We will actively participate in and be a responsible member of our communities. We will accomplish this mission with a productive and diverse work force.
- **Value:** Our values describe the guiding principles and beliefs of Denver Water. We recognize it is every employee's responsibility to uphold these values in order to carry out and align the mission with the vision of the organization. These values provide the framework and guidance for decision making, daily performance, and ensuring consistency and excellence throughout Denver Water.

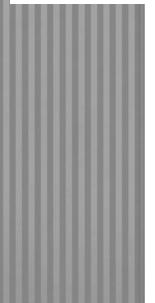
# Organization

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Planning	40-41
Finance Engineering Operations & Maintenance	34-35 36-37 38-39



# That we do at Denver Water





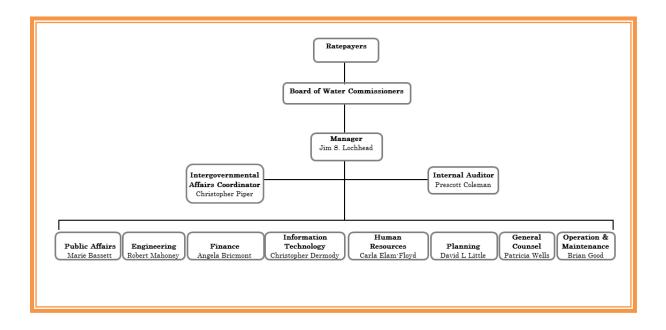












#### Denver Water Highlights

Established in 1918, Denver Water is Colorado's oldest and largest water utility. In general we ensure a continuous supply of water to the City and County of Denver and Denver Water Customers who live in the surrounding suburbs. We are responsible for the collection, storage, quality control and distribution of drinking water to nearly one-fourth of all Coloradoans.

The leadership of Denver Water consists of a five-member Board of Water Commissioners which is appointed by the Mayor of Denver to staggered six-year terms. The Board appoints a Manager who is chief executive officer of day-to-day operations; the Manager also serves as Secretary to the Board.

Denver Water Regular & Introductory Employees (At End of Year)						
	2008	2009	2010	2010	2011	
Section	Actual	Actual	Budget	Actual	Budget	
Manager & Staff	15.0	7.0	8.0	7.0	11.5	
Human Resources	20.0	22.8	22.8	23.8	23.8	
Public Affairs	161.0	176.6	190.6	172.6	184.6	
Engineering	147.0	159.0	163.0	161.0	163.0	
Finance	56.0	58.0	60.0	50.0	60.0	
IT	61.0	69.0	70.7	68.5	72.5	
Planning	45.0	46.6	48.6	46.6	48.6	
O&M	538.0	541.5	562.5	546.0	562.0	
Legal	12.0	14.6	14.6	13.6	14.6	
Total	1,055.0	1,095.1	1,140.8	1,089.1	1,140.6	

\*Starting with 2009 Actual, Director positions moved from Manager & Staff to their respective divisions, and section managers to their respective sections.

#### Denver Water Goals for 2011

- Complete the Integrated Resource Plan.
- Secure approvals to enlarge Gross Reservoir.
- Continue to finalize Mediation with the West Slope.
- Complete Denver Water's Strategic Plan.
- Continue work for WISE (Water, Infrastructure and Supply Efficiency).

#### **Denver Water Goals**

#### Customer

- $\checkmark$  Provide reliable service
- ✓ Provide excellent service
- ✓ Provide high quality water

#### Financial

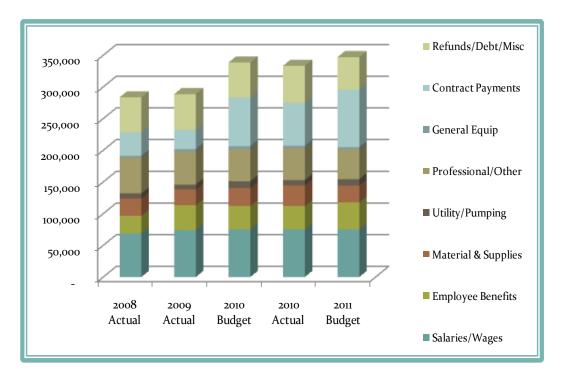
✓ Exercise responsible financial stewardship

#### Public Responsibility

- ✓ Promote water efficiency and wise water use
- ✓ Develop additional supplies for the future

#### Organization

- $\checkmark$  Promote accountability
- ✓ Improve efficiencies
- ✓ Communication



#### Denver Water Expenditure History (In Thousands of Dollars)

#### Manager and Staff Highlights



The 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 City Charter obligations.

The 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 Manager gives overall direction to

employees and oversees the work necessary to provide an adequate supply of water to the citizens 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 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 sources of funds to meet operating and maintenance costs, finance of ongoing capital improvement programs, and the principal and interest payments on long-term debts.

#### Manager and Staff Accomplishments During 2010

- Successful transition of leadership at Denver Water.
- Completion of substantive negotiations of the comprehensive agreement with the Western Slope regarding past and future operations of Denver Water facilities, and commencement of implementation negotiations with the State of Colorado.
- Initiation of Denver Water Strategic Planning Process.
- Initiation of Compensation Change Initiative.
- Advocated the interests of Denver Water in statewide policy and Colorado River Basin negotiations.
- Representation of Denver Water in State, National and International forums in water resource and utility management.
- Newly developed Internal Audit team became fully staffed. All team members hold MBAs, two are also Certified Public Accountants (CPA), and the Chief Auditor is a Certified Internal Auditor (CIA) and a Certified Information Systems Auditor (CISA).
- Included the small, minority and women business community to assist with outreach efforts for construction, purchasing and professional services.
- Denver Water received MLK Business Social Responsibility award.
- Successfully led effort to negotiate conservation reporting standards in House Bill 10-1051 that will standardize the collection and reporting of conservation data and benefit statewide water conservation efforts.
- Generated support at the Federal and Local level for Denver Water's proposed Moffat Collection System Project.
- Initiated a strategic planning process for Government Affairs designed to develop short and long term goals that will best serve Denver Water in the governmental affairs arena.

#### Manager and Staff Goals for 2011

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1,000 500

- Finalize the agreement with the Western Slope and assist in furthering the permitting process for the Moffat Project.
- Assure the completion and implementation of the Strategic Plan and Compensation Change initiatives.
- Lead the furtherance of efficient operations and processes at Denver Water.
- Advocate and represent the interests of Denver Water in Statewide, National and International forums and processes.
- Execute on the 2010-2011 Internal Audit Plan and meet the requirements of the newly adopted Internal Audit Charter.
- Identify a reporting system for Small Minority Women Business Enterprise (SMWBE) program to better track spending.
- Involve employees in various boards and committees.
- Continue to be involved in the community by being a part of trade shows and other ethnic chamber events.
- Complete the development of the Government Affairs strategic plan and begin its implementation.

Develop and implement a plan for educational outreach to government officials.

• Increase Denver Water's reputation as a resource on water provider issues with the Colorado General Assembly, the Governor's Office, City and County of Denver Government, and other governments that Denver Water works.





2008 Actual 2009 Actual 2010 Budget 2010 Actual

Salaries & Wages Prof & Other Services

# Manager and Staff Goals

#### Financial

✓ Exercise responsible financial stewardship

#### Public Responsibility

- ✓ Promote water efficiency and wise
- water use ✓ Develop additional supplies for the future

#### Organization

- ✓ Promote accountability
- ✓ Improve efficiencies
- ✓ Communication

2011 Budget



# Human Resources Division Highlights

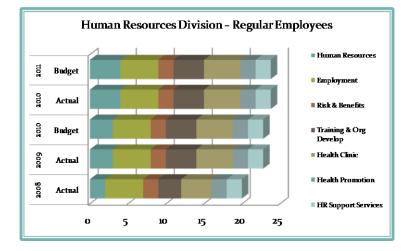
Under the direction of the CEO/Manager, the Human Resources Division is responsible for interpreting, updating and enforcing Denver Water's Personnel Policies; maintaining and revising Denver Water's classification and pay plans; establishing and maintaining employees' personnel records; implementing policies, procedures and programs relative to recruiting, hiring, managing and retaining Denver Water employees; developing programs for training, education, personal, professional and organization development; implementing programs related to health promotion, counseling, support, employee relations and equal opportunity; administering Denver Water's employee benefits and retirement programs; investigating internal and external employee complaints; and developing community outreach efforts with the goal of establishing Denver Water as an employer of choice.

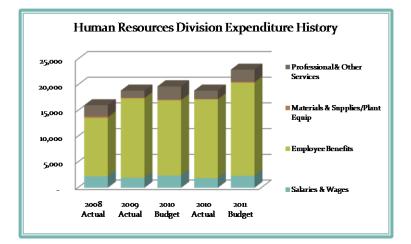
# Human Resources Accomplishments During 2010

- Completed changes to the medical program to ensure that Denver Water offers benefits comparable to peer organizations.
- Implementation of PeopleSoft Security administration procedures.
- Provided employee technical training.
- Worked with the Retirement Plan Committee in selecting a new actuary and a record keeper for our retirement plans.

# Human Resources Division Goals for 2011

- Establish a new compensation system for Denver Water.
- Implement ePerformance, an electronic assessment of an employee's job performance.
- Implement Kronos, an electronic time keeping system.
- Improve new hire employment process.
- Complete cafeteria audit and institute recommendations.





#### Human Resources Division Goals

#### Organization

- ✓ Promote accountability
- ✓ Improve efficiencies
- ✓ Communication



# Public Affairs Division Highlights

Under the direction of the CEO/Manager, the Public Affairs Division facilitates relationships with people and entities outside of Denver Water. The division responds to customer concerns and manages customer relations, maintains cooperative relationships with Denver City administration and governmental agencies whose sphere of operation affects Denver Water, coordinates the administration of distributor contracts, and facilitates Denver Water's relations with its various publics.

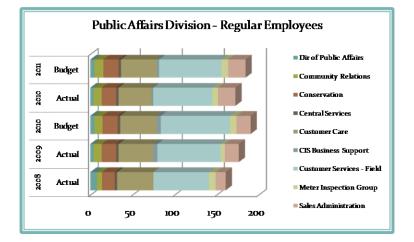
- Community Relations
- Customer Service Field
- Water Conservation
- Customer Care
- Sales Administration

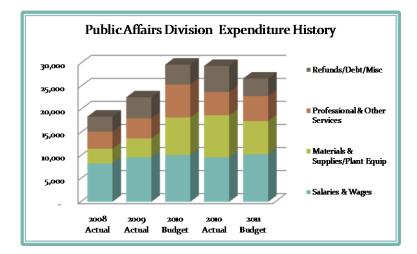
# Public Affairs Accomplishments During 2010

- Relocated Meter Reading, Customer Care and portions of Conservation to the Quivas building.
- Continued the pattern of urging wise water use by customers and implemented programs to reinforce those behaviors. Customers responded by continuing to reduce use even though the summer was hotter and drier than usual.
- Improved business processes to more efficiently use the new Customer Information System and continued to refine the system to best meet Denver Water needs.

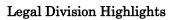
# Public Affairs Division Goals for 2011

- Transition Customer Service Field to the automatic dispatch and reporting system.
- Analyze participation contracts and get Board concurrence on determination of contract status.
- Clearly communicate to consumers complicated messages regarding forest health, western slope mediation, the WISE (Water, Infrastructure and Supply Efficiency) project and the related rate consequences.











The Legal Division represents and gives legal advice to Denver's Board of Water Commissioners, the CEO/Manager and the various divisions of Denver Water. It also handles all of Denver Water's litigation.

The types of legal representation include water rights and diligence proceedings, administrative proceedings before state and federal agencies, contracts, civil rights, tort claims, real estate and condemnations, and municipal, employment, environmental and regulatory law. When special counsel are hired, the Legal Division collaborates in and supervises their activities.

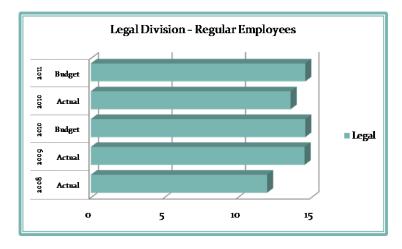
In addition, the Legal Division represents Board interests in internal administrative appeals relating to personnel problems and customer complaints, reviews and advises upon matters of pending legislation, and prepares and reviews contract documents of all kinds.

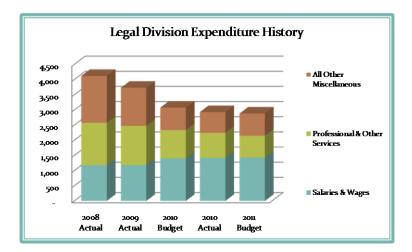
# Legal Accomplishments During 2010

- Completed the first phase of the global mediation with the West Slope after several years • of negotiation.
- Obtained final decree for implied consent water right, which confirms Denver Water's right to control nontributary groundwater underlying the City and County of Denver.
- Successfully defended in the Colorado Supreme Court the "5K Agreement" with FRICO • (Farmers Reservoir & Irrigation Company), obtaining an important ruling affirming the legality of "no call" agreements between water users.

# Legal Goals for 2011

- Develop mechanisms to implement the West Slope mediation agreement and obtain formal approval by the signatories to the agreement.
- Achieve satisfactory resolution of various claims and lawsuits brought against Denver Water.
- Provide legal assistance in obtaining acceptable permits for the enlargement of Gross Reservoir as part of the Moffat Project.





# Legal Division Goals

#### Customer

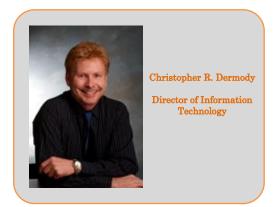
 $\checkmark {\rm Provide \ reliable \ service}$ 

#### Financial

✓ Exercise responsible financial stewardship

#### Organization

- ✓ Promote accountability
- ✓ Improve efficiencies
- ✓ Communication



# Information Technology Division Highlights

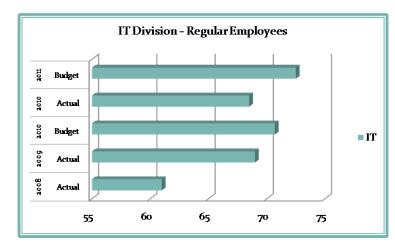
Under the direction of the CEO/Manager, the Information Technology Division develops, implements and supports computer applications, data-center operations and the technology infrastructure for Denver Water. This involves identifying and implementing appropriate technologies to meet the business needs of Denver Water, providing appropriate resources to support technologies that are implemented, providing availability of these technologies 24 hours per day, seven days per week and providing security for information maintained on the various computer systems.

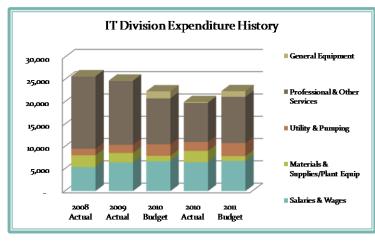
# Information Technology Accomplishments for 2010

- Implemented significant network upgrades interconnecting the Westside Campus with Treatment Plants and the new Quivas office facility.
- Provided mobile workforce automation for the Flushing Program.
- Provided MAXIMO (work and maintenance management system) based work management automation capabilities for Transmission and Distribution.
- Applied additional Customer Information System functionality and productivity related improvements.
- Implemented labor expense planning and actual labor expense reporting capabilities.

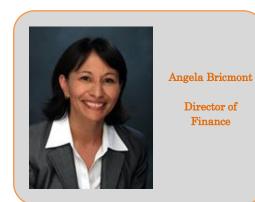
#### Information Technology Goals for 2011

- Integrate the water network information between the Geographic Information System and MAXIMO (work and maintenance management system) systems.
- Provide mobile workforce automation for the Locates Crews, Transmission and Distribution Crews and Customer Service Field Crews.
- Automate Distribution Engineering work planning and estimating processes.
- Establish a new E-MAP system to provide improved mobile and desktop access to Geographic Information System.
- Institute additional Customer Information System functionality and productivity related improvements.
- Complete the implementation of the KRONOS time keeping system.
- Implement an enterprise content management system.









# **Finance Division Highlights**

Under the direction of the CEO/Manager, the Finance Division is responsible for managing financial resources, acting as the disbursing authority for the Manager and providing electronic record keeping.

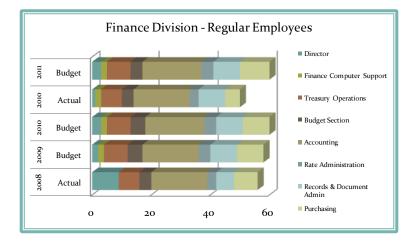
- Budget
- Accounting
- Treasury Operations
- Rate Administration
- Purchasing
- Records and Document Administration

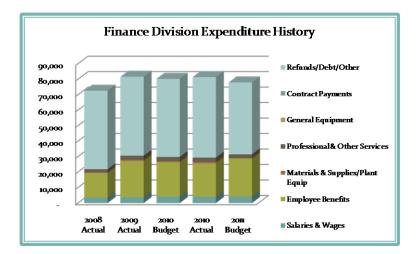
#### **Finance Accomplishments for 2010**

- Issued \$90 million in Build America Bonds at a historically low interest rate of 3.1%.
- Developed and implemented a capital program review (CPR) process to focus the organization on successful execution of the Board's 10 Year Capital Plan. Improved capital project execution rate from 68% (2009) to 96% (2010 estimate).
- Implemented several risk management initiatives aimed at ensuring that all Denver Water contracts are in compliance with insurance and other risk-related requirements.

### Finance Division Goals for 2011

- Implement and deploy an Enterprise Content Management System (ECMS). An ECMS is a tool used to capture, manage, store, preserve and deliver documents-based content related to internal business processes. ECMS will benefit Denver Water by ensuring compliance with records retention requirements, improving business processes, and allowing more efficient collaboration.
- Deploy our new Enterprise Time Management System (ETMS) which will replace our aging unsupportable legacy timekeeping system. ETMS will replace our paper-based system, improve workforce management, and improve compliance by reducing the risk of errors.
- Develop and implement a process to review operating costs on an ongoing basis in an effort to keep costs low and ensure responsible stewardship of ratepayer dollars.





# Finance Division Goals Financial \* Exercise responsible financial stewardship Public Responsibility \* Promote water efficiency and wise water use \* Develop additional supplies for the future Deganization \* Improve efficiencies



# **Engineering Division Highlights**

Under the direction of the CEO/Manager, the Engineering Division is responsible for the design, construction and related engineering aspects of physical additions or improvements to the water system.

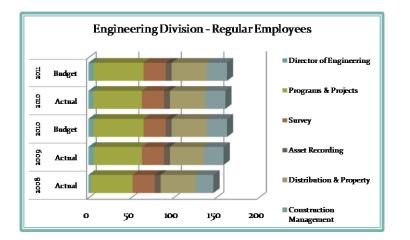
- Survey
- Programs and Projects
- Construction Management
- Asset Recording
- Administration

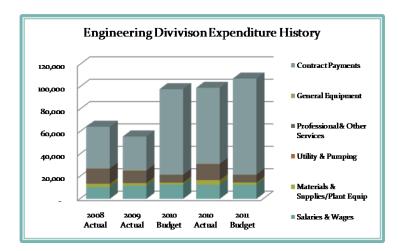
#### **Engineering Accomplishments for 2010**

- Ongoing work on Denver Water's large Capital Improvement Program, including Cheesman Dam and Williams Fork Dam projects, and closeout of the Marston Filter Plant No. 2 project.
- Coordination of multiple projects and outages to accommodate the regional RTD FasTracks project.
- Major strides in the development of online tools to enhance project development efficiency.

# **Engineering Division Goals for 2011**

- Dredge approximately 625,000 cubic yards of sediments from Strontia Springs Reservoir.
- Ongoing construction or completion of major capital projects including Cheesman Dam, Williams Fork Dam and Lone Tree Storage Reservoir projects.
- Additional work on developing efficiency tools and standards to enhance execution of capital projects.





# Engineering Division Goals

#### Customer

- ✓ Provide reliable service✓ Provide excellent
- service

#### Financial

✓ Exercise responsible financial stewardship

#### **Public Responsibility**

✓ Develop additional supplies for the future

#### Organization

- $\checkmark$  Promote accountability
- ✓ Improve efficiencies



# **Operations and Maintenance Division Highlights**

The Operations and Maintenance Division is responsible for the collection, treatment, and distribution of potable and recycled water. The Division operates and maintains major dams and reservoirs, hydropower generating facilities, multiple raw water tunnels and canals, treatment plants, finished water reservoirs with pump stations, and nearly 2,700 miles of water mains throughout Denver and its Total Service area.

- Source of Supply
- Water Treatment
- Water Quality and Environmental Compliance
- Water Control
- Safety & Loss Control
- Instrumentation & Control Systems
- Transmission & Distribution
- Maintenance
- Recycled Water
- Office

# **Operations & Maintenance Accomplishments for 2010**

- Made significant improvements to safety programs.
- Completed revision of the Recycled Water Master Plan.
- Collaborated with the City of Denver and Denver Fire Department in effort to obtain a favorable Public Protection Classification from the Insurance Services Office.
- Developed a new training program for Transmission and Distribution employees.
- Worked extensively with the Colorado Department of Health and Environment to redesign Denver Water's Lead and Copper rule program.

# **Operation & Maintenance Division Goals for 2011**

40,000

30,000 20,000

10,000

2008

Actual

2009

2010

Actual Budget

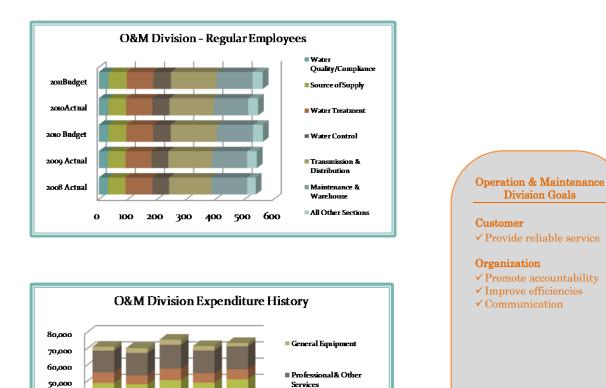
2010

Actual

2011

Budget

- Work with Executive Staff and the Board to develop key priorities and projects that will allow efficient and effective implementation of Denver Water's Strategic Plan.
- Continue Deployment of technology to field crews.
- Implement recommendations from the study of Warehouse and Purchasing operations.
- Finalize development and implementation of the Linear Construction Stormwater Management Plan.
- Assist with training and implementation of Kronos an electronic timekeeping system.
- Continue study of Denver Water's Moffat Treatment Plant to determine whether or not to rebuild the facility at the current location or relocate the plant.



Utility & Pumping

Equip Salaries & Wages

Materials & Supplies/Plant



# **Planning Division Highlights**

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.

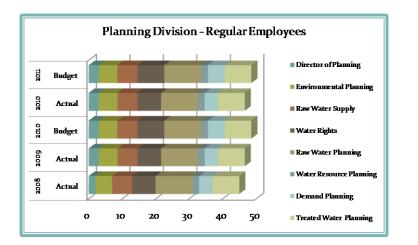
- Treated Water Planning
- Demand Planning
- Water Rights
- Water Resources Analysis
- Raw Water Supply
- Environmental Planning
- Water Resources Planning

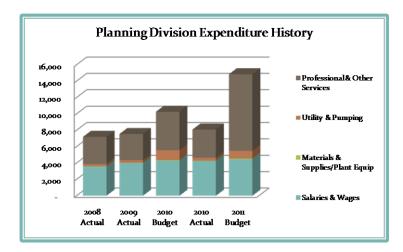
# Planning Accomplishments for 2010

- Completed Public Hearings for the Draft Environmental Impact Statement for the Moffat Collection System Project and assisted the U.S. Army Corps of Engineers (COE) with responding to comments.
- Negotiated a Memorandum of Understanding with the U.S. Forest Service for \$33 million (\$16.5 million each) to work together to improve the health of the forests in Denver Water's watersheds.
- Drafted a delivery agreement for the first phase of the Water Infrastructure Supply Efficiency Partnership (WISE) project.
- Completed the Treated Water Planning Study to determine treated water distribution facilities needed for future growth and evaluation of structural reliability issues.
- Assisted with establishing a new and more efficient 10-year Capital plan and annual budget process that reduces duplication and shortens the time to complete the efforts.

## Planning Division Goals for 2011

- Work with the U.S. Army Corps of Engineers (COE) to complete and issue the Final Environmental Impact Statement on the Moffat Collection System Project. Develop a comprehensive mitigation and environmental plan(s).
- Implement on-the-ground forest treatments with the U.S. Forest Service in the Strontia Springs Zone of Concern and continue to develop work plans for other watersheds in Denver Water's collection system.
- Complete the new Integrated Resource Plan to establish policy on new conservation, reuse and supply project, expansion of the treatment and distribution system, water quality and supply reliability goals.
- Begin implementation of required elements of the mediated agreement with Colorado River Basin entities.
- Secure resolution of outstanding issues surrounding the 1940 Agreement with Consolidated Ditches and Englewood's concerns with water exchange operations.





# Planning Division Goals

#### Financial

✓ Exercise responsible financial stewardship

#### Public Responsibility

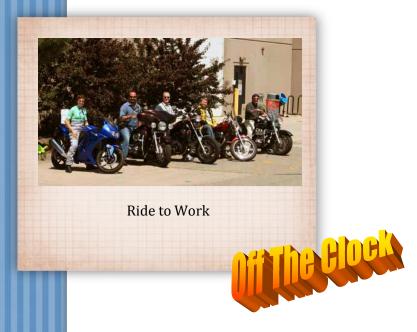
- ✓ Promote water efficiency and wise water use
- ✓ Develop additional supplies for the future

#### Organization

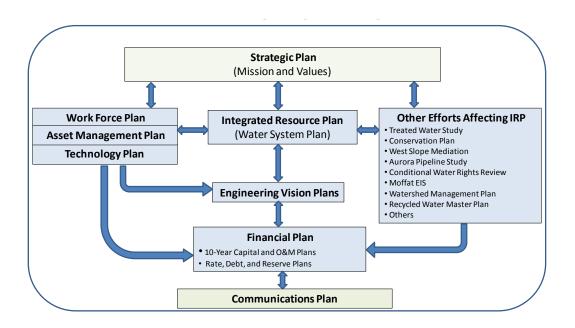
- ✓ Promote accountability
- ✓ Improve efficiencies
- ✓ Communication

# Strategic Overview

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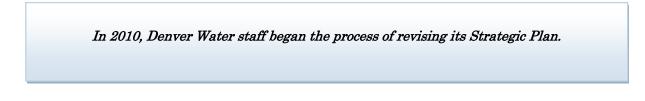


# Denver Water Long-Range Planning Activities



# Long-Range Planning

The Denver Water Board engages in a number of long-range planning efforts, all of which have a direct impact on the budget. The diagram above illustrates the intricate linkage between these various planning efforts.



# Strategic Planning

In 2010, Denver Water staff began the process of revising its Strategic Plan. Denver Water understands that to be more responsive to its customers in a rapidly changing economy Denver water must increase its flexibility throughout the organization. The Strategic Plan describes how we will leverage our people and technology, not only to meet and exceed expectations but also excel as the state's largest water utility.

The process began by hiring a strategic planning professional who worked with executive staff and Board Members to develop the high level goals and major focus areas of our strategy. Midlevel managers were invited to give input and provide feedback relating to the areas of focus. In the coming months, strategy will be further developed by the creation of tasks and supported by performance metrics to measure the impact of strategic goals. The results of the strategic plan will be incorporated into the 2012 Budget.

# **Integrated Resource Planning**

In 1997, Denver Water was one of the first water utilities in the country to prepare an Integrated Resource Plan (IRP) to address changes in the water service industry that could impact our service area. The IRP is narrower in scope, but more detailed than the Strategic Plan and specifically addresses the level of system reliability we want to provide to customers, new facility needs, water quality issues, and operations and maintenance direction for our treatment and distribution systems. The 1997 plan resulted in the Board issuing a Resource Statement that identified a near-term strategy of conservation, non-potable reuse, system refinements, cooperative resource projects and supply projects. These projects are currently under development.

# Efforts are currently underway to update the IRP.

Efforts are currently underway to update the IRP. It has become apparent that the future for which the organization is planning is uncertain. New developments that could influence the Board's future actions include severe drought, catastrophic wildfires, terrorist attacks, climate change, the pine beetle impact on our watersheds, and new risks of regulatory changes. The new IRP process addresses the need for an expanded, more fully integrated long-range planning process that will:

- 1. Incorporate new demand planning and conservation opportunities.
- 2. Address emerging water quality challenges.
- 3. Integrate planning across the raw water, treatment, distribution, and recycling water systems in a more complete manner.
- 4. Redefine the appropriate levels for system reliability and water service goals.
- 5. Develop planning strategies for addressing new uncertainties from climate changes, regulatory risks, demand pattern changes, system failure risks and rehabilitation requirements, and others.
- 6. Reassess the Board's role in regional and statewide water activities.
- 7. Integrate the results of the new IRP into future Capital Plans.

The projects that were identified in the 1997 IRP and subsequent 2002 update are underway and are included in our 10-Year Capital Plan. Examples of these projects are the Moffat Collection System and Gravel Pit storage, which are discussed in the section below. When the new IRP is completed in 2011, the results will be integrated into the long-range Capital Plan.

# **10-Year Financial Planning**

Each year Denver Water engages in a 10-Year Financial planning process that looks at capital and operating priorities over the next ten years. Finance Division staff then conduct an analysis to determine the appropriate combination of rate revenue, debt, and cash reserves needed to finance the plan.

The 2011-2020 Financial Plan reflects Denver Water's focus on planning for the water needs of our customers and our neighbors in the coming years. Our organizational commitment to meeting these needs through a combination of new water supply, water conservation, and water reuse is apparent in these documents.

The single largest project in the 10-Year Capital Plan is the Moffat Collection System project. Currently, over 80% of Denver Water's system relies on the unimpeded operation of just one of our reservoirs (Strontia Springs). An emergency above this reservoir or an extreme drought could result in a shortage of water in the Moffat Collection System. Denver Water has performed extensive reviews of alternatives to increase water supply to this system. Enlarging Gross Reservoir is the least costly and most environmentally friendly means to achieve the required additional water supply. The current 10-Year Plan estimate for the project is \$229.7 million, with construction scheduled for 2013-2017. In late 2009, the U.S. Army Corps of Engineers issued a draft Environmental Impact Statement for this project and instituted a public comment period that extended through March, 2010. Once the comment period closed, the Corps analyzed the comments and incorporated them where appropriate. If major changes to the scope of the project are not required, the Corps could issue Denver Water a permit in 2011. The 2011 budget contains \$1.3 million for the completion of the final Environmental Impact Statement.

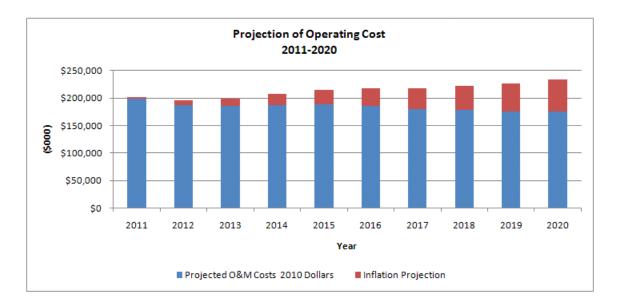
> The single largest project in the 10-Year Capital Plan is the Moffat Collection System project.

The 10-Year Capital Plan also outlines \$49.9 million in funding for our Gravel Pit Storage Projects. These projects, which are being developed cooperatively with other Denver Metro area water users, reclaim mined gravel pits and convert them into water storage which can be used for river exchanges or to supplement water available to the non-potable reuse plant. For 2011, just over \$3.1 million has been allocated for construction work on the gravel pits.

The Denver Water commitment to non-potable reuse of water is also reflected in the 10-Year Capital Plan. The Board of Water Commissioners has expressed a desire to accelerate the build out of the recycled water system to 2020. There is a total of \$74.3 million allocated to the expansion of the recycled water plant and distribution system. The distribution system will grow to connect new customers to the system. An expansion of the recycled water plant is scheduled for 2017-2019 and will add 15MGD capacity to the facility. The 2011 capital improvement plan provides \$9.4 million for the expansion of our recycled distribution system.

The 2011 capital improvement plan provides \$9.3 million for the expansion of our recycled distribution system.

As is the case with most water utilities, Denver Water is faced with an aging infrastructure, with some parts of the collection, treatment, and delivery system nearing the end of their useful life. In order to meet our strategic objective and charter requirement to deliver high quality water at the lowest possible cost, we must step up our efforts to replace this aging infrastructure. Our Plan is to double the rate of replacement over the next 10 years. This commitment is also reflected in the 10-Year Capital Plan where we have budgeted \$131.0 million for pipe replacements and rehabilitation.



The graph presented here shows how Denver Water's Operating Costs are expected to grow over the next 10 years. Much of the growth represented in this chart is related to our commitment to water supply, reuse, and conservation as outlined above.

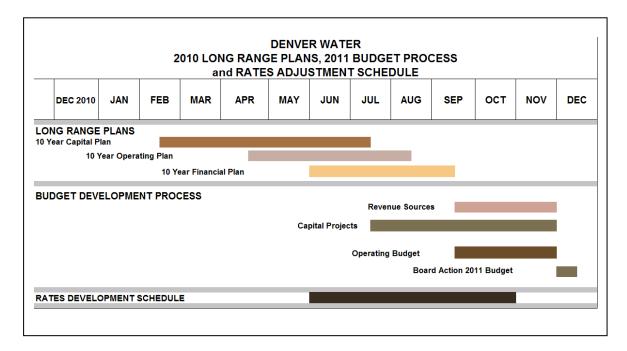
The largest single operating expenditure in the planning horizon is the removal of sediment from the Strontia Springs Reservoir. During the Buffalo Creek (1996) and Hayman (2002) fires, much of the vegetation in this watershed was destroyed. As a result, rainstorms now push sediment into the reservoir and 8-10% of the storage capacity has been lost. In 2010 Denver Water spent \$8.0 million in the beginning of the project to regain lost capacity by removing the sediment and piping it to our Kassler Facility, over 6 miles downstream. The 2011 Approved Budget allocates \$20.5 million for further construction work on this project.

The 2011-2020 Operating Plan also reflects Denver Water's continued efforts to encourage our customers to use water wisely in all situations. Denver Water's conservation goal is to achieve 29,000 acre-feet of water savings by 2016. Denver Water expects to spend \$89.6 million on conservation programs in the next 10 years. In 2011, \$8.8 million will be spent on education and outreach, rebates and incentives, and monitoring and evaluation of each program.

The 2011-2020 Operating Plan also reflects Denver Water's continued efforts to encourage our customers to use water wisely in all situations.

As with most public sector enterprises, Denver Water is also anticipating significant future cost increases for chemicals, maintenance, security, and employee benefits. These increases are reflected in the 10-Year Plan and the 2011 Annual Budget.

Once the 10-Year Capital and Operating priorities have been finalized and incorporated into the Financial Plan, the Finance Division, works to develop the strategy to finance the plan. The draft 10-Year Financial Plan is presented to the Board in July. After Board approval, the water rates are developed for the following year and incorporated into the annual budget.



# Annual Budget Process

The annual budget process begins in July, when the 10-Year Financial Plan has been finalized. The first year of the completed Financial Plan is presumed to be the following year's annual budget. Measurable changes are made to the annual Capital and Operating budgets as estimates for revenues, staffing levels, salaries, benefits, and project schedules are refined. Throughout the fall, meetings are held with the Board's Budget subcommittee to discuss budget assumptions or changes that have occurred since the rates were adopted. At the public Board workshop in November, the full Board is presented with a draft of the annual budget. Feedback is incorporated into the budget and the final budget is presented to the Board for adoption at a public meeting in early December.

# Amending the Budget

Budgets for projects or activities may be added or revised during the year. When possible, funds are transferred from another project that has been delayed or cancelled. All changes must be requested via an official variance notification to the Budget Manager and signed by the appropriate Division Director. Division Directors can authorize expenditures up to \$10,000 without further approval. Expenditures up to \$100,000 can be authorized by the Manager, but all contracts and purchases over \$100,000, whether budgeted or unbudgeted, must be authorized by the Board of Water Commissioners. The Board Agenda Item form provides transparent information as to whether a particular item was budgeted in the current year.

The Budget Office provides a variance report and updated forecast at the end of each quarter to the executive staff and the Board Budget Subcommittee. These reports provide information about year-to-date budget performance and changes which occurred during the previous quarter and their impact on reserve balances.

### **Summary of 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. Where applicable, copies of the financial policies are included in the appendix at the end of this document. 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.

# 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% of the next year's operating costs, 50% of replacement capital and equipment purchases, one year of debt service, and a 5% self-insurance reserve.

# 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. Budgeting is done on a modified accrual basis meaning that revenues are recognized when they become measurable or available (cash basis), while expenditures are accounted for in the accounting period incurred (accrual basis).

# 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 (GASB).

# Chart of Accounts:

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

# <u>Capital Policy</u>:

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.

### <u>Revenues</u>:

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 and a portion of the costs of new facilities and water supply.

## <u>Expenditures</u>:

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 that Denver Water will properly maintain its facilities and continuously seek ways to operate more efficiently.

#### <u>Risk Management</u>:

The Board is exposed to various risks of loss, including general liability, (limited under the Colorado Governmental Immunity Act to \$150,000 per person and \$600,000 per occurrence) property damage, 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 identified major facilities.

## Investments:

The Board has protection of principal as its primary investment policy objective. The Board designates its authority to invest monies deposited in the Water Works Fund to the Manager and the Director of Finance. According to the current investment policy, U.S. Government obligations and 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.

# <u>Debt Guidelines</u>:

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.

## Fund Structure

Denver Water is an "enterprise" of the City within the meaning of Article X, Section 20 of the Colorado Constitution. 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..."

Although the Board approves the rates and the annual budget, no funds are appropriated.

Fund Balance: 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 capital projects. In 2010 the Investment balance available for future operating and capital was \$80.1 million

2010 Investment Balance Summary (\$000)							
	2010 Actual						
Beginning Balance 01/01	\$	194,012					
Total Sources		354,190					
Total Uses	\$ <u>\$</u> \$	<u>333,241</u>					
Ending Investment Balance 12/31	\$	214,961					
Less: Board Designated Cash							
Land Sale Proceeds	\$	11,969					
Blue River Decree Litigation	\$ \$ <u>\$</u> \$	3,500					
OPEB Designated Funds	\$	7,800					
Total Board Designated Cash	\$	23,269					
Less: Legally Restricted Cash:							
Total Legally Restricted Cash	\$	7,426					
Available Investment Balance	\$	184,266					
	ć	EE 222					
Less: Operating/Insurance Reserve (30% of Operating)	\$ \$	55,332					
Less: Part II/III Capital Reserve (50% Replacement Capital)	Ş	48,783					
Available for Future Operating & Capital 12/31	\$	80,151					

#### **Debt Information**

As set forth in the debt guidelines adopted in May, 2003, Denver Water issues debt only for refunding current maturities of existing debt (current refunding), refunding future maturities of existing debt (advance refunding), and for non-recurring capital expenditures. Operating expenses and capital improvements of a normal recurring nature are included in the calculation of the revenue requirement from rates and are, therefore, financed on a "pay-as-you-go" basis.

The Treasury section monitors the marketplace and evaluates the appropriateness of various financing sources for specific capital projects. The expected life of the asset, the nature of the covenants, and the impact on the organization's future financial flexibility and whether Denver Water will be able to support the projected level of debt are analyzed.

Denver Water's policy is to structure current refunding so that the final maturity of the debt does not exceed the useful life of the asset. Advance refunding is considered when the net present value savings on the bonds being refunded are greater than 3% and the refunding is permitted by statutory regulations.

Denver Water's debt guidelines state the organization's desire to maintain the stand-alone revenue bond rating at a level of AA or better. In order to maintain or exceed this rating Denver Water uses the following, guidelines in 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. Interest Coverage (Net Revenues divided by Interest Requirements-excluding System Development Charges) should be equal to or greater than 2.5x.

c. Debt Service Coverage, as defined in the Master Bond Resolution should be equal to or greater than 2.2x.

d. The year-end balance in the Water Works Fund, net of Principal and Interest Requirements for the next 12 months should be equal to or greater than \$5 million.

Debt Pr	<b>Debt Principal and Interest Obligations</b> (in Millions of dollars)									
Year	Pri	ncipal	Int	erest	Т	otal				
2011	\$	24.0	\$	22.3	\$	46.3				
2012		19.7		20.3		39.9				
2013		21.1		19.4		40.5				
2014		22.1		18.4		40.5				
2015		23.2		17.3		40.6				
2016		24.6		16.2		40.8				

# **Budget Summary**

Comparison of Sources and Uses of Funds 51

**Priorities and Issues** 

52-54



Compariso					es	of Funds	5			
		(Thousands 8 Actuals	_	Dollars) 009 Actuals	20	10 Budget	20	o Actuals	20	u Budget
Beginning Investment Balance		5226,160		\$198,311		\$194,012		\$194,012		5225,410
		Sources	of F							
Operating Revenue	\$	204,232	\$	188,293	\$	223,305	\$	225,493	\$	246,079
Non-Operating		3,140		2,467		3,482		3,285		6,098
Hydropower		4,315		4,949		3,797		4,000	•••••	3,797
System Development Charges		19,138		9,013		8,000		11,283		8,000
Participation, Reimbursements & Grants		5,197		10,938		4,863		10,940		4,863
Interest on Investments		8,133		5,183		704		310		1,134
All Other Revenue		9,696		5,675		8,185		8,879		8,503
Subtotal Sources of Funds	\$	253,851	\$	226,518	\$	252,336	\$	264,190	\$	278,474
Bond Proceeds	-	1,800		44,000	-	39,000		90,000		0
Total Sources of Funds	\$	255,651	\$	270,518	\$	291,336	\$	354,190	\$	278,474
		Uses of	Fu	-				11.07		
Operation & Maintenance Programs:										
Raw Water	\$	8,857	\$	9,411	\$	23,766	\$	19,468	\$	34,376
Recycled Water		2,786		2,729		3,700		2,755		2,293
Water Treatment		15,635		16,109		18,825		17,355		15,480
Delivery		19,824		18,161		19,983		18,925		20,352
Conservation		6,568		8,741		11,444		10,846		8,793
Customer Service		7,968		10,085		14,862		13,657		10,149
General Plant		10,049		10,514		9,538		10,719		12,855
Administration		38,623		40,422		44,347		40,204		41,402
Distributed Indirect Costs		40,789		52,439		47,450		50,512		52,941
Total Operation & Maintenance	\$	151,099	\$	168,611	\$	193,915	\$	184,441	\$	198,641
Capital Programs:										
Raw Water	\$	25,366	\$	23,045	\$	38,999	\$	44,770	\$	24,274
Recycled Water		2,695		702		5,198		3,253		9,390
Water Treatment		17,843		10,010		10,628		11,142		7,108
Delivery		13,677		16,591		24,885		25,274		44,944
General Plant		23,216		18,791		14,415		13,127		16,162
Total Capital	\$	82,797	\$	69,148	\$	94,125	\$	97,566	\$	101,878
Debt Service:						10.2		102		
Debt Service		49,604		50,800		50,525		51,234		46,374
Total Uses of Funds	\$	283,500	\$	288,559	\$		\$	333,241	\$	346,893
Cash Balance Adjustment		J/J-2	\$	13,742		11-11-1	\$	10,449		1. 1-11
Net Cash Flow	\$	(27,849)	\$	( <b>4</b> , <b>299</b> )	\$	(47,229)	\$	31,398	\$	(68,419)
Ending Investment Balance	\$	198,311		194,012		146,783		225,410		156,991

\*Cash Balance Adjustment is required to reflect the Ending Investment Balance due to Accrual Based Expenditures.

The above table shows a comparison of Denver Water's 2011 Budget to the 2010 Budget and actual expenditures from 2008-2010.

# **Priorities and Issues**

Denver Water operates on a cost-of-service basis, a system through which rates are established in order to reimburse the utility for legitimate costs it encounters in serving customers. In a typical year we examine priorities, demand forecasts, and financial conditions and then set revenue and expenditure projections through our 10-year planning process in June. The resulting rates and expenditures become the basis for the following year's annual budget, although some small changes are made in the interim.

# **Revenue Issues**

# Weather

Fluctuations in seasonal demand patterns have a significant impact on Denver Water's operating revenues. From 2001-2005 Denver Water experienced prolonged drought which required a significant reduction in customer demand. After the drought had subsided the Board pursued an aggressive conservation program. Due to conservation programs along with permanent changes in customer water use behavior, customer demand has decreased by 19%. Denver Water's 2010 revenue projections were calculated using a normalized historical water consumption assumption of 66 billion gallons of treated water. Our actual treated water demand for 2010 was 67 billion gallons and, as a result, revenue from water sales were \$2 million (1.2%) higher than the budgeted amount.

As we begin 2011, Denver Water will continue to be concerned about the impact weather may have on our revenues. Runoff from melting mountain snows account for the majority of Denver Water's water supply. If snowpack and runoff figures are low enough, Denver Water may consider demand management alternatives including summer watering restrictions, which could have an impact on revenue. Although significant winter storms in the mountains can still change the outlook, Denver Water is monitoring the situation closely and will seek to respond to any revenue shortfalls in a way that enables us to operate our system efficiently, meet our system expansion and improvement needs, and remain financially healthy.

# The Economy

Denver Water is an enterprise fund operating on an enterprise basis and, therefore, we do not receive any revenue from taxes. Our revenue vulnerabilities are largely related to water consumption and not the economic climate. While we face revenue shortfalls in an abnormally wet or dry year, consumer spending does not impact our revenue.

One aspect of the economy that impacts Denver Water's revenue projections is housing starts. Denver Water assesses a fee, known as a System Development Charge (SDC), for new connections to our system. These fees are used to fund expansion capital. As a result of the slumping housing market, receipts from SDCs were only 51% of normal in 2010. Based on information from the local Home Builders Association, we do not anticipate significant improvement in 2011. We have projected 2011 receipts from SDCs to be \$8.0 million, a considerable decrease from the \$22.0 million we would expect in a normal housing market.

Our revenue vulnerabilities are largely related to water consumption and not the economic climate.

# **Expenditure Issues**

# Capital Expenditures

In an effort to eliminate the capital project backlog resulting from delaying projects due to the drought, the Board adopted, and has continued to carry out and ambitious \$1.3 billion 10-year capital expenditure program that includes funds to double our annual rate of system reinvestment, build out our recycled water and gravel pit storage systems by 2020, and complete a \$226 million project to raise the dam and expand storage capacity at Gross Reservoir. It is critical to our customers that we keep this capital program on track and not continue to push projects into later years.

New management strategies have been put into place to ensure these projects stay on schedule to the extent possible. The new approach includes a Capital Program Review (CPR) committee as well as a Strategic Planning process. The CPR meets once per month with the objective of breaking down barriers and improving communication between the Engineering, Operations, Planning, and Finance Divisions. The results so far have been impressive and the CPR group is already looking ahead to 2011 to ensure projects scheduled for that year are moving at an appropriate pace. In 2010, Denver Water staff began the process of revising its Strategic Plan. The Strategic Plan describes how we will leverage our people and technology, not only to meet and exceed expectations but also excel as the state's largest water utility.

A year of significant revenue loss would present a major challenge to keeping our 10-year capital program on track, especially given SDC receipts that are likely to be less than half of normal. Staff is monitoring the situation on a monthly basis and if the revenue shortfall materializes we will be prepared to respond accordingly with a larger debt issue or use of cash reserves. Delaying scheduled capital projects will be the option of last resort.

# **Operating Expenses**

Most of Denver Water's operating expenses are fixed. In fact, only 7% of our operating costs are variable. This fact is of special concern when you consider that only 4.4% of our revenues are fixed. In other words, when revenue is significantly reduced due to low customer demand, we still have to operate our reservoirs, treatment plants, and distribution systems, read meters and bill customers, operate computer systems, and process payments and payroll. Therefore, it is not easy to reduce operating expenses significantly when revenues are down.

Most of Denver Water's operating expenses are fixed. In fact, only 7% of our operating costs are variable.

Recent circumstances are putting upward pressure on our operating expense budget. For example, in 2009 we moved from bi-monthly to monthly billing in an effort to give our customers more timely information about their water consumption. Although this move will benefit our conservation efforts, it also doubled our meter reading and billing costs. Employee and retiree health care costs are increasing rapidly, as are costs for security at our outlying facilities. As outlined in the budget message, a major dredging project to regain lost capacity in Strontia Springs Reservoir will add \$20.0 million to the operating budget in 2011.

Despite these difficulties, Denver Water has made a concerted effort to reduce operating expenses where possible. In 2011, training, travel, and consultant services will be reduced significantly. Also Staff has committed to an increase the vacancy rate from 4% to 5% for 2011. While the Board did approve a market adjustment for its employees for 2011, the Board continues to evaluate our current employee compensation program. The new pay system will focus on rewarding top performers and eliminating automatic salary adjustments. Staff is also analyzing changes to our retiree medical program that may reduce our Other Post Employment Benefit (OPEB) liability in the future.

# **Financial Impact of Conservation**

Denver Water is faced with the seemingly contradictory relationship between water conservation and revenues. Denver Water sets water rates based on the cost of service ratemaking methodology and, therefore, sets rates to cover the costs of maintaining and operating the water system. The majority of our operating costs are fixed, and as a result, when water consumption is reduced revenues fall and rates must be raised to cover costs. Although water conservation will result in reduced costs for capacity additions in the future, most customers focus on the short-term impacts and believe they are being punished for conserving water.

This perceived conflict means that, while Denver Water must continue to cover full cost of service through water rates, we must also be aware of the impact on our customers. As part of this effort, proposed costs are evaluated each year with a mind toward the resulting rate increases. Through our Strategic Planning Process we have identified the need to educate our customers on the importance of water conservation and the future costs that can be avoided if we use water wisely.

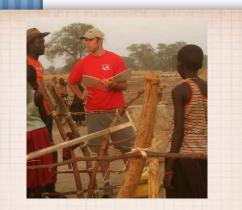
# Summary

Denver Water begins 2011 in a strong financial position with a watchful eye on the weather and the potential financial impact of another year of revenue shortfall. In the sections that follow, our revenue projections and budget drivers for 2011 are described in detail.

Our commitment to providing high quality service at the lowest possible rates is reflected throughout the discussion of revenue and expenditures. The 2011 budget also has strong linkages to our long-term and strategic planning objectives.

# Sources of Funds

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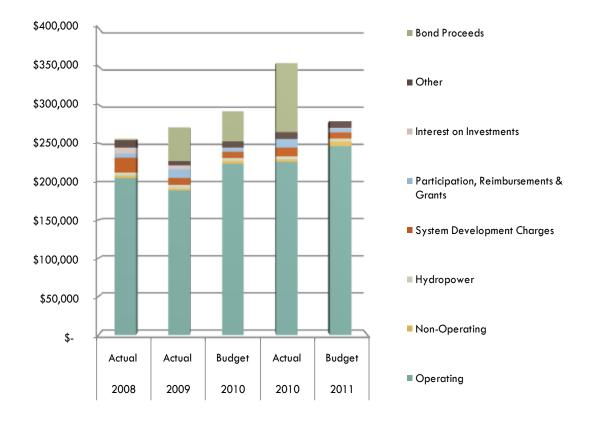
Denver Water planner helps bring water, education to Sudanese villages



		2008 Actual		2009 Actual		2010 Budget		2010 Actual		11 Idget
Operating	\$	204,232	\$	188,293	\$	223,305	\$	225,493	\$	246,07
Non-Operating		3,140		2,467		3,482		3,285		6,09
Hydropower		4,315		4,949		3,797		4,000		3,79
System Development Charges		19,138		9,013		8,000		11,283		8,00
Participation, Reimbursements & Grants		5,197		10,938		4,863		10,940		4,86
Interest on Investments		8,133		5,183		704		310		1,13
Other		9,696		5,675		8,185		8,879		8,50
Subtotal Sources	\$	253,851	\$2	226,518	\$	252,336	\$2	264,190	\$	278,474
Bond Proceeds		1,800		44,000		39,000		90,000		-
Total Sources	\$	255,651	\$2	270,518	\$	291,336	\$3	354,190	\$	278,474

# 2008-2011 COMPARISON OF SOURCES OF FUNDS

The projected sources of funds for Denver Water in 2011 are \$278.5 million.



### Key Issues - Water Rates

### Water Rates

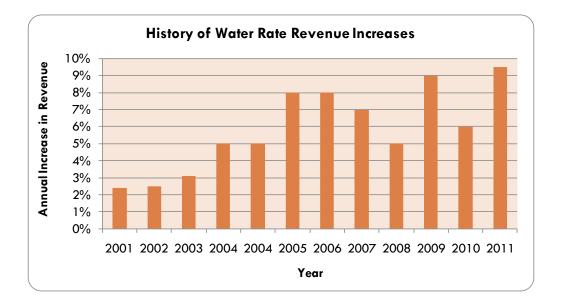
• The Board of Water Commissioners adjusts water rates annually to adequately recover the cost of providing service. These costs include operations and maintenance, debt service and rate financed capital.

### **Rate Increase**

• Effective March 2011, Denver Water's rates will increase. Typical residential customers will see their bills increase by about \$41 a year. Typical suburban residential customers served by Denver Water will see an increase of \$33 per year. The amount of the bill will vary depending on how much water the customer uses.

### Why Is the Rate Increase Necessary?

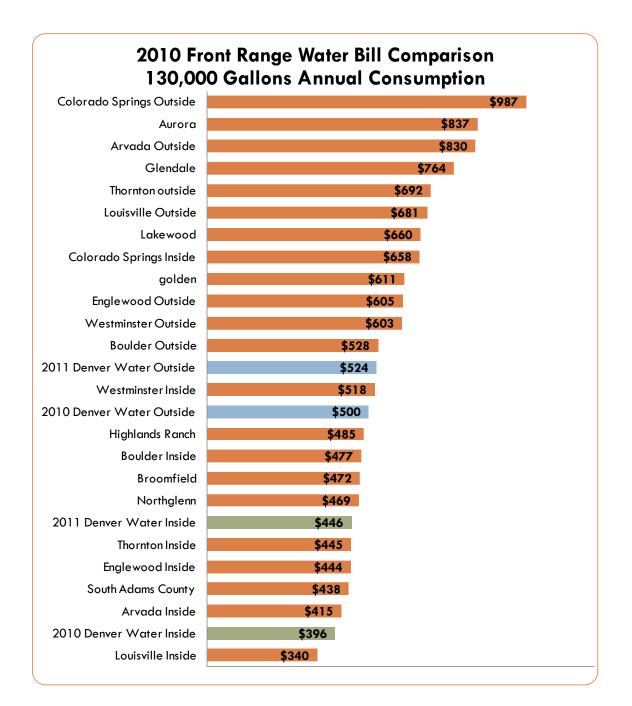
• Our most important responsibility is to ensure our community has a safe and reliable supply of clean water. Today, we are at a pivotal point. Our distribution system is aging. Over the long term, demand for water will continue to increase while the supplies to meet that demand will become increasingly limited. Also, the threat of climate change creates greater uncertainty with regard to our water supplies, 80 percent of which come from snow.



### **Comparative Water Bills**

The following table compares Denver's annual residential water bills with those of the other independent suppliers in the Denver Metropolitan area for a representative residential customer based on usage of 130,000 gallons per year. This information is for comparison purposes only.

Rates for Denver Water customers living inside the city remain among the lowest in the metro area.



### **Types of Water Service**

Water rates are based on four types of retail metered service: Inside City, Outside City Read and Bill, Outside City Total Service and Master Meter Distributors. Inside City service refers to all water users inside Denver. Outside City Read and Bill service refers to areas outside the City where Denver Water is responsible for water delivery to a distributor and for reading meters and billing customers, while the distributor is responsible for operation and maintenance of the distribution system. Outside City Total Service refers to areas outside the City where Denver Water is responsible for water delivery, reading meters, and billing customers, as well as operation and maintenance of the distribution system.



52% of our Customers live in the City and generate 44% of water sales revenue.

48% of our Customers live outside the City and generate 56% of water sales revenue. (Includes Master Meter Distributors)



A variation to the standard "Total Service" Contract is the Total Service Improvement Contract. Under this contract a Distributor whose system does not currently meet Denver Water Engineering Standards may request to enter into a "Total Service" Contract that includes special provisions for Denver Water to take dominion over the Distributor's existing water system and to upgrade the Distributor's water system to meet Denver Water Engineering Standards. A surcharge is assessed to each of the customers within the Distributor's service area to pay for the improvements.

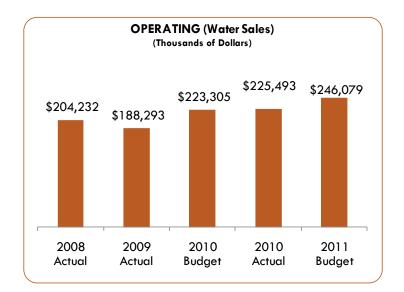
Denver Water also provides wholesale water service to Master Meter Distributors (water districts outside the City) that own and operate their own water system, perform their own meter reading and customer billing, and purchase water on a wholesale basis for distribution to their respective retail customers. Denver Water will bill the Distributor through master meters at a rate that reflects the cost of providing this additional service. Wholesale water distributors account for approximately 21% of our revenue from water sales.

### **Operating (Water Sales)**

Operating Revenues are generated from the sale of water to customers. In 2011, we anticipate that 88.3% of our revenue (not including debt) will result from water sales. The funds are used to pay normal operation and maintenance costs, replacement of facilities, and plant additions, as well as debt service.

Operating projections are based on an assumption of total demand for water compared to historic normal demand. Historically, Denver Water has been able to predict our consumer's water consumption patterns with a fair degree of accuracy. However, the recent drought and resulting change in our customers' water use has added a degree of uncertainty to our forecasting.

The 2011 forecast of revenues from the sale of water is based on a conservative treated water demand forecast that is 5 percent less than post drought "normal" and a 10.4% revenue adjustment beginning on March 3, 2011.

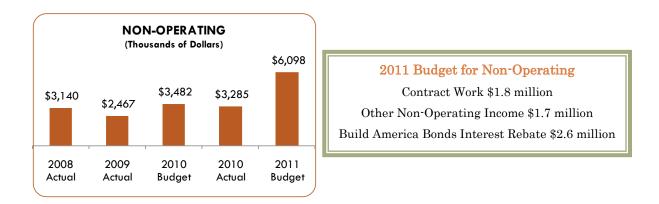


2011 Budget for Operating (Water Sales) Metered Water Sales \$170.9 million Private Fire Protection \$1.2 million Government Water Sales \$9.3 million Master Meter \$57.7 million Non-Potable Water \$5.9 million Non-Potable for Resale \$1.1 million

### Non-Operating

These funds are obtained from payments for services that Denver Water renders such as ditch assessments, irrigation, main inspections, installation of taps, calculating and mailing sewer bills, rents on Denver Water facilities and other such services.

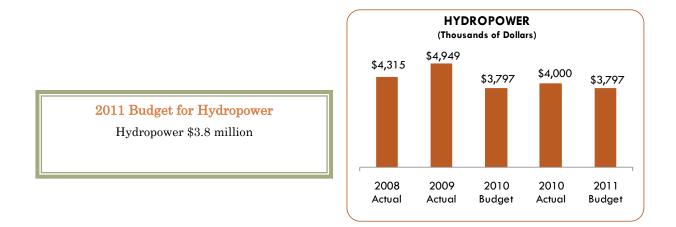
Non-Operating cash receipts are estimated based on historical trends. The 2011 budget has increased to account for the new Build America Bonds Interest Rebate.



### Hydropower

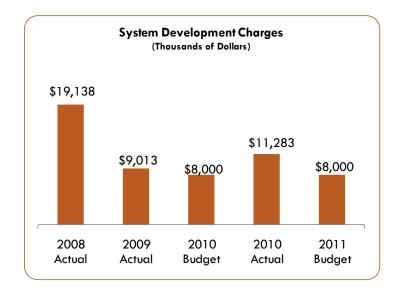
Denver Water generates hydroelectric power from our facilities at Dillon, Strontia Springs, Williams Fork and Gross Reservoirs as well as generation facilities at the Roberts Tunnel, Foothills Treatment Plant and Hillcrest Reservoir. Denver Water enters into agreements with electric utilities that purchase the generated power.

Projections are based on assumptions of normal weather, and hydrological conditions. Actual revenues vary depending on precipitation and reservoir levels. In 2011, Hydropower Revenues are again estimated to decrease as our Williams Fork facility is taken out of service for upgrades.



### System Development Charges

The System Development Charge (SDC) is a fee received for new connections to Denver Water's system. This charge applies to any applicant who is granted a license to take water through Denver Water's system or a system deriving its supply from Denver Water. The SDC, first implemented in 1973, provides a source of funds for expansion capital.



The charge is based upon the gross square footage of the single family residential lot or the number of units in a multi-family building, the size of the connection required, or estimated volume of water needed.

System Development Charge receipt projections are based on an estimate of the blended average cost for new taps, the anticipated growth rate for the number of new taps, and any anticipated rate increases. As a result of the slumping housing market, receipts from System Development Charges were only 51% of normal in 2010. Based on the continued downturn in the housing market, we estimate that SDC collections will continue to be only 37 percent of the amount we would expect in a normal year.

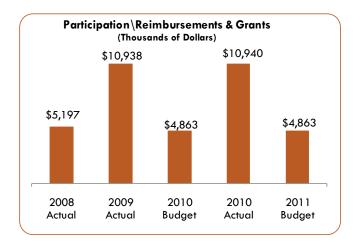
### 2011 Budget for System Development Charges

System Development Charges \$8.0 million

### Participation \Reimbursements & Grants

A participation agreement is one in which a Distributor or Developer pays for a portion of the costs of the Denver Water distribution facilities such as conduits, treated water reservoirs, or pump stations required to provide service to that district. Estimates are based on the existence of contractual obligations.

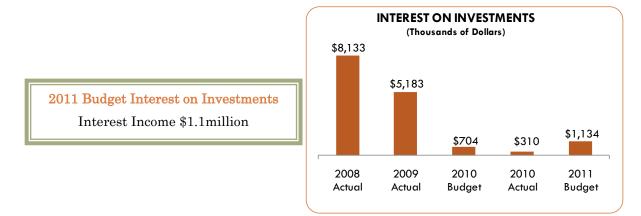
Reimbursements are compensation received from another entity for money already spent on collaborative projects. Grants are an award of financial assistance given by the government or some other organization.



### **2011 Budget for Participation Reimbursements & Grants** Participation/Reimbursements & Grants \$4.9 million

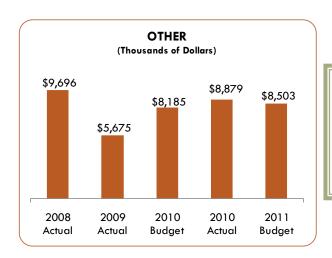
### **Interest on Investments**

The projection for interest on investments is based on estimates of month-by-month investment balances and assumptions about prevailing interest rates on authorized investments. Our projection of \$1.1 million is based on an assumption of .6%, but is still significantly lower than our pre-recession interest income.



### Other

Other sources of funds consist of reimbursements for the relocation of mains and hydrants, proceeds from the sale of surplus assets, employee payments for health and dental insurance, and minor items not included elsewhere. Projections are based on historical experience and knowledge of upcoming changes.

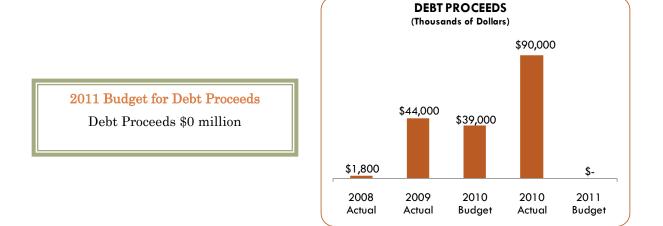


2011 Budget for Other Employee Insurance Collected \$.1.9 million Special Assessments \$4.1 million Reimbursements Received \$1.4 million Other \$1.1 million

### **Debt Proceeds**

Bonds are issued in order to build facilities or make improvements to a public property. Denver Water Board practice is to use debt proceeds to finance expansion capital projects.

Of the \$90 million debt proceeds issued in 2010 \$51 million reflects debt proceeds that was originally planned for 2011 but was issued early because of present market conditions and realizable savings from debt issuance costs. As a result, no bond proceeds are expected in 2011.



# Uses of Funds

Uses of Funds by Type	64-68
Use of Funds by Program	69-79

**UNTREPORT** 

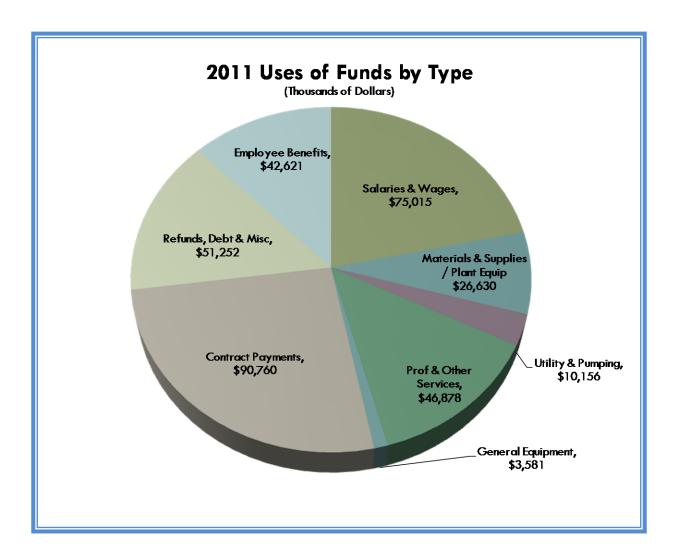


Denver Water resource scientist acts fast to save drowning boy

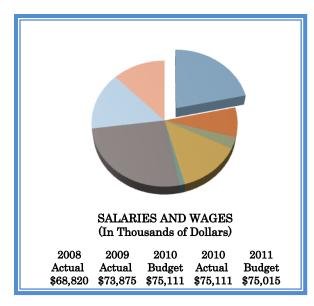
### 2011 Uses of Funds by Type

The projected Uses of Funds budget for Denver Water in 2011 is \$346.9 million. Costs are displayed in categories by type, regardless of whether the cost is operating or capital.

Categorizing data this way is useful for trend analysis and for highlighting the impact different costs have on the budget.



		11 Uses of Fur Thousands of Dolla		
2008	2009	2010	2010	2011
Actual	Actual	Budget	Actual	Budget
\$283,500	\$288,559	\$338,565	\$333,241	\$346,893



## Salaries and Wages

Total payroll for 2011 is projected at \$75.0 million and will support 1,140.8 regular employees as well as 104.8 full time temporary positions. The total payroll also assumes a 5% overall vacancy rate, 1% higher than the 2010 vacancy rate.

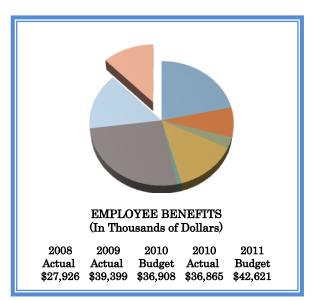
From 1977 to 2009, our number of customers has grown 44 percent. Yet thanks to technological advancements and efficient operational changes, the number of employees has grown only 26 percent during that same time period. Our 1,100 employees are doing more with less, but they remain committed to doing their jobs as efficiently and responsibly as possible.

<u>2011 BUDGET:</u> Regular Wages \$63.8 million Overtime Pay \$2.1 million Holiday, Vacation, Sick \$7.3 million Other Pay \$1.8 million

## **Employee Benefits**

This category of costs covers employee medical, dental, vision and life insurance, as well as the defined benefit and defined contribution retirement programs. FICA, Medicare, Long Term Disability, and Worker's Compensation are also included in this category.

Employee health care costs continue to rise and are projected to be \$16.5 million. Changes to employee and retiree medical plans were made in 2011 to shift significantly more of the costs of health care to employees. Despite these plan design changes, the 2011 budget for health care is projected to be 18% higher than in 2010.

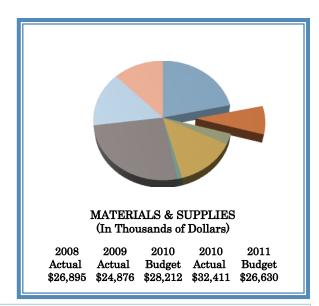


<u>2011 BUDGET:</u> Retirement Plan Contribution \$15.4 million Health Insurance\$15.4 million All Other Benefits \$11.8 million

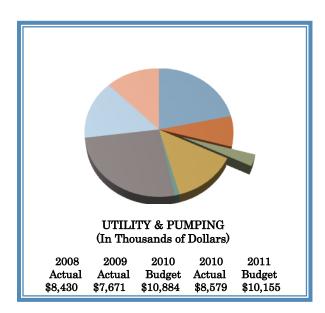
## **Materials & Supplies**

The 2011 Budget is a decrease of \$1.6 million from the 2010 budget.

This area includes materials and supplies purchased for direct use and for warehouse stock. Office supplies, pipe, sand, and chemicals fall into this category, as do fuel and employee safety equipment.



<u>2011 BUDGET:</u> Materials and Supplies for Direct Use \$9.4 million Chemicals Purchased for Direct Use \$5.5 million Store Issues \$11.7 million

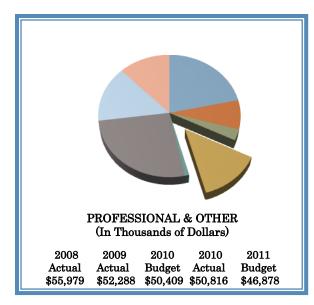


## **Utility & Pumping**

The 2011 Budget is a decrease of \$.7 million from the 2010 Budget.

This category includes power and diesel fuel for pumping water and our utility bills. Electricity, gas, water, sewer, telephone and cellular service are included in this group.

<u>2011 BUDGET:</u> Electricity, Gas, Water & Sewer \$4.3 million Communications \$2.9 million Power Purchased for Pumping Water \$2.9 million



## **Professional & Other**

The 2011 Budget is a decrease of \$3.5 million from the 2010 Budget.

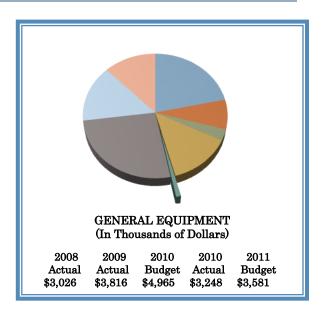
This category includes funds for consultants with expertise in IT, Engineering, Finance, Planning and other areas. Labor services such as those for landscaping, paving, equipment rentals and temporary employment are also included in other services. Employee costs such as travel, training, conferences and meeting related costs budgeted are also under other services.

<u>2011 BUDGET:</u> Professional Services \$25.5 million Other Services \$21.3 million

## **General Equipment**

The 2011 Budget is a decrease of \$1.4 million from the 2010 Budget.

General equipment includes communication equipment, personal computers, hardware and software, office furniture, laboratory instruments, garage and shop machines, and vehicles.



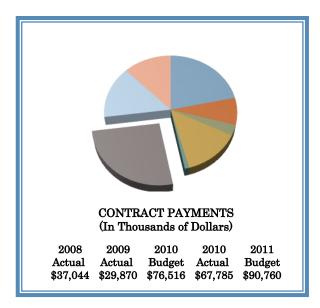
### <u>2011 BUDGET:</u> Vehicles \$2.0 million All Other General Equipment \$1.6 million

## **Contract Payments**

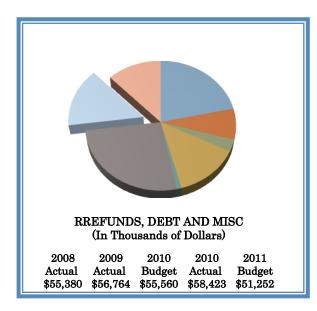
The 2011 Budget is an increase of \$13.6 million from the 2010 Budget.

This grouping includes construction contract payments for capital projects, land and land rights, contract materials and supplies, land, land rights and water rights purchases, and construction materials purchased by contractors.

The increase in contract payments reflect anticipated system expansion and reinvestment projects related to the sedimentation remediation at Strontia Springs.



### <u>2011 BUDGET:</u> Contract Payments and Construction Materials- \$86.7 million Land, Land Rights and Water Rights \$4.0 million



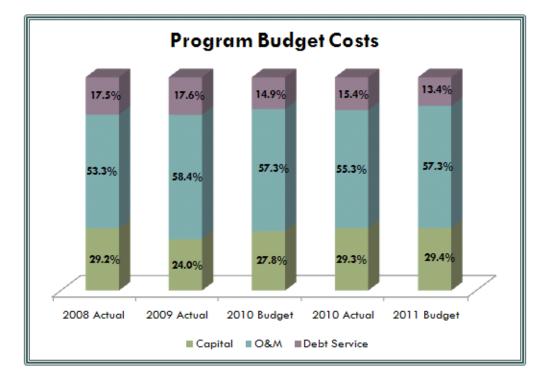
## **Refunds**, **Debt and Misc**

The 2011 Budget is a decrease of \$4.3 million from the 2010 Budget.

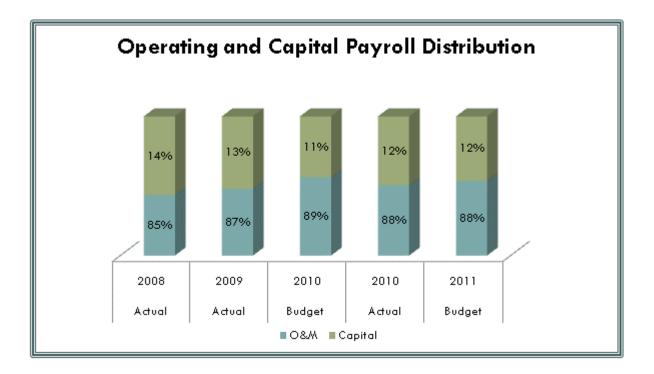
Debt service comprises 91% of the costs budgeted in this category. The remaining 9% is made up of conservation incentives, unemployment insurance and insurance/legal claims.

<u>2011 BUDGET:</u> Refunds \$.7 million Debt Service \$46.3 million All Other Miscellaneous \$4.2 million

# Uses of Funds by Program



Uses of Funds by Program Summary										
	(Th	ousa	nds of [	Dollars)						
Operation and Maintenance Programs	2008 Act	vals	2009	Actuals	20	10 Budget	2010 Act	vals	201	1 Budget
Raw Water	\$8,	857	\$	9,411	\$	23,766	\$ 19	,468	\$	34,376
Recycled Water	2,	786		2,729		3,700	2	,755		2,293
Water Treatment	15,	635		16,109		18,825	17	,355		15,480
Delivery	19,	824		18 <mark>,1</mark> 61		19,983	18	<mark>,92</mark> 5		20,352
Conservation	6,	568		8,741		11,444	10	,846		8,793
Customer Service	7,	968		10,085		14,862	13	,657		10,149
General Plant and IT	10,	049		10,514		9,538	10	,719		12,855
Administration	38,	623		40,422		44,347	40	,204		41,402
Distributed Indirect Costs	40,	789		52,439		47,450	50	,512		52,941
Total Operation and Maintenance	151,	099	1	<mark>68,6</mark> 11		193,915	184	,441		198,641
Capital Programs										
Raw Water	\$ 25,	366	\$	23,045	\$	38,999	\$ 44	,770	\$	24,274
Recycled Water	2,	695		702		5,198	3	,253		9,390
Water Treatment	17,	843		10,019		10,628	11	,142		7,108
Delivery	13,	677		16,591		24,885	25	,274		44,944
General Plant	23,	216		18,791		14,415	13	,127		16,162
Total Capital	82,	797		69,148		94,125	97	<mark>,566</mark>		101,878
Debt Service	\$ 49,	604	\$	50,800	\$	50,525	\$ 51	,234	\$	46,374
					_				•	
Total Uses of Funds	\$ 283,	500	\$2	88,559	\$	338,565	\$ 333,	,241	\$	346,893



## Payroll Costs

Payroll costs are distributed between capital projects and operating activities. The cost of payroll for employees directly related to the completion of capital projects may be capitalized. The chart above shows the percentage of payroll allocated between capital and operations.

Of the total amount budgeted for payroll expenditures, 12 percent will be assigned to staff working with capital projects and 88 percent will be allocated to employees engaged in other utility activities. The 2011 capital allocation is slightly higher than prior years.

# **Operations & Maintenance**

### Key Impacts to the 2011 Operating Budget

Strontia Springs Sedimentation Remediation

**Customer Service Activities** 

### Security Upgrades

Operations & Maintenance (In Thousands of Dollars)												
	20	08 Actual	20	09 Actual	20	10 Budget	20	10 Actual	20	I 1 Budget		
Raw Water	\$	8,857	\$	9,411	\$	23,766	\$	19,468	\$	34,376		
Recycled Water		2,786		2,729		3,700		2,755		2,293		
Water Treatment		15,635		16,109		18,825		17,355		15,480		
Delivery		19,824		18,161		19,983		18,925		20,352		
Conservation		6,568		8,741		11,444		10,846		8,793		
Customer Service		7,968		10,085		14,862		13,657		10,149		
General Plant		10,049		10,514		9,538		10,719		12,855		
Administration		38,623		40,422		44,347		40,204		41,402		
Distributed Indirect Costs		40,789		52,439		47,450		50 <b>,</b> 512		52 <b>,</b> 941		
Total O&M	\$	151,099	\$	168,611	\$	193,915	\$	184,441	\$	198 <b>,</b> 641		

### **Operations & Maintenance**

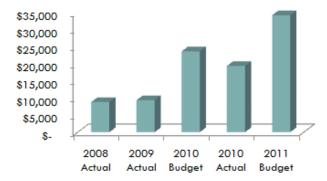
Operations & Maintenance (O&M) costs are budgeted at \$198.6 million for 2011, 2.4 percent more than the amount budgeted in 2010.

The principal driver of this increase is the work being done on a multi-year project to regain lost capacity in Strontia Springs Reservoir by dredging sediment from the bottom and pumping it down Waterton Canyon to the old Kassler facility. The sediment removal from the reservoir is a result of the 2002 Hayman Fire.

Another key impact in 2011 is Denver Water's multi-year Electric Register Transmitters (ERTs), Replacement Program. ERTs are part of our auto meter reading program which allows a meter reader using a handheld or vehicle-based radio device to collect meter readings more efficiently. Beginning in 2010, this program replaces electronic register transmitters with units that have a longer battery life (around 20 years).

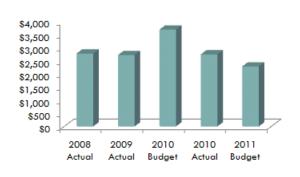
### Raw Water

The total 2011 O&M Budget for the Raw Water Program is \$34.4 million. This amount is \$10.6 million higher than the 2010 Budget of \$23.8 million. The major driver increasing costs is the Strontia Sedimentation Remediation. The 2011 budget reflects the cost of dredging, which starts this year.



### **Recycled Water**

Operating since 2004, Denver Water's Recycled Water Plant receives wastewater from the Metro Wastewater facility after its treatment process, treats it and delivers the water to our industrial and irrigation customers. Long term plans include recycled water distribution system expansion to meet the needs of our future customers. The 2011 O&M budget for Recycled Water is \$2.3 million, which is \$1.4 million lower than the 2010 Budget.





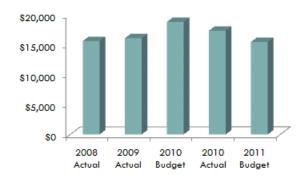
### **Recycled Water**

Water is a precious resource here in the West, much too precious to use just once. That's why Denver Water started a program to treat and recycle wastewater from the Robert W. Hite Treatment Plant. Once build-out is complete, the project will supply more than five billion gallons of recycled water every year — water for irrigation, for industrial use, for lakes in our parks and for golf courses — water we don't have to take from a reservoir.

### Water Treatment

The O&M budget for Water Treatment is developed using a demand estimate of 70,500 mg in 2011. The demand information is used to project chemical costs.

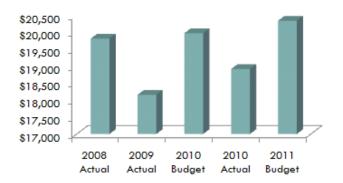
Chemicals comprise 32.9% of the total Water Treatment budget. Actual costs for chemical use are dependent on water demand. The 2011 budget is \$15.5 million which is \$3.3 million lower than the 2010 Budget. The decrease is due to balancing workload and the replacement schedule resulting in a reduction in as-built drawings for our treatment plants.





## Delivery

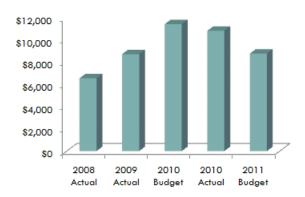
The O&M budget for Delivery of \$20.4 million which is \$368,000 higher than the 2010 Budget. These costs are related to maintaining our pumping and clear water storage facilities, as well as those for operating our distribution system. Denver Water has 18 treated water pump stations with a maximum pumping capacity of 1,097.4 mgd. Maintaining our system includes emergency leak repairs and leak detection in the system. Cost impacts include material prices and utility costs incurred for pumping operations and materials and other services for pipe and street repairs.



### Conservation

The Conservation O&M budget for 2011 is \$8.8 million, which is \$2.6 million lower than the 2010 Budget. Denver Water's conservation plan involves accelerating the pace of water conservation in its service area and to reduce overall water use from the 2001 pre-drought usage by 22% before 2016. The reduction for 2011 is a reflection of the progress has been made towards this goal. This plan is a primary part of Denver Water's future water supply planning. In order to provide long-term, reliable supplies for its customers, Denver water utilizes three strategies: conservation, recycled water and developing new supplies.

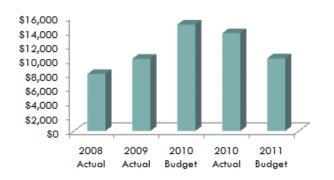
Some of Conservation's efforts include programs such as Education and Outreach whereby conservation staff visits area schools, providing conservation knowledge to students through presentations and materials, promoting hands-on student experiences that will bring a deeper appreciation of water's importance. Other programs are the Rebates and Incentives which encourages the public to replace toilets, clothes washers with water efficient products.





### **Customer Service**

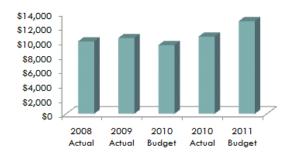
The Customer Service 2011 Budget is \$10.1 million, which is \$4.8 million lower than the 2010 Budget. In April 2010 we will begin a three year project that will replace current ERT's that have a battery life of 6 to 10 years with ones that are not only more cost effective but have a 20 year life.





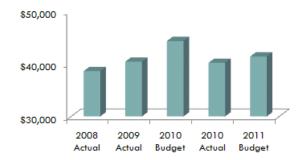
## General Plant

The General Plant program encompasses activities related to the operation and maintenance of our vehicles, equipment and administrative facilities as well safety, security and small tools. Cost impacts included increased security at Dillon Dam and preparing the Quivas Administration building for operations. The 2011 O&M Budget for General Plant is \$12.9 million, \$3.4 million higher than the 2010 Budget.



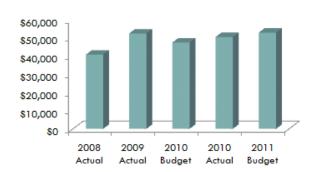
### Administration

The Administration program comprises our overhead costs for administrative activities, maintenance shops, computer related operation and maintenance, and other related activities. The 2011 O&M Budget for Administration is \$41.4 million, \$2.9 million lower than the 2010 Budget.



## Distributed Indirect Costs

The Distributed Indirect Costs Program contains the employee benefits and general liability and other insurances. The 2011 O&M Budget is \$52.9 million, \$5.5 million higher than the 2010 Budget. The increase is due in part to the actuarial requirement that Defined Benefits contribution be increased for 2011.

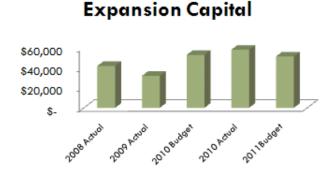


## Expansion Capital Drivers

**Conduit 302 Stapleton S. to Rocky Mountain Arsenal-** This recycled water conduit will be constructed to provide water to the Rocky Mountain Arsenal. The project is anticipated to be completed this year.

**Lone Tree Reservoir- Basin 2-** This project will double the storage capacity at the Lone Tree facility by constructing an additional clear water storage basin.

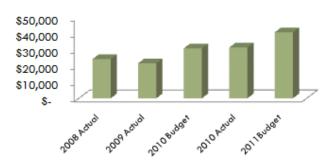
**Williams Fork Dam-** A new outlet works will be constructed in conjunction with a small hydro installation. The project is scheduled to be completed in 2012. Operating impacts will be the potential increase in hydropower revenue.



### System Reinvestment Capital Drivers

**Conduit & Main Rehabilitation-** A continuous program to clean and reline conduits and mains to restore their carrying capacities, whereby lowering operating costs related to emergency main breaks, water damage and leaks.

**Main Replacements-** This project includes installation of new mains for looping and other system improvements. Also includes replacement of deteriorated, obsolete and leaking mains under 24" in diameter. This is a continuous program. Lower operating costs related to emergency main breaks, water damage and leaks are anticipated.

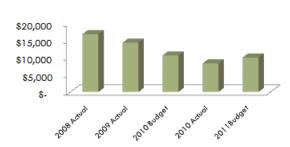


### System Reinvestment

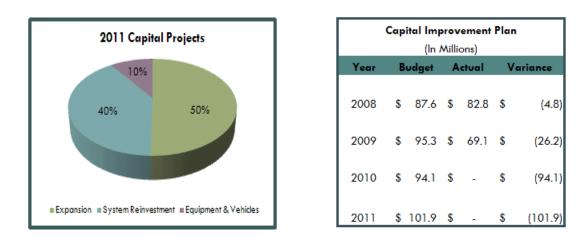
### **Equipment and Vehicles Capital Drivers**

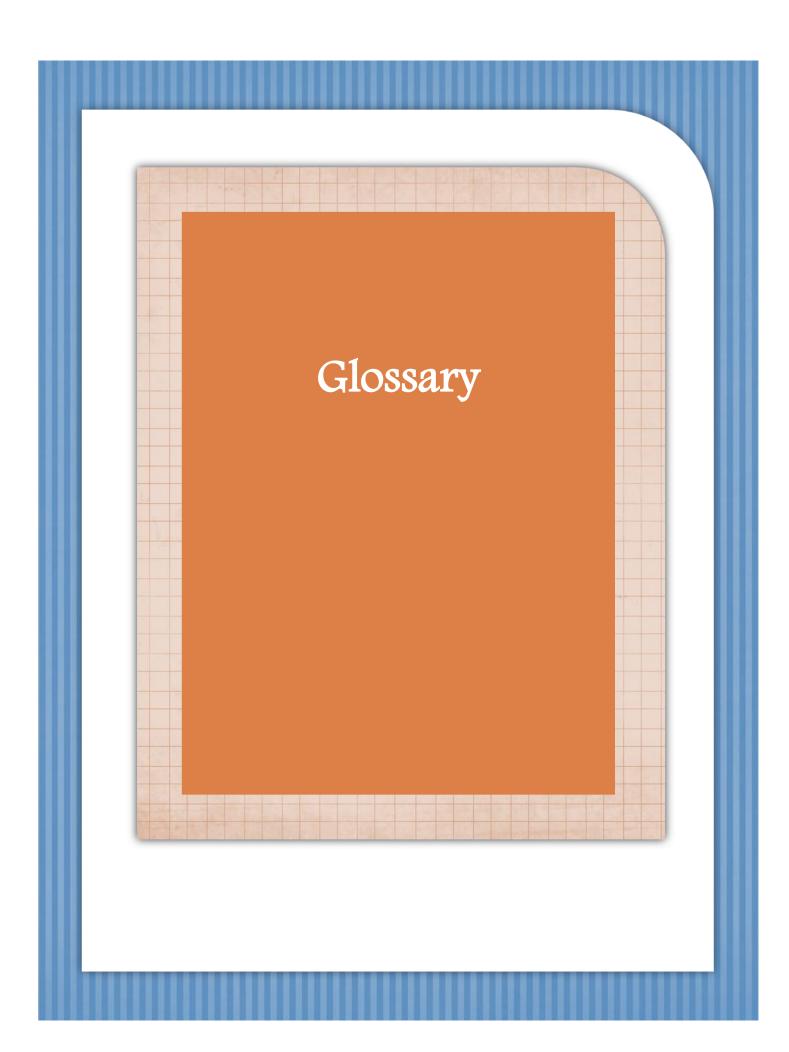
### **Operational Asset Management- Words**

Vehicles and Comm. Motors Vehicles- New and replacement vehicles for the fleet. Maintain levels in the fleet by replacement of deteriorated vehicles.



**Equipment and Vehicles** 





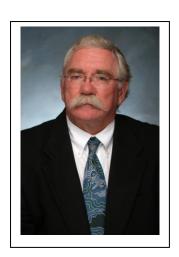
## Denver Water Loses an Icon

By Ann Depperschmidt, Community Relations

When Chips Barry worked for the state of Colorado, he bought his clothes at Goodwill. When he got the job as Denver Water's manager, he said he'd start buying new clothes – but added that he'd check in on Goodwill every now and then.

"He was frugal at work too. He thought it was the public's money, and he wanted to be careful about it," said Sara Duncan, Denver Water's intergovernmental affairs coordinator who has known Barry since they were teenagers. "But he was frugal in his own life because he knew what was important. And it wasn't money. It was people."

Barry, Denver Water's manager, died May 2 in a tractor accident on his farm in Hawaii. He had planned to retire July 1.



"This is the saddest thing, not only for the water department and his family, but also for all of his friends," Duncan said. "We all thought that when Chips retired, he'd have more time for us. And we all looked forward to spending time with him."

Barry was known for his approachable leadership style, sharp intelligence and easygoing sense of humor. When Barry was asked to speak at events, he often would provide organizers with a witty biography to use as his introduction.

"Hamlet 'Chips' Barry's ancestors came to the Denver area in 1886," the biography said. "His greatgrandfather, later a Colorado Supreme Court Justice, was one of the first persons in Colorado to fill a wetland for subdivision development (an EPA permit was not needed in those days).

"The future justice then sued the Denver Water Company to get water service to the area," the biography continued. "That former wetland is now known as the Montclair neighborhood of East Denver. Barry is too cheap to move his domicile away from the ancestral family lands in Montclair."

Barry was well-educated and well-traveled, attending Denver Public Schools, Yale College and Columbia Law School. After law school, he worked as a VISTA volunteer in rural Alaska, as a law clerk to Judge Robert McWilliams on the 10th Circuit Court of Appeals in Denver and as a legal services lawyer in Micronesia.

In 1975, he returned to Colorado from the Marshall Islands, resuming a career in western water and natural resources. Barry, Denver Water's longest-serving manager at almost 20 years, worked in Gov. Roy Romer's cabinet as the executive director of the Colorado Department of Natural Resources before moving to Denver Water.

But Barry was much more than an accomplished resume. He was an avid tennis player who collected old Saabs, foreign paper money and books about Micronesia and Alaska. He loved his family – wife Gail, son Duncan, daughter-in-law Karolina, son Pennan, daughter-in-law Winnie and grandson Malcolm, and enjoyed spending time with them on his macadamia nut and coffee farm in Hawaii.

Board president Penfield Tate said Barry was, in many ways, the guiding force behind the organization.

"In today's workplaces, which are often sterile and rigid, Chips was anything but," Tate said. "Chips will be greatly missed and richly remembered."

Earlier this year, in a letter to employees announcing his retirement, Barry expressed his gratitude for the opportunity to lead Denver Water for two decades.

"I have very much enjoyed my time, and all the opportunities and challenges, during the last 20 years at Denver Water," he wrote. "It has been my great honor to work with you all."

## Acronyms A-E

ACP Accelerated Conservation Plan

**AF** Acre Foot

**AMWA** Association of Metropolitan Water Agencies

**BABS** Build American Bonds

**BPPI** Budget and Planning Process Improvement

**CAFR** Comprehensive annual financial Report

**CBSM** Community Based Social Marketing

**COP** Certification of Participation

**CIP** Capital Improvement Plan

**CIS** Customer Information System

**COE** U.S. Army Corps of Engineers **CPR** Capital Program Review

**CWA** Clean Water Act

**DIA** Denver International Airport

**DW** Denver Water

**ECMS** Enterprise Content Management System

**EIS** Environmental Impact Statement

**EPA** Environmental Protection Agency

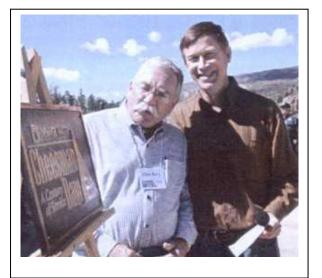
**EMS** Environmental Management System

**ERT** Encoder Receiver Transmitter

**ETMS** Enterprise Time Management System



Chips Barry, Penfield Tate, Jim Lochhead



Chips Bary and Mayor John Hickenlooper

"Few people in Colorado could match the vision or influence Chips Barry had when it came to water issues. He was a pioneer who helped build a conservation program that is nationally and internationally recognized as a model of success. However great his legacy in water, what we will miss most is the person - the warmth and the wit, the charm and the kindness. He was one of the most gracious and considerate people I've ever known. Chips will be greatly missed."

- Mayor John Hickenlooper

NRCS Natural Resource Conservation Service

**NWRS** National Water Resource Association

**OPEB** Other Post-Employment Benefits

**RCRA** Resource Conservation and Recovery Act

**PACSM** Platte and Colorado simulation Model

**POS** Point of Service

**SDBE** Small Disadvantaged Business Enterprise

**SMWBE** Small Minority Women Business Enterprise

**WISE** Water Infrastructure Supply Efficiency Partnership

**WUWC** Western urban Water Coalition

FERC

Federal Regulatory Energy Commission

**FRICO** Farmers Reservoir & Irrigation Company

**GAAP** Generally Accepted Accounting Principles

GAD Gallons Per Account Per Day

GASB Governmental Accounting Standards Board

**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



## DEFINITIONS A-B

### 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 GASB.

### 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. Roughly two-thirds of an acre foot serves the needs of a typical family of four for a 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. The Denver Water budget is prepared using the modified accrual 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.

### Bonds

Debt instruments. According to the Charter, the Board may issue revenue bonds which are secured solely by it's revenue. In the past it was able to issue general obligation bonds that were secured by the full faith and credit of the City 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.

## DEFINITIONS C



### Capital Expenditure

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

### Capital Improvement Plan

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% of the next year's operating costs, 50% of replacement and equipment purchases, 1 year of debt service, and a 5% self-insurance 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 utilized by Denver Water generally follows the structure presented by the National Association of Regulatory Utility Commissioners for Class A Water Utilities (NARUC).

### **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 non-point sources of pollution.



## DEFINITIONS C-D

### 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) will enhance the system's capabilities, performance, and security. Among numerous other objectives, an up-to-date CIS will boost 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 will also accommodate the switch from bimonthly to monthly billing.

### **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 (nonstores issues only).

## DEFINITIONS D-F



### 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% of all persons employed, and shall serve solely at the pleasure of the Board.

### Division

Largest organizational unit reporting to the Manager.

### **Employee Benefits**

Employee Benefits are expenditures paid by Denver Water for Worker's Compensation, Social Security, Retirement, Employee Assistance Program, Health and other insurances. It does not include employee withholdings or unemployment insurance.

### EPA Section 319

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

### **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.

### 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 that Denver Water will properly maintain its facilities and continuously seek ways to operate more efficiently.

### 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-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.



## DEFINITIONS G-I

### **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**

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**

A board which 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.

### Hydropower

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

### Infill

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

### Integrated Resource Planning

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.

## DEFINITIONS I-M



### **Investment Balance**

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

### Introductory Employee

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

### Investments

The Board has protection of principal as its primary investment policy objective. The Board designates its authority to invest monies deposited in the Water Works Fund to the Manager and the Director of Finance. According to the current investment policy U.S. Government obligations and 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.

### 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.

### Master Plan

Expenditures identified by projects and activities that are necessary to accomplish the Department's overall operating goals and objectives. The Master Plan, or Program Budget, is divided into a Capital Work Plan and an O&M Work Plan.

### Master Plan Item

A specific activity or project that is identified in the Master Plan.

### Maximo

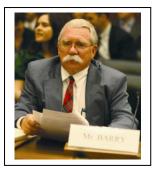
Maximo (work and maintenance management system) is a component of our Enterprise Asset Management system, and is used to manage work activities and programs related to operational assets.

### **Mobile Worforce**

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 basis in which recvenues are budgeted and recorded when received and expenditures are recorded when incurred, regardless of when payment is made.



## DEFINITIONS M-N

### **Municipal Water Utilities**

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

#### Master Plan

Expenditures identified by projects and activities that are necessary to accomplish the Department's overall operating goals and objectives. The Master Plan, or Program Budget, is divided into a Capital Work Plan and an O&M Work Plan.

#### Master Plan Item

A specific activity or project that is identified in the Master Plan.

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Accounting method in which basis in which recvenues 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)

## DEFINITIONS O-P



#### 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 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.



# DEFINITIONS P-R

#### **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.

#### 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.

## DEFINITIONS R-T



#### Revenues

The Denver Water 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

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 and fuel and oil for vehicles and equipment

#### Strategic Plan

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

#### System Development Charges

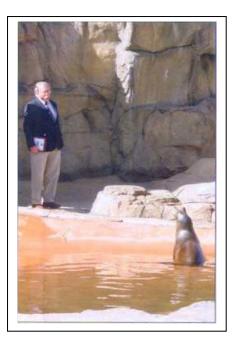
A one-time connection charge that provides a means for financing a portion of the source of supply, raw water transmission facilities, treatment plants and backbone treated water transmission facilities required to provide service to a new customer. Sometimes called a tap fee.

#### Тар

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 work force. Assignments in this category can be of limited duration or indefinite duration, but generally do not exceed one year.



## DEFINITIONS T-Z

### Type of Expenditure

A classification of resources or commodities that will be budgeted and charged to projects and activities by Cost Control Centers.

#### **Utilities & Pumping**

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

#### 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 monies coming into said 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 – Financial Policy**

- 2. a replacement of a retirement unit for another retirement unit (regardless of whether the replacement is similar to or better than the original - as long as they are both retirement units).
- b. The initial repairing, altering, painting, or otherwise improving retirement units acquired in a used condition in order to bring them up to normal operating standards
- c. Preparing retirement units for serviceable use (installing, testing, etc.)

Elements of Cost include:

<u>Purchase Costs</u> - the purchase price of the property (or a reasonable allocation if the total price includes land or other assets), plus related legal and transfer fees paid by the buyer; obligations for liens; interest attaching to the properties that may be assumed by the buyer; freight and transportation charges (Plant items only); costs of purchase options related to the property purchased; sales, use and other taxes payable on purchase; and any other acquisition costs directly associated with the property. Purchase costs are reduced by trade discounts and quantity discounts granted on the purchase. Items not to be considered as a part of the purchase price include, credits for trade-ins, maintenance agreements and, extended warranties. If the trade-in value has been netted against the new purchase that amount will need to be added back to arrive at the true capitalized cost. Trade-in values need to go against the 434.100 account as well as the net plant value of the retired asset.

<u>Construction Costs</u> - the purchase price (less trade and quantity discounts allowed) or inventory value of parts, components, materials and supplies consumed in the process of construction; cost of DW labor directly employed in construction; authorized overhead allocations; cost of outside construction contract services; depreciation (if not included in overhead); rental of equipment used in construction; cost of construction insurance obtained outside of DW; permit fees; architects' and builders' fees; and capitalized interest during construction, if applicable.

<u>Equipment Installation Costs</u> - the purchase price or inventory values of materials, parts, and supplies (including freight and taxes) used in installing purchased movable or removable equipment; DW labor used directly in installation (including actual employee benefit burden); authorized overhead allocations; and outside contract fees.

**Postacquisition Costs** - Costs incurred for servicing or modifying retirement units during the ownership period after they have been acquired and placed into use. They may be maintenance and repair expenditures for the purpose of preserving the appearance and continuing operating efficiency and utility of the property to the end of its originally contemplated serviceable life, or they may be betterments.

Retirement Unit - A base unit of property for capitalization, depreciation, and retirement

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purposes, that performs a distinctive functional service, either independently or in conjunction or unison with other retirement units. It may be a single unit of property or an assembly of parts and components. It may be part of a larger assembly, but is readily separable and separately useful from the larger assembly of which it is attached. For example, a pump, a vehicle, and a building may be retirement units.

**Retirement Unit Component** - An item of property that does not perform a distinctive functional service but is incorporated as a part or component of a retirement unit. For example, a pump part, a vehicle tire, and a roof of a building may be retirement unit components.

## POLICY:

### Capitalization

A. Initial Acquisition Costs

Initial acquisition costs of retirement units are capitalized if the retirement unit has an estimated future serviceable life of more than one year and has a cost of \$5,000 or more.

**Initial acquisition costs** of property with a life of one year or less or have a cost of less than \$5,000 are expensed.

An exception to the \$5,000 per item limit is an initial complement of a large facility, such as a complete furnishing of a new office facility, or a complete refurnishing of an existing facility. In such case, the entire initial complement may be capitalized if material.

When plant and equipment is purchased jointly with land, the total purchase cost is allocated for capitalization between the land and the plant and equipment. For allocation methods, see Accounting Policy "Land, Land Improvements, Land Rights, and Options."

Assets acquired or constructed under participation agreements with other entities, where DW retains 100% legal ownership, are recorded and depreciated based on gross costs of the participation project. (See Accounting Policy "Participation Projects").

### B. Postacquisition Costs

1. Capitalization Criteria

Post-acquisition costs of a retirement unit are capitalized if they meet all of the

following three conditions:

- The retirement unit has an estimated remaining serviceable life of more than one year (See Accounting Policy "Leasehold Improvements" for assets held under operating or capital leases),
- b. The post-acquisition costs are \$5,000 or more, and
- c. The costs result in at least a 20% **betterment** over and above the original quality characteristics of the property.

**Post-acquisition costs** for repair and maintenance or for items not meeting the above three conditions are charged to maintenance expense. This includes replacements of **retirement unit components** not involving **betterments**, regardless of cost.

- 2. Accounting for Betterments
  - a. Capitalized post-acquisition costs are added to the original cost of the retirement unit. The depreciation rate is adjusted on a prospective basis to take into account the revised cost and life, if applicable.
  - b. Dismantling and removal costs, less any salvage realized, incurred in connection with the reconstruction, conversion, betterment or renewal of existing plant and equipment are capitalized as part of the capitalized postacquisition costs.
- 3. Moving and Relocation

Costs of moving or relocating plant and equipment within a facility or from one facility to another are generally expensed when incurred, unless connected with major reconstruction, conversion, **betterment**, or renewal projects, in which case they may be capitalized.

#### **Depreciation**

A. Record Date

Depreciation calculations in any month are based on depreciable cost of record as of the prior month end.

- B. Commencement/Cessation Dates
  - 1. General Equipment

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Depreciation begins the month following the month in which the equipment is placed in service, and a full month of depreciation is taken in the month in which the equipment is retired.

## 2. Plant Equipment

Depreciation begins the month following the quarterly transfer from construction work in progress (March, June, September, or December), and a full quarter's depreciation is taken in the quarter of retirement. (See paragraph D under "Administration" below for definitions of general and plant equipment).

C. Depreciable Base/Salvage Value

The historical capitalized cost of plant and equipment, without adjustment for salvage value, is used as the depreciable cost of the property, unless the estimated salvage value (gross proceeds upon retirement) exceeds 25% of the historical capitalized cost, in which case salvage value is taken into account.

D. Depreciation Method

Depreciation is computed using the straight-line method over the estimated useful lives of the respective depreciable asset classes.

The "unit" or "item" method of depreciation is used, as opposed to the "group" method.

E. Determination of Serviceable Life

A serviceable life is estimated for each **retirement unit** for depreciation/retirement purposes. Estimated serviceable lives are influenced by the following considerations:

- 1. Past experience relating to retirements of plant and equipment (including reasons for retirements).
- 2. Published statistics and guidelines (industry experience).
- 3. DW policies with respect to repair and maintenance of plant and equipment.
- 4. Anticipated business conditions, environmental legislation and requirements, obsolescence potential, etc.
- 5. Internal research and engineering judgment especially in relation to new processes, equipment, etc.

Property Accounting maintains a complete list of serviceable lives by plant and

equipment category/type codes.

See Accounting Policy "Leasehold Improvements," for serviceable lives of assets held under operating or capital leases.

F. Changes in Serviceable Life Estimates

Serviceable life estimates are subject to review and revision based upon **betterments** or discovery of new facts indicating that the original estimates were significantly different, e.g.,

- 1. greater or lesser than anticipated wear and obsolescence,
- 2. higher or lower than anticipated level of maintenance and repair work, or
- general reappraisals concerning estimated remaining serviceable lives of properties in use.

For purposes of the above, a change of 25% or more in the serviceable life of a base unit is considered to be significant.

Changes in the allocation of depreciation charges as a result of changing serviceable life estimates are handled on a prospective basis, i.e., adjustments for under or over depreciation are equalized over the remaining life of the property.

G. Cessation of Depreciation

Depreciation is terminated on the depreciable cost of plant and equipment only when:

- 1. the property is retired or permanently idled (for idle property, see Accounting Policy "Idle Plant and Equipment."), or
- the property is fully depreciated, i.e., accumulated depreciation equals depreciable cost.

### <u>Retirement</u>

A. Retirement Units

The disposition of a **retirement unit** (property that is sold, junked, scrapped, abandoned, reverted to lessors upon the termination of a capital lease, etc.) is accounted for by removing the asset cost and accumulated depreciation from the accounts, and recognizing the gain or loss in current income.

This is accomplished by two separate entries, one for the receipt of cash, if any, and the other to remove the asset accounts from the books.

## B. Retirement Unit Components

- 1. Replacements
  - a. Without Betterment

Replacements of **retirement unit components** not involving **betterments** are charged to maintenance expense. Original costs of any replaced parts remain in the asset accounts.

b. With Betterment

Replacements of **retirement unit components** involving **betterments** are described in Paragraph B.2 under "Capitalization" above.

2. Retirements Without Replacement

Retirements of **retirement unit components** without replacement are accounted for in the same manner as for **retirement units** if the original costs are known or can be reasonably estimated. If the original costs are not known or cannot be reasonably estimated, they remain in the asset accounts.

- C. Special Retirement Considerations
  - 1. Trade-in allowances

Equipment trade-in allowances are treated as proceeds from the disposal of the equipment traded in, and are taken into account in calculating the gain or loss on disposition of the equipment traded in.

2. Dismantling, Removal and Selling Costs

Dismantling, removal, and selling costs, less any salvage realized, incurred in connection with the selling, junking, scrapping, abandonment, etc. of existing plant and equipment are recorded as a deferred charge until the work order is closed, whereupon they are charged to gain or loss on disposition of the asset.

3. Costs of Abandoned Construction

Accumulated costs of construction projects that are completely abandoned with no intention to pursue the project are expensed.

## Administration

## A. Authorization for Capital Acquisitions

- The Purchase Requisition System (discussed in Tab E of the Accounts Manual) is used for purchase of all materials, supplies, equipment, routine services, equipment leasing, and rentals.
- The Work Order System (discussed in Tab I of the Accounts Manual) is used for construction of a project or removal of an asset from service.
- B. Construction Work in Progress (CWIP)

Control of construction costs to be capitalized as plant and equipment is maintained through a separate CWIP account and subsidiary records that accumulate the costs before they are finally cleared to the appropriate plant and equipment accounts. Detail records are maintained for in-progress expenditures by work order to insure that all costs are properly authorized, identified, and classified. All capitalized construction costs of plant and equipment are cleared through CWIP before transfer to the applicable plant and equipment accounts.

C. Clearing CWIP

Project costs are cleared from CWIP to plant or equipment on a quarterly basis (March, June, September, or December) when the project is ready for use and all pertinent costs have been recorded. Individual **retirement units** are identified and classified through the plant analysis procedure.

D. Types of Equipment

Equipment is classified into two basic types - plant equipment and general equipment. Plant equipment additions result from CWIP transfers and contributions, while general equipment additions result from CWIP transfers, contributions, and direct purchases. The characteristics of each type are as follows:

Characteristic	General (TOE 7000's)	Plant (TOE 3800)
Life	1-20 years	Generally 20 years or more
Use	Does not function as an integral part nor is an appurtenance to a structure.	Is an appurtenance to or functions as an integral part of a structure or process (such as chlorination)

GENERAL CHARACTERISTICS OF EQUIPMENT

Portability	Portable in nature. Does not usually require installation. Includes vehicles & "M" Machines.	Permanent in nature. Requires installation or used for a specific function only
Physical Inventory	Identifiable as a complete unit. Can be marked with ID tag.	May be identified as a complete unit. Sometimes inaccessible and/or cannot be marked with ID tag, but is identified on the system
Cost	\$5,000 or more. Items of high "home value" i.e. computers, generators, air compressors, digital cameras, and certain other electrical equipment such as radios, scanners, VCR's and VCR cameras costing less than \$5,000 may be included on an individual basis.	\$5,000 or more.

## BACKGROUND:

<u>Capitalization</u> - To facilitate the accounting for plant and equipment, initial acquisition costs are differentiated from post-acquisition costs, and retirement units are differentiated from retirement unit components.

To avoid undue refinement for initial acquisition costs, a minimum capitalization amount of \$5,000 is established. The \$5,000 capitalization minimum is considered necessary to preclude burdensome record keeping on numerous small items, the total cost of which normally does not have a material effect upon financial results, whether capitalized or currently expensed. Items below this minimum are generally items of relatively small value such as working tools and implements and minor office equipment. They are usually small in size, very portable, and difficult to track and control in any formal accounting system, and are often moved or replaced without notification to the Accounting Section. Because of these characteristics, any attempts at capitalization and effective control would be counterproductive, so they are expensed when acquired. However, individual sections may inventory and control these items if they so desire.

The classification of assets between retirement units and retirement unit parts or components is specified by the National Association of Regulatory Utility Commissioners (NARUC) in the "Uniform System of Accounts for Class A Water Utilities," for the purpose of simplifying the accounting for additions, retirements, and replacements. NARUC specifies that replacement parts or components should be expensed regardless

of cost, unless they are betterments, which eliminates the burden of capitalizing and retiring immaterial amounts. This concept is also accepted practice in non-utility accounting, although other terminology may be used for "retirement unit," such as "complete functional entity." The criteria for capitalizing post-acquisition costs are: (1) betterment - they must generate a substantial improvement over and above the original quality characteristics of the property for which they are incurred, and (2) materiality - betterment costs must amount to the capitalization limit of \$5,000 for each retirement unit on which the work is performed.

The betterment criterion is based on accepted accounting standards that exclude ordinary maintenance and repair costs from capitalization. The materiality criterion is designed to eliminate record keeping on relatively minor property improvement costs by treating them as period maintenance and repair expenses.

Individual judgment will be used to apply the betterment criterion to distinguish a substantial betterment from ordinary repair and maintenance. Plant or engineering personnel will be involved in this evaluation, when necessary. The use of an objective criterion such as a minimum betterment percentage was considered but was rejected. DW has chosen not to follow the procedure for accounting for betterments specified by NARUC of adding the excess cost of the replacement over the estimated cost at current prices of replacing without betterment to the asset. Instead, DW has chosen to remove the old cost and accumulated depreciation from the accounts if known or can be reasonably estimated, and capitalize the new cost. If not known or cannot be reasonably estimated, the old costs remain in the accounts.

<u>Depreciation</u> - DWB acquires plant and equipment with the intent of keeping and using them over their full productive or useful lives. Salvage values at the end of that time historically have been negligible or nonexistent, therefore, no provision for salvage value is made for most assets, and generally, original costs are considered as the depreciable costs. In some cases where technological obsolescence is an important factor, e.g., computer hardware, or in any other specific cases where potential salvage may be significant, exceptions are made for salvage recognition. "Significant" salvage is defined as gross proceeds upon retirement exceeding 25% of the historical capitalized cost.

<u>Retirement</u> - DW has chosen not to follow the procedure for retiring retirement units specified by NARUC, but instead follows conventional non-utility accounting procedure. NARUC uses the group method of depreciation extended to the utility plant as a whole, in order to stabilize the rate base and minimize the need for frequent rate changes that result from property retirements. Under this method, gains and losses on dispositions of retirement units are not recognized in current income but are recorded against accumulated depreciation. Since DW calculates rate adjustments by using a cash requirements approach rather than a cost of services approach, and does not come under the jurisdiction of a regulatory authority other than its own Board of Water Commissioners, it has rejected this method in favor of the conventional unit method, which recognizes

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gains and losses in current income.

## Appendix – Debt Guidelines

## Denver Water Debt Guidelines

as adopted by the Board on May 28, 2003 - Item V-G-4

## Denver Water will use the following guidelines to evaluate when and how to use debt financing in the future.

- 1. Debt proceeds may not be used to pay operating and maintenance expenditures.
- 2. Debt may be used only for refunding current maturities of existing debt (called *current refundings*), refunding future maturities of existing debt (*called advance refundings*) and for capital improvements.
- 3. Current refundings will be structured so that the final maturity of the debt does not exceed the useful life of the asset. In addition, refundings will be structured to facilitate an orderly and regular retirement of debt and to comply with statutory regulations while taking advantage of favorable market conditions.
- 4. Advance refundings will be considered when the net present value savings on the bonds being refunded is greater than 3.0% and the refunding is permitted by existing statutory regulations; or if extraordinary circumstances exist, when the net present value of savings is sufficient to satisfy existing statutory regulations.
- 5. Capital improvements of a normal, recurring nature and amount will generally not be financed with debt. Rather, this type of improvement will be included in the calculation of the revenue requirement from rates. This will result in routine capital expenditures being financed internally on a "pay-as-you-go" basis.
- 6. Non-recurring capital projects that expand the system or that are otherwise unusual in nature or amount may be financed externally. Because capital outlays for projects of this type are often made in advance of growth in demand, repayment of debt used to finance such projects may be deferred until revenues begin to be collected.
- 7. As there is a limited pool of resources, whether from internal sources or from debt, each proposed capital improvement will be assessed within the context of how it impacts the reliability and integrity of the total system and whether it is consistent with Denver Water's mission and long-term goals. During the capital planning and budgeting process, projects will be ranked to determine which ones are most essential to meet the Board's overall objectives. Projects that are ranked highest will then be reviewed with respect to appropriateness for external financing. An assessment of the impact on Denver Water's bond rating given the availability and cost of external financing will be made prior to final approval of the proposed projects for inclusion in the budget and capital plan.
- 8. Denver Water's treasury section will monitor the marketplace and stay abreast of new types of financing instruments and sources of funds. In evaluating the appropriateness of various financing sources for specific projects, Denver Water will consider the expected life of the asset, the nature of covenants, the impact on the organization's future financial flexibility, the amount of uncertainty and market risk associated with the type of financing being considered, the current regulatory and economic environment and whether revenue and expense projections indicate that Denver Water will be able to support the projected level of debt.
- 9. Deriver Water desires to maintain its stand-alone revenue bond rating at a level or of AA or better. After consulting with the rating agencies, Deriver Water understands that maintaining its actual and historical level of debt service coverage rate of 2.2x or better will be important to maintaining the rating. Merely meeting the covenants contained in the bond resolution is not expected to be adequate. For that reason, the following, more stringent guidelines will be used in financial planning activities:
  - a. The Debt Ratio should not exceed 40%.
  - b. Interest Coverage (excluding System Development charges) should be equal to or greater than 2.5x
  - c. Debt Service Coverage, as defined in the Bond Resolution should be equal to or greater than 2.2x
  - d. The year-end balance in the Water Works Fund, net of Principal and Interest Requirements for the next 12 months should be equal to or greater than \$5 million.

**Debt Ratio** - Total Debt divided by the sum of net fixed assets plus net working capital.

**Debt Service Coverage -** Net Revenues divided by scheduled principal and interest payments, before any refunding, for the same 12 month period.

Interest Coverage - Net Revenues divided by Interest Requirements

## Summary of Definitions

(for more extensive definition, see Series 2003A Bond Resolution)

**Total Debt -** The principal amount of long-term debt plus the current portion of long-term debt plus accrued interest payable less the balance in any Debt Service Reserve Funds or Debt Service Funds. *(Includes general obligation bonds, certificates of participation, revenue bonds and capital leases.)* 

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

**Operating and Maintenance Expenses -** Operating and maintenance expenses, net of depreciation, amortization and gross interest expenses, all calculated in accordance with generally accepted accounting principles, for the 12 month period ending on the date of the calculation.

**Net Revenues -** Gross Revenue less Operating and Maintenance Expenses.

**Interest Requirements -** Scheduled interest payments during the 12 month period following the date of calculation.

**Principal and Interest Requirements -** Interest Requirements plus the current portion of long-term debt. (Includes general obligation bonds, certificates of participation, and capital leases.)