

# Denver Water 2009 Budget

**USE ONLY  
WHAT YOU  
NEED.**



“Providing water of the highest quality is one of Denver Water’s top priorities.”

-Chips Barry  
Manager of Denver Water

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GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished  
Budget Presentation  
Award*

PRESENTED TO

**Denver Water  
Colorado**

For the Fiscal Year Beginning

**January 1, 2008**

Handwritten signature of the President of GFOA.

President

Handwritten signature of the Executive Director of GFOA.

Executive Director

### **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, 2007. 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.



To Our Customers and Other Interested Readers:

Denver Water's proposed budget for 2009 and our operations during 2008 reflect our focus on planning for the future. We are committed to providing our customers with an adequate, reliable supply of high-quality water despite current economic and climatic uncertainties. Toward this end, we are following or formulating several short- and long-term plans to make our organization more dynamic and adaptable in responding to the changing environment in which we operate. In addition to defending our legal water rights, our commitment to these goals includes protecting our water resources all along their journey from the watersheds to customers' taps.

*“We are committed to providing our customers with an adequate, reliable supply of high-quality water despite current economic and climatic uncertainties.”*

In 2008 the staff and Board began work on an updated Integrated Resource Plan (IRP), a comprehensive plan that will guide decisions related to our water system—the collection, treatment, distribution, and recycling systems—over the next 40 years. This long-range planning effort will continue through 2009, with publication of the completed plan slated for 2010.

The updated IRP will include a new Watershed Management Plan designed to protect our watersheds from the threat of catastrophic wildfires. Erosion caused by the 1996 Buffalo Creek Fire and the 2002 Hayman Fire has deposited huge volumes of sediment and debris into Cheesman and Strontia Springs reservoirs. In response, we have spent more than \$8 million on mitigation efforts at Cheesman and will launch a \$23 million dredging operation at Strontia Springs in 2010. Under the Watershed Management Plan, we will continue to collaborate with state and federal Forest Service personnel on a number of forest management programs, including removing trees killed by the large-scale bark beetle infestation in Grand and Summit Counties.

Another planning tool, the 2009–2013 Strategic Plan, uses Denver Water's mission and values as the basis for strategic actions designed to help us achieve specified goals. Begun in 2008, this short-term plan is designed to ensure that the Board and staff are working together toward a common purpose. This plan addresses all utility functions, not just those related to the water system, and focuses primarily on internal issues such as interdepartmental communication, employee productivity, and safety concerns.

Previous planning projections indicate that without preventive measures, Denver Water will experience a water supply shortage of 34,000 acre-feet by 2030. To make sure our supplies can keep up with demand as our customer base grows, we are pursuing a dual strategy—adding 18,000 acre-feet of supply by expanding storage capacity in our Moffat Collection System and saving 16,000 acre-feet of water through efficiency and conservation programs.

The Moffat System currently stores only 10 percent of Denver Water's supply and is at risk of running out of water in a single dry year. To achieve a better balance among our three collection systems, the Board has recommended enlarging Gross Reservoir, Moffat's primary storage facility. The proposed project would bring the reservoir to its original design size, increasing its capacity by 72,000 acre-feet. (Four acre-feet of storage space is required for every acre-foot of supply, so the increased capacity would be four times the additional 18,000 acre-feet of needed supply.) We continue to cooperate with the U.S. Army Corps of Engineers as it assesses the potential environmental effects of this plan.

In the meantime, conservation programs remain the cornerstone of our efforts to stretch Denver Water's limited supplies. In 2008 we extended our recycled water system to the Lowry and Stapleton neighborhoods, bringing the Montclair Pump Station on line in April. Installation of the pipeline linking the pump station to Lowry was finished in January, and the pipeline connecting it to Stapleton was completed in August. The recycled water will irrigate numerous public areas in these neighborhoods, including Lowry's Mira Vista Golf Course, Sports Park, and Jackie Robinson Fields and Stapleton's Westerly Creek, Central, and East-West Greenway parks. Adding these two neighborhoods to the system brings our deliveries of recycled water to 4,000 acre-feet per year.

Because many customers have embraced a culture of conservation we have promoted over the past few years, demand continues to be lower than before the dry years of 2002–2004. After snowmelt filled Denver Water's reservoirs to capacity in 2008, storage levels on October 1 still averaged 94 percent, 5 percent higher than median levels for this date. Despite a string of above 90-degree days during the summer irrigation season, average water use in 2008 remained at 171 gallons per capita per day, 18 percent lower than average use before the drought.

To educate customers who had not yet adopted efficient lawn-watering habits, we carried out a Water Use Enforcement Program during the 2008 summer irrigation season. From May through September, eight water use monitors made more than 4,750 stops to talk with customers about water waste, and a hotline for customers to report water waste received more than 2,500 phone calls. We will continue this program in 2009.

Although lawn irrigation practices have the greatest potential for residential water savings—as well as the largest savings on homeowners' water bills—our customers are also applying the maxim "Use Only What You Need" to indoor water use. The number of rebates Denver Water paid to homeowners who installed water-efficient fixtures and appliances rose so significantly in 2008 that the 2009 budget contains an additional \$500,000 for this program.

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

Businesses and homeowners associations that participated in our irrigation efficiency incentive contracts received \$4,500 for each acre-foot of water they saved during 2008. Payments for saved water under these contracts will increase to \$7,000 per acre-foot in 2009.

In addition to safeguarding and augmenting our water resources, our preparations for the future include ensuring the quality of the water delivered to customers' taps and streamlining our operations with the aid of state-of-the-art software systems.

The new chlorine contact basin being constructed at Foothills Treatment Plant will enable us to meet the April 2012 deadline for complying with a new federal regulation related to disinfection. As part of our ongoing effort to maintain the integrity of our distribution system, we stepped up our distribution system renewal program in 2008 for the second year in a row, replacing or rehabilitating mains whose condition could threaten system reliability. Although we originally planned to clean and line some 15,000 linear feet of cast-iron pipe in 2008, we ended up installing cement-mortar linings in more than 26,000 linear feet of pipe, thanks to the contractor's willingness to maintain 2007 unit prices and our ability to transfer some funds originally earmarked for another project that was postponed. We intend to maintain an accelerated schedule of distribution system renewal in 2009.

*“Although lawn irrigation practices have the greatest potential for residential water savings-as well as the largest savings on homeowners water bills- our customers are also applying the maxim “Use Only What You Need” to indoor water use.”*

We also made significant progress in 2008 with a multi-year project to modernize our aging Customer Information System (CIS). The new system, which will supersede 24 existing systems, will make our operations more efficient and accommodate our move from bimonthly to monthly billing. The implementation and integration phase of this project began early in 2008, and the completed system is scheduled to go on line in July 2009.

The first phase of another multi-year project—Denver Water's Mobile Workforce Automation System—came on line in 2008. By permitting real-time management of our field personnel, the automated system increases productivity and allows us to respond more quickly to customer service requests. Board members received a hands-on demonstration of the system's capabilities in September.

Our most significant steps toward preparing for the challenges of the future are described in the following section, which summarizes Denver Water's 2009 goals and objectives.

## 2009 Goals and Objectives

### Implement Denver Water's 2009–2013 Strategic Plan



Denver Water's new Strategic Plan maps out the direction of our organization for the next five years. The plan encompasses all the utility's functions, incorporates our mission and values, and establishes our goals, objectives, and action plans. Some 125 employees helped to create the plan, along with Board members and representatives of Denver Water's distributors and its Citizens Advisory Committee. Employees and Board members will review the plan and provide feedback. This feedback will be incorporated, and a final plan will be proposed to the Board.

*“One of the goals, for example, is to anticipate change, influence outcomes where possible, and be capable of adapting to change.”*

The mission statement introducing the Strategic Plan affirms the staff's commitment to provide customers with a reliable, high-quality water supply and excellent service; to be responsible, creative stewards of the assets we manage; to actively participate in the communities we serve; and to carry out these responsibilities with a productive, diverse work force. In addition to customer service, stewardship, and diversity, the values championed in the plan include accountability, transparency, innovation, safety, and mutual respect.

Responsibility for each strategy outlined in the plan is assigned to the manager, the directors, the Board, or specific divisions. The plan also stipulates a time frame for implementing each strategy. One of the goals, for example, is to anticipate change, influence outcomes where possible, and be capable of adapting to change. Among the five strategies delineated for achieving this goal is incorporating scenario analysis into the planning process. This task is assigned to all divisions, and the time frame specified is immediate and ongoing. Denver Water's longstanding goal of helping customers use water more wisely includes a new strategy under the plan—to assume a lead role in creating efficient, state-of-the-art irrigation systems for all Denver and suburban parks. This task, assigned to the Public Affairs Division, has a 2011 target date.

As it guides us for the future, the Strategic Plan will enable us to work in concert to achieve mutually agreed-on goals. These goals include continuing Denver Water's legacy as a highly regarded, trustworthy, industry-leading organization that values its customers, employees, resources, and community.

### **Continue to Plan for Future Uncertainties That May Affect Water Supplies**

The linchpin in our efforts to address this goal is updating Denver Water's Integrated Resource Plan (IRP). The new IRP will establish the level of service we intend to provide to customers, identify new facility needs and water efficiency opportunities, and set future operations and maintenance goals. It will also clarify the Board's goals regarding system reliability and strategic water reserves.

The process of updating the IRP began in 2008 and will continue throughout 2009. In addition to Board members, the task involves 33 employees working on five teams and contributing expertise from various functional groups, including finance, engineering, operations and maintenance, legal, and public affairs. The new IRP will also reflect input from customers and special-interest groups. Publication of the final version is anticipated in 2010.

A new aspect of the updated IRP is its use of scenario planning to address potential supply uncertainties. Instead of taking the traditional approach of using current water use trends and past supply patterns to arrive at a single forecast of future supply and demand, the new IRP will outline plans for responding to a range of alternative circumstances. The basis for this approach is the assumption that neither past supply nor demand patterns are likely to remain the same, especially in light of climate change and shifting environmental and political attitudes.

Recognizing that other water utilities face similar challenges, Denver Water will continue to consult with its peers in the industry and in the region in 2009 to exchange information related to planning for an uncertain future. We will also support the Board in its attempt to resolve long-standing water rights issues through mediation with Western Slope water users.

In response to the Board's proposal to augment supplies by enlarging Gross Reservoir, the U.S. Army Corps of Engineers has released a provisional draft Environmental Impact Statement (EIS) describing the potential environmental effects of this project. The project will be reviewed by the U.S. Environmental Protection Agency, the Federal Energy Regulatory Commission, and Grand County. The next step is for Denver Water and the Corps to respond to the comments of these other entities. Once all the comments have been addressed, the Corps will release a draft EIS to the public.

### **Continue to Be Responsible Stewards of Our Natural Resources**

Denver Water's staff is committed to being conscientious stewards of the natural resources with which we've been entrusted. To further this commitment, we are working on detailed Watershed Management Plans aimed at preventing catastrophic wildfires near our water collection systems. The ongoing hazard of wildfires has been exacerbated by the bark beetle infestation that is killing vast numbers of lodge pole pines in Grand and Summit counties. Development of the Watershed Management Plans will proceed in conjunction with the IRP update during 2009, and the plans will be incorporated in the published IRP.

Because forest management programs are far less costly than post-fire recovery activities, we will continue collaborating with state and federal Forest Service personnel in 2009 to establish fire breaks, remove trees killed by the bark beetle, and thin vulnerable forests in our watersheds. We have also joined a recently formed group of Front Range water providers and state and federal agencies whose purpose is to develop additional watershed assessment methods and protection plans.

Responsible stewardship also means stretching finite water supplies by eliminating water waste and relying on recycled water for nonpotable uses such as irrigation and industrial applications. In addition to increasing funds for residential rebates and irrigation efficiency contracts in 2009, we are expanding programs to encourage further reductions in indoor residential water use and launching new programs to help commercial and industrial establishments use water more efficiently.

*“Denver Water’s staff is committed to being conscientious of the natural resources which we’ve been entrusted.”*

For the third consecutive year, we will partner with the Mile High Youth Corps to retrofit low-income households with water-efficient toilets, showerheads, and faucet aerators. Since this program began in 2007, we have extended its area of operation from the City and County of Denver to other locations in our combined service area. We have also increased the number of retrofits each year—854 high-efficiency toilets were installed in 2007, the number rose to 1,500 in 2008 and more than 2,000 will be installed in 2009. The 2009 budget for this program includes \$850,000 for materials and \$640,000 for installation.

A toilet giveaway project planned for 2009 will serve two purposes—to equip 1,000 additional households with high-efficiency toilets and to introduce the local community to a national organization of “green plumbers.” Instead of offering rebates for water-efficient toilets, this initiative will provide free toilets to be installed by members of Green Plumbers USA<sup>®</sup>, a national training and accreditation program that emphasizes the role of plumbers in promoting the benefits of water conservation. This pilot project is budgeted at \$125,000 for 2009.

New programs targeting commercial water savings include a cooling tower subsidy and a plan to retrofit restaurants with efficient spray nozzles for dishwashing. In cooperation with the Colorado National Association of Industrial and Office Properties, we will identify 10 representative cooling towers to receive a year of free water treatment and service aimed at optimizing their water consumption. Our staff will use data on the efficiencies achieved to encourage other property owners to participate in our Cooling Tower Incentive Program. The 2009 budget for this pilot program is \$120,000.

The 2009 budget also includes \$50,000 for hiring an installer to retrofit 1,000 food service establishments with water-efficient spray nozzles for dishwashing.

### **Apply Technology to Bolster Denver Water's Focus on Customers**

The multifaceted, multimillion-dollar project to modernize our Customer Information System (CIS) is scheduled to culminate in July 2009. The new system will streamline operating procedures by replacing or consolidating 24 existing systems and will enable us to better serve customers by giving them more frequent water use information through monthly bills. In addition to enabling the switch from bimonthly to monthly billing, the up-to-date CIS will boost our ability to track customer account information, analyze water savings, and administer more sophisticated rate designs that support our demand-management and revenue goals. Total implementation costs are estimated at \$26 million, including the salaries of Denver Water employees involved in the project.



Our agenda for 2009 also includes further implementation of our Mobile Workforce Automation System, which went live in 2008. The system allows our dispatcher to see each field worker's location on a map, prioritize work orders, and send the orders directly to a personal computer installed in the field worker's truck. The truck's computers also give field employees access to GIS maps and information from our water sales database and enable them to initiate follow-up work orders for other Denver Water sections directly from the job site. Scheduled work, such as hydrant flushing, can be routed for optimal efficiency. In addition, the system is linked with our asset management database, allowing compilation of more complete data on our equipment and facilities.

When the 2009–2013 Strategic Plan is finalized, our Public Affairs Division will proceed with plans to update Denver Water's Web site ([denverwater.org](http://denverwater.org)). The goal for the redesign is to give customers and other interested parties updated, easier-to-locate information. The new site will be more interactive than the existing one, allowing users to quickly find breaking news, water conservation information, and bill payment options.

*“Our agenda for 2009 also includes further implementation of our Mobile Workforce Automation System, which went live in 2008.”*

### **Ensure That Denver Water Is an Efficient, Effective, Desirable Place to Work**

As part of our ongoing effort to attract and retain talented, skilled, and motivated employees, we will devote increased attention in 2009 to improving Denver Water's status as a desirable place to work. To enhance our efficiency and effectiveness, we will engage employees in developing strategies to help us achieve the organization's strategic goals. We will also continue to review and update our compensation and benefits plans to make certain they are attractive, competitive, and in line with those of our peer organizations.

## **Monitor the Volatile Economy and Prepare for Potential Effects to Denver Water and Its Customers**

In anticipation of the possibility that economic conditions may adversely affect 2009 revenues, the Board directed staff to reduce revenue forecasts and planned expenditures for the coming year. In response, the staff scaled back its forecasts of demand for treated water and revenue from system development charges. To make sure Denver Water can meet its financial obligations if we cannot access the municipal debt market or our revenues are significantly lower than projected, we also reduced planned capital outlays by \$22 million and planned operating expenditures by \$13.5 million. Finance Division staff will confer with the Board throughout 2009 to assess economic conditions and seek guidance on whether additional budget adjustments are warranted.

## **2009 Budget**

### **Sources of Funds**

The 2009 budget for water sales is \$212.0 million. This figure is based on a water demand forecast that is 5 percent less than the projection used in August to develop 2009 water rates. We have also used a conservative estimate to calculate 2009 collections from System Development Charges. During the financial planning process, we reduced the estimated revenue from system development charges by 15 percent to account for a potential slump in new tap sales caused by the slowing housing market. In consultation with the Board, the Director of Finance subsequently directed an additional 10 percent decrease. The budget is now 75% of normal for system development charges.

The remaining revenue categories are generally comparable to those in 2008, with a few notable exceptions. Two entities—South Adams County Water and Sanitation District and Farmers Reservoir and Irrigation Company—are contractually obligated to make payments to Denver Water in 2009 for their share of the purchase price for Lupton Lakes Gravel Pit. These payments total \$10.3 million and are expected to result in a Participation Budget that is significantly higher than in 2008.

With the current volatility in the capital markets, we are keeping a close eye on the municipal bond market. We originally anticipated issuing approximately \$44.1 million in bonds in the first quarter of 2009. However, in light of the current high cost of that debt, the Board has recommended postponing the bond issue. Finance Division staff will continue to monitor market conditions and, if appropriate, will reconsider the issue later in the year. We are currently budgeting the \$44.1 million issue for December 2009.

### **Uses of Funds**

Total 2009 payroll expenditures—including regular wages, paid leaves of absence, and overtime and disability payments—are projected at \$70.4 million. Most of the positions to be added this year are

related to the Board's directive to implement monthly billing in July 2009. In recognition of current economic conditions, the Board and staff have agreed to carefully manage hiring during 2009. Although the Manager intends to authorize most new positions related to implementing monthly billing and converting some IT contractors to regular Denver Water employees, he will review every request to fill a vacancy during the year to determine whether the hiring can reasonably be delayed.

Of the total amount budgeted for payroll expenditures, 14 percent will be assigned to staff working with capital projects and 86 percent will be allocated to employees engaged in other utility activities. The capital allocation is in line with our actual experience in 2008.

Operations and maintenance (O&M) expenditures for 2009 are budgeted at \$166.2 million, 7.7 percent more than the amount budgeted in 2008. The principal drivers of this increase are personnel, fuel, and vehicle costs related to monthly billing, plus the increased contribution to keep Denver Water's defined benefit retirement plan financially and actuarially sound

Although the calculated actuarially required Board contribution to our defined benefit plan will be finalized after our December 31, 2008, valuation, we are currently budgeting the contribution at \$14.5 million for 2009. Because of unpredicted market volatility in the last half of 2008, this contribution is measurably higher than historical contributions. Our estimate is that the required contribution could range between \$12.5 million and \$16 million.

The 2009 budget for conservation programs reflects the Board's continuing commitment to accelerate water savings throughout Denver Water's combined service area. The total conservation budget for 2009 is \$10.3 million, an increase of \$1.1 million compared with the 2008 budget.

In 2007 the Board implemented a change in the design of the employee health care insurance program. The new design was intended to produce a more equitable cost-sharing ratio between Denver Water and its employees in the face of rising health care insurance premiums. Because the changes appear to be achieving the Board's objectives, the Board's share of employee health care insurance costs will remain at \$12.1 million in 2009. This is the same amount the Board actually spent on employee health care insurance in 2005. The Board's share of employee health care costs in 2006, 2007, and 2008 were \$13.8 million, \$11.3 million, and \$11.1 million, respectively.

Spending on capital projects in 2009 is budgeted at \$87.2 million. This figure reflects a reduction of \$22.7 million in construction costs from the originally proposed 2009 Capital Improvement Plan. Staff will continue design work for the majority of these delayed projects and, if the economic situation or a federal economic stimulus package warrants it, will ask the Board's permission to proceed with additional projects during 2009. The top 50 capital projects planned for 2009 are expected to cost \$72.5 million, or 83 percent of the amount budgeted under the 2009 Capital Improvement Plan.

Debt service and related costs are budgeted at \$51.9 million.

## Investment Balance

Based on projected 2009 sources and uses of funds, we estimate that Denver Water's investment balance, or cash reserves, will remain unchanged at \$198.3 million by the end of 2009.

## 2008 Budget Performance

### Sources of Funds

Total sources of funds for 2008 were budgeted at \$251.8 million. Actual revenue for 2008 was \$255.7 million, \$3.8 million more than the budgeted amount. The increase in revenue is the result of several factors, including higher-than-anticipated water sales, interest income, and hydropower revenues; two unbudgeted reimbursement payments; and receipt of \$1.8 million in unbudgeted funds from Clean Renewable Energy Bonds.

Water sales for 2008 were budgeted at \$203.9 million, an amount comprising 81 percent of the overall revenue budget. At the end of the year, total billed revenue from water sales was \$204.2 million, or 0.5 percent lower than the budgeted amount.

In addition to the revenue from water sales, our interest income amounted to \$1.5 million more than budgeted, and hydropower revenues exceeded the budgeted amount by \$0.5 million. We also received a \$1.6 million reimbursement from the Willowbrook Water and Sanitation District for the cost of installing Conduit 129 in Jefferson County. In October we received a \$1.8 million reimbursement from South Adams County Water and Sanitation District for gravel pit construction costs.

This additional revenue was partially offset by lower-than-budgeted revenue from System Development Charges, which produced \$19.1 million in 2008, \$3.8 million less than the budgeted amount. This shortfall is likely due to the economic slowdown.

### Uses of Funds

Total capital spending in 2008 was \$82.8 million, or \$4.8 million below the amount budgeted. Fifty capital projects accounted for 91 percent of total expenditures under the 2008 Capital Improvement Plan. Throughout 2008, staff transferred money from one project to another to cover unexpected cost escalations or emergency projects.

*“In addition to the increased revenue from water sales, our interest income amounted to \$1.5 million more than budgeted, and hydropower revenues exceeded the budgeted amount by \$0.5 million.”*

Operating expenses in 2008 were \$151.1 million, just 1.9 percent under the budgeted amount. Although expenditures for conservation and employee benefits were under budget by \$3.3 million and \$3.9 million, respectively, these savings were offset by higher-than-anticipated costs for security related to Dillon Dam and for around-the-clock staffing of the emergency operations center at the Democratic National Convention, as well as a higher-than-predicted number of maintenance projects in the Transmission and Distribution Division.

Debt service payments for 2008 totaled \$49.6 million.

### Investment Balance

Our Investment balance at the end of 2008 totaled \$198.3 million, which is \$11.8 million more than the budgeted amount. Of the total balance, \$106.5 million is either legally restricted or restricted by Board policy. The unrestricted reserve balance, which is available for future operating or capital expenditures, was \$91.8 million at the end of 2008.

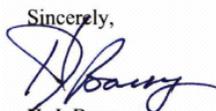


*“We will continue to monitor water rates, capital expenditures, debt levels, and investment balances to minimize rate increases while providing reliable service to customers and maintaining Denver Water’s financial well-being.”*

## Financial Overview

Denver Water's strong financial status is projected to continue during our planning horizon of 10 years. Underlying credit ratings of our master resolution revenue bonds by Moody's, Fitch Ratings, and Standard & Poor's are Aa2, AA+, and AA, respectively. We will continue to monitor water rates, capital expenditures, debt levels, and investment balances to minimize rate increases while providing reliable service to customers and maintaining Denver Water's financial well-being.

I am confident that the 2009 budget provides a responsible plan for both fiscal and physical operations and is sufficiently conservative to enable us to adapt to changes in the economy in the coming year.

Sincerely,  
  
 H. J. Barry  
 Manager

## BOARD OF WATER COMMISSONERS

*Penfield Tate III, President  
Attorney: Greenberg Traurig*



During my tenure on the Board we have really collectively begun to emphasize the need to promote a strong conservation ethic in the city, the Front Range and region; understanding that water is a limited and precious resource and absent a few unique things, we can't create any more of it. It's important that we properly use and protect what is available. As a Board member I think about the policy making a little bit differently. I'm often thinking about if I were still an employee on the ditch crew, how would I feel about this decision we are about to make.

*“I think we run a good water department. We’ve been fortunate with a good, strong employee corps and a good management corps.”*

*John Lucero, First Vice President  
Broker Associate: Lucero Real Estate, Inc.*

John Lucero brings extensive knowledge of housing and zoning issues through his work as a Broker Associate at Lucero Real Estate, Inc., a local real estate company that offers residential, commercial, development, and investment real estate expertise. “My ancestors have been in the region for several hundred years. It is because of this that I am particularly interested in water delivery, recycling and conservation. I bring an intimate knowledge of real estate, land use policy, and green concerns to benefit Denver Water.”



*“I’m excited to learn more about the complexity of water and our influence in the area.”*

### LAST 20 COMMISSIONERS

James B. Kenney, Jr.	Jan 9, 1976 to Sep 26, 1983	Hubert A. Farbes, Jr.	Jul 8, 1985 to Jul 14, 1997
Charles G. Jordan	Sep 26, 1983 to Jun 28, 1985	Ronald L. Lehr	Jul 21, 1993 to Apr 20, 1999
D. Dale Shaffer	Aug 9, 1978 to Jul 8, 1985	Joe Shoemaker	Jul 10, 1995 to Jul 9, 2001
John A. Yelenick	Jul 14, 1969 to Aug 25, 1987	Andrew D. Wallach	Jul 18, 2001 to Aug 5, 2003
Marguerite S. Pugsley	May 10, 1978 to Aug 25, 1987	Daniel E. Muse	Feb 10, 2000 to Nov 13, 2003
Elizabeth A. Hennessey	Nov 4, 1985 to Jul 28, 1989	Richard A. Kirk	Jul 21, 1993 to Oct 18, 2005
Malcolm M. Murray	Aug 25, 1987 to Jul 12, 1993	William R. Roberts	Jul 10, 1997 to Oct 18, 2005
Donald L. Kortz	Aug 25, 1987 to Jul 12, 1993	Denise S. Maes	Jul 10, 1995 to Jul 10, 2007
Monte Pascoe	Sep 26, 1983 to Jul 10, 1995	Harris D. Sherman	Dec 6, 2005 to Feb 16, 2007
Romaine Pacheco	Jul 31, 1989 to Jul 10, 1995	Susan Daggett	Nov 6, 2007 to Jan 22, 2009

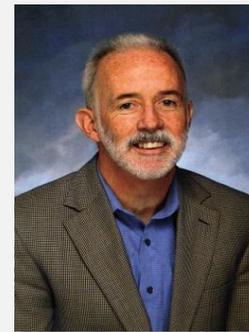
***George B. Beardsley, Commissioner***  
***Principal: Inverness Properties, LLC***



George Beardsley is a principal with Inverness Properties, LLC, which specializes in the development and operation of commercial real estate properties. He is a partner with G.L. Beardsley and Sons, which has ranch operations in Elbert and Douglas Counties and maintains ranch operations in Summit County. Beardsley is a member of the Board of Trustees of the Colorado Conservation Trust, the Colorado State University Research Foundation and the Gates Foundation. He is the past president of the Inverness Metropolitan Water & Sanitation District, a member of the Urban Land Institute's Environmental Council and the Colorado Forum and its Water Committee; and a former board member of Great Outdoors Colorado.

***Tom Gougeon, Commissioner***  
***Principal: Continuum Partners, LLC***

The Denver Water system is a remarkable asset and represents an amazing achievement by all who have contributed to its development. As we plan for its future, we have even greater obligations to be good stewards of both the system and the natural resources and watersheds upon which it depends. Our future priorities will include new sources of supply, greater reuse capabilities, leadership in conservation and demand management and new partnerships with stakeholders around the state. We need to achieve all of these goals while still assuring customers they are receiving good value for every dollar spent.



***Commissioner***  
***(Vacant Position)***

## Contact US

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Patricia L. Wells, 303.628.6464  
General Counsel

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Manager of Budget [grace.wilcox@denverwater.org](mailto:grace.wilcox@denverwater.org)



# About Denver Water



## Charter Directives

Denver Water was established in 1918 by the people of Denver as an independent agency with duties and responsibilities specifically spelled out in the City Charter. Since that time, the Denver Board of Water Commissioners has supplied water to Denver and contract distributors adjacent to Denver in accordance with the following charter directives:

The Board shall “...have complete charge and control of a water works system and plant for supplying the City and County of Denver and its inhabitants with water for all uses and purposes.” Charter of the City and County of Denver, Section 10.1.1.

The Board shall fix rates which “...shall be as low as good service will permit... “and” ... may be sufficient to pay for operation, maintenance, reserves, debt service, additions, extensions, betterments, including those reasonably required for the anticipated growth of the Denver Metropolitan area and to provide for Denver’s general welfare.” Charter of the City and County of Denver, Section 10.1.9.

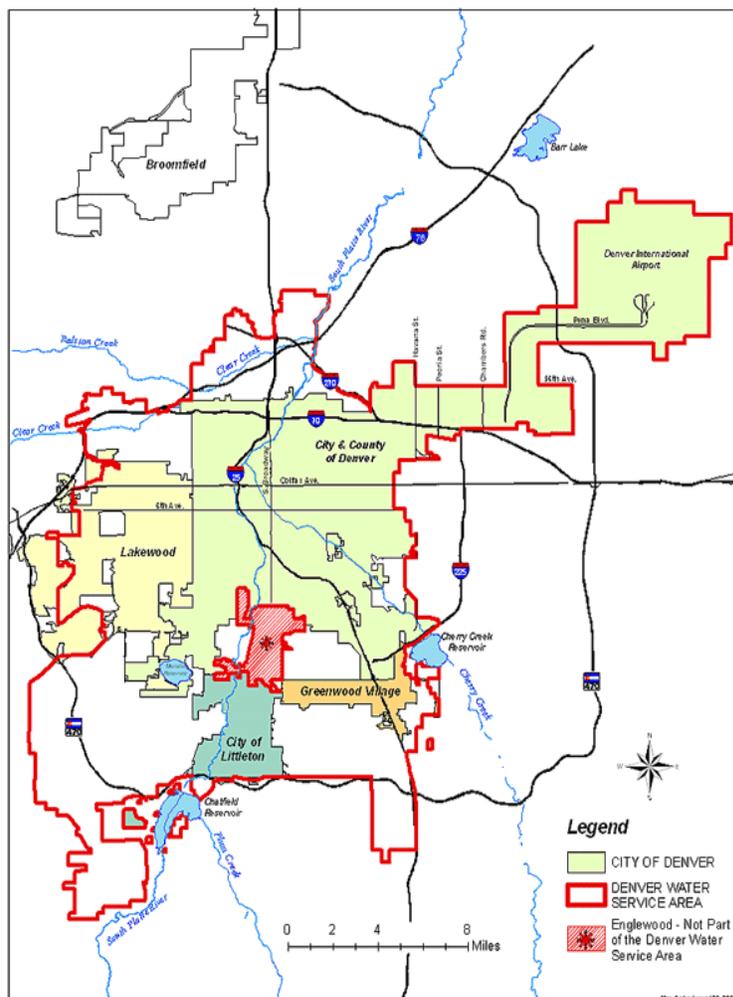
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## Map of Service Area



### Customers Served

- Denver Water proudly serves high-quality water and promotes its efficient use to 1.1 million people in the city of Denver and many surrounding suburbs.

### Service Area

- Customer accounts served in City and County of Denver; 157,707.
- Suburban customer accounts served (wholesale); 76,770.
- Suburban customer accounts served (retail); 72,390.
- Denver Water provides service to 15,767 water fire hydrants.
- Denver Water also serves approximately 150,000 people through fixed and special contracts.

## General Information

### Denver Water:

- Ensures a continuous supply of water to the City and County of Denver and Denver Water customers who live in the surrounding suburbs.
- Is responsible for the collection, storage, quality control and distribution of drinking water to nearly one fourth of all Coloradans.
- Primary water sources: Blue River & South Platte River.
- Other sources: Fraser River, Williams Fork River, South Boulder Creek, Ralston Creek, Bear Creek.
- Was established in 1918 (Denver citizens purchased water system from a private company).
- Is Colorado's oldest and largest water utility.
- Is a separate legal and financial entity from City of Denver.
- Derives its authority from the Charter of The City and County of Denver.

### 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 to meet its expenses of operation and maintenance.
- The Board has never required ad valorem taxes to meet its obligations.
- 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.

### Our Distribution System:

- 2,675 miles of water mains (pipelines).
- 36.5 miles of non-potable pipes in the system.
- 17 pumping stations.
- 34 underground reservoirs in various city locations.

Denver Water Reservoirs		
Reservoirs	Acre Feet of Storage	% of Total Storage
Dillon	254,036	45
Eleven Mile Canyon	97,779	17
Cheesman	79,064	14
Gross	41,811	7
Chatfield	27,428	5
Antero	20,015	4
Marston	19,796	4
Ralston	10,749	2
Strontia Springs	7,863	1
Long Lakes	1,787	.3
Platte Canyon	910	.2
Soda Lakes	645	.1
Williams Fork	96,822	Provides exchange water to meet downstream senior water rights requirements.
Wolford Mountain	25,610	Lease agreement with the Colorado River Water Conservation District for exchange water.

### Watersheds

- Almost all of Denver Waters' water supply comes from mountain snowmelt.
- High level of watershed control and protection by multiple agencies
- Total area: 4,000 square miles (2.5 million acres)
- Location and size:
  - Park County: 1,230,000 acres
  - Grand County: 390,000 acres
  - Jefferson County: 280,000 acres
  - Summit County: 210,000 acres
  - Teller County: 160,000 acres
  - Douglas County: 120,000 acres
  - Clear Creek County: 70,000 acres
  - Gilpin County: 60,000 acres
  - Other Counties: 20,000 acres

Water Treatment	
Treatment Plant	Capacity
Marston	250 million gallons per day
Moffat	185 million gallons per day
Foothills	280 million gallons per day
<b>Total Capacity</b>	<b>715 million gallons per day</b>

### Water Treatment Plants

- Utilize "conventional" process design consisting of coagulation, sedimentation, filtration, and disinfection processes.
- Produce water which exceeds all the standards set by the state of Colorado and the federal Safe Drinking Water Act.

Recycled Water	
Recycle Treatment Plant	Capacity
Commerce City	30 million gallons per day

### Recycled Water Treatment Plant

- Non- Potable water is used for industrial purposes and for outdoor irrigation in parks, golf courses and other public spaces.
- Treatment is similar to the process at drinking-water plants: coagulation, sedimentation, filtration and disinfection, but not to drinking water quality.
- Ammonia is removed and phosphorous reduced to make it non-corrosive when used in industrial applications; water will be safe for incidental body contact.
- Water is treated to a level higher than required by standards set by Colorado Department of Public Health and Environment for irrigation use.

### Water Use:

- Denver Water provides one-third of the state's treated water supply (234,000 acre feet\* per year).
- Average annual use for typical family home: 125,000 gallons per year (a little less than half an acre foot).
- The average consumption is about 168 gallons per person per day (10-year average).

### 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% Showers/baths
- 6% Faucets
- 5% Leaks
- 1% Dishwashers

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

## Denver Community Profile 2006 Estimates

	<u>Denver</u>	<u>Region</u>
Population	582,474	2,719,432
Employment	499,006	1,589,506
Employers	23,674	91,133
Average Annual Wage*	\$47,710	\$44,226
Average Household Size	2.24	2.51
Percent Multifamily Housing Units	45%	31%
New Housing Units Built 2005-2006	2,945	23,080
Vacancy Rate	6.10%	5.40%

\*Workers employed in the community

### Top Employers

1. CITY AND COUNTY OF DENVER
2. DENVER PUBLIC SCHOOLS
3. UNIVERSITY OF COLORADO
4. UNITED AIR LINES INC
5. UNITED STATES POSTAL SERVICE
6. DENVER HEALTH & HOSPITAL AUTHORITY
7. UNIVERSITY OF COLORADO HOSPITAL AUTHORITY
8. CENTURA HEALTH
9. FRONTIER AIRLINES INC
10. UNIVERSITY OF DENVER

# Denver Water Values



## Mission

Denver Water will provide our customers with high quality water and excellent service through responsible and creative stewards of the assets we manage. We will do this with a productive and diverse workplace. We will actively participate in and be responsible member of the water community.

## 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, ensuring consistency and excellence throughout Denver Water.

# Organization



## Who We Are & What We Do

Since 1918, Denver Water has continued to provide our customers with high quality water and its efficient use to people in the city of Denver and many surrounding suburbs.

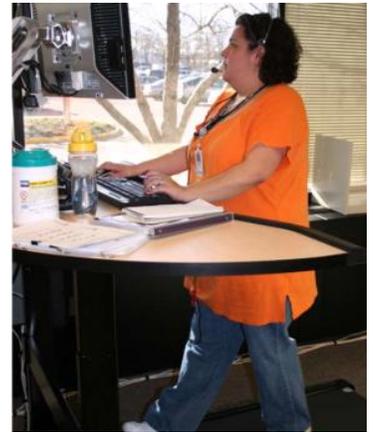
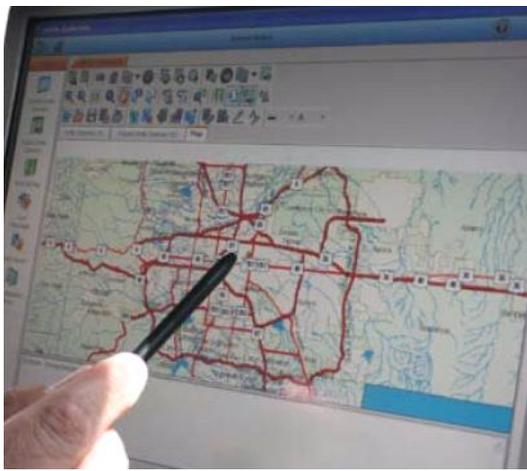
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# What We Do At Denver Water



Provide Customer Service while staying healthy



Mobile Workforce Automation system allows service workers to locate customer call details with ease



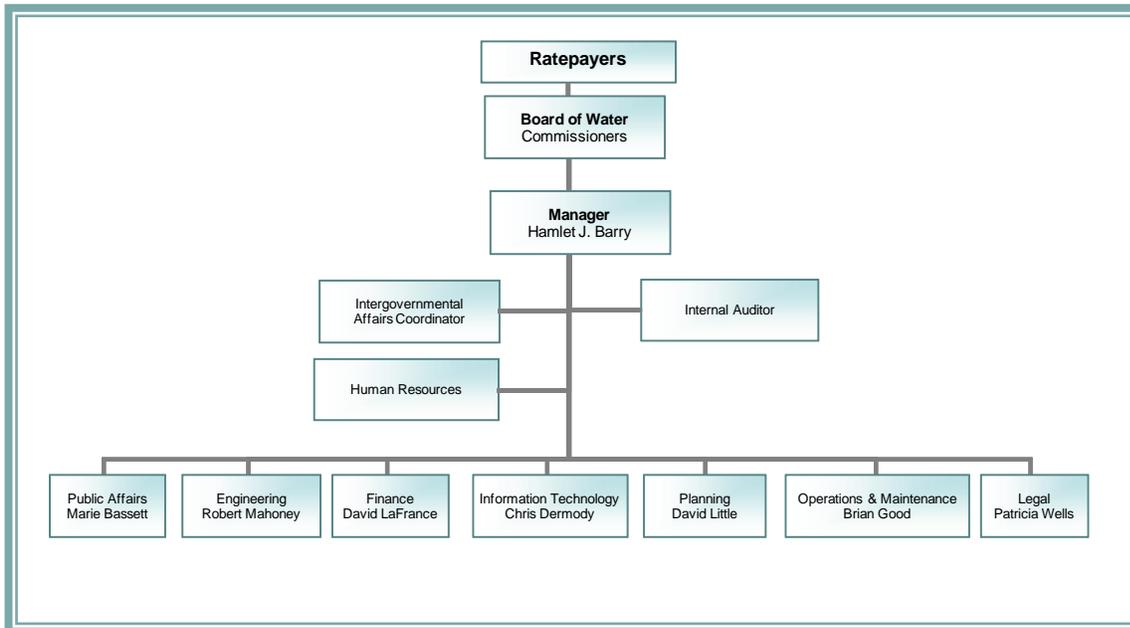
Help Our Worldwide Community



Maintain our system by replacing equipment



Use Technology to detect water leaks



### Denver Water Goals

#### Customer

- 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

- Promote accountability
- Improve efficiencies
- Communication

## 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.

### Goals for 2009

- Implement Denver Water's 2009-2013 Strategic Plan.
- Continue to plan for future uncertainties that may affect water supplies.
- Continue to be responsible stewards of our natural resources.
- Apply technology to bolster Denver Water's focus on customers.
- Ensure that Denver Water is an efficient, effective, desirable place to work.
- Monitor the volatile economy and prepare for potential effects to Denver Water and its customers.


**Regular & Introductory Employees (At End of Year)**

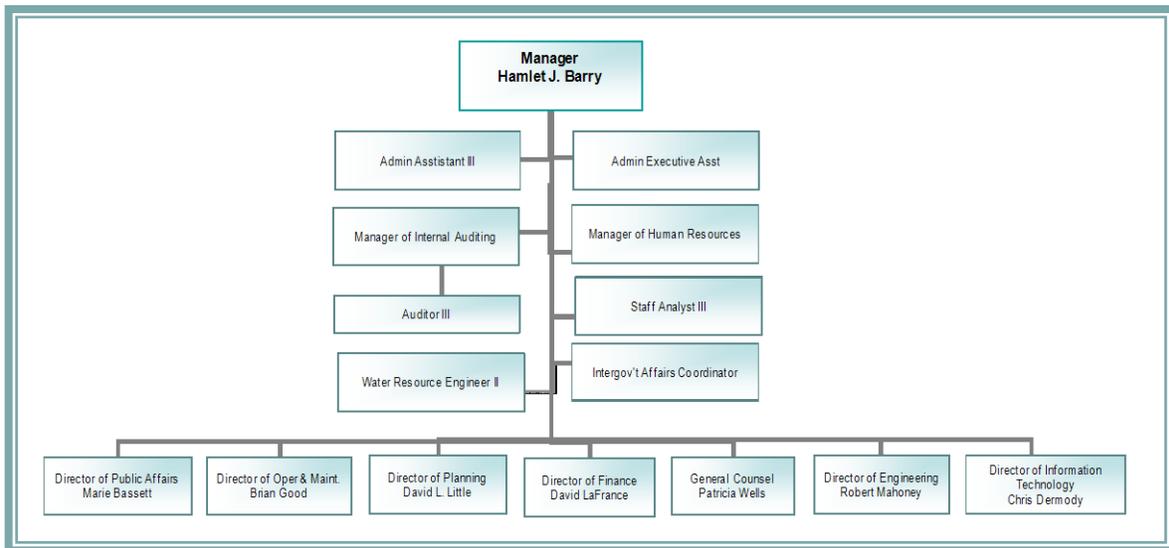
Section	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Manager & Staff	14.0	14.0	15.0	15.0	16.0
Human Resources	24.8	20.0	20.0	20.0	21.0
Public Affairs	139.8	146.3	166.7	161.0	188.6
Engineering	126.0	139.0	152.0	147.0	162.0
Finance	57.0	54.0	58.0	56.0	59.0
Information Technology	58.8	57.8	67.0	61.0	70.0
Planning	42.3	41.4	45.1	45.0	47.6
Operations & Maintenance	528.8	521.0	567.0	538.0	563.0
Legal	<u>13.3</u>	<u>13.8</u>	<u>13.6</u>	<u>12</u>	<u>13.6</u>
<b>Total</b>	<b>1,004.8</b>	<b>1,007.3</b>	<b>1,104.4</b>	<b>1,055.0</b>	<b>1,140.8</b>

*Increases in staffing are due to customer growth, capital projects, and technology related to monthly billing.*

**DENVER WATER  
Expenditure History (Thousands of Dollars)**

		2006	2007	2008	2008	2009
		<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Payroll	\$	62,922	64,833	68,366	68,820	70,413
Employee Benefits		31,138	28,207	31,848	27,926	37,078
Materials & Supplies/Plant Equip		17,396	19,557	24,995	26,895	28,103
Utility & Pumping		7,511	6,934	8,064	8,430	8,789
Prof & Other Services		32,137	37,396	49,812	55,979	56,943
General Equipment		2,355	2,593	7,004	3,026	3,918
Contract Payments		54,007	53,959	48,549	37,044	44,460
Refunds		472	865	619	2,162	673
Debt Service		46,237	53,678	49,448	49,575	51,655
All Other Miscellaneous		<u>2,921</u>	<u>2,031</u>	<u>2,728</u>	<u>3,643</u>	<u>3,312</u>
<b>Total</b>	<b>\$</b>	<b>257,096</b>	<b>270,053</b>	<b>291,433</b>	<b>283,500</b>	<b>305,344</b>





## Manager and Staff Highlights

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

### Goals for 2009

- Implement and monitor Denver Water's 2009 Strategic Plan.
- Develop more opportunities for Manager and Executive Staff to interact with customers and employees in the field.
- Support strategies that allow executive staff to delegate work and spend more time thinking strategically.

### Accomplishments During 2008

- Continued work with the Board on historic negotiations with Western Slope water users.
- Completed draft of the 2009-2013 Strategic Plan.
- Improved communications with employees through site visits, Q & A sessions, newsletters and email.

### Manager and Staff Goals

#### Financial

- Exercise responsible financial stewardship

#### Public Responsibility

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

#### Organization

- Promote accountability
- Improve efficiencies
- Communication



**Regular & Introductory Employees (At End of Year)**

Section	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Manager & Staff	14.0	14.0	15.0	15.0	16.0
<b>Total</b>	<b>14.0</b>	<b>14.0</b>	<b>15.0</b>	<b>15.0</b>	<b>16.0</b>

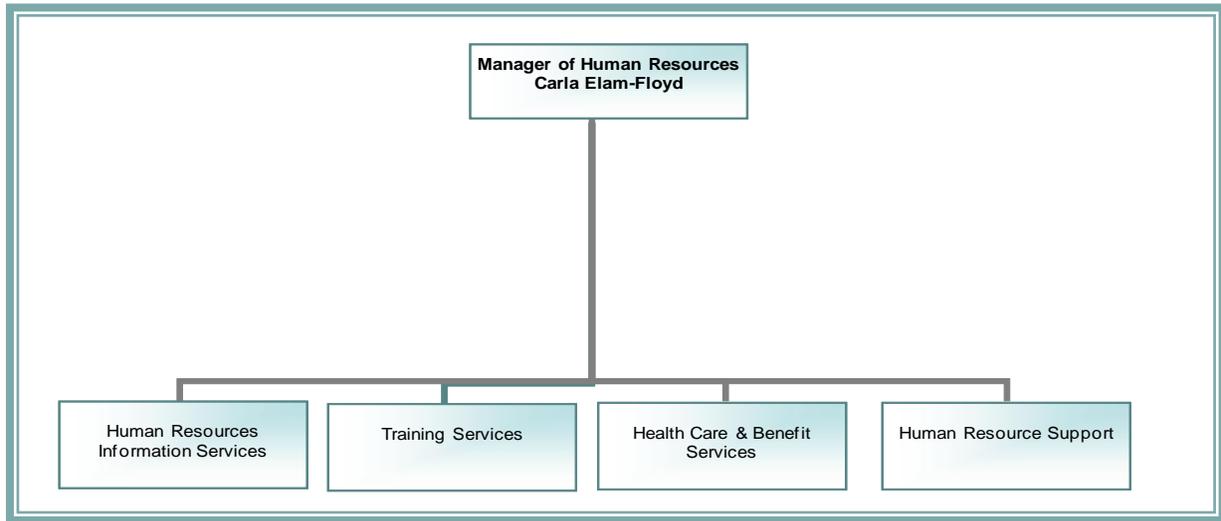
*Six Division Directors, the General Counsel, the Internal Auditor, and Manager of Human Resources report directly to the Manager.*

**MANAGER & STAFF**  
Expenditure History (Thousands of Dollars)

	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Payroll	\$ 1,798	1,947	1,710	2,087	2,049
Materials & Supplies/Plant Equip	2	3	7	12	7
Prof & Other Services	538	550	642	597	329
All Other Miscellaneous	10	-	-	-	-
<b>Total</b>	<b>\$ 2,348</b>	<b>2,500</b>	<b>2,359</b>	<b>2,696</b>	<b>2,385</b>



Hamlet J. Barry,  
Secretary-Manager



#### Human Resources Goals

##### Organization

- Promote accountability
- Improve efficiencies
- Communication

## Human Resources Highlights

The Human Resources Division is responsible for enforcing Personnel Policies including maintaining and revising Denver Water's classification and pay plans. Manage programs relating to recruiting, hiring, managing, and retaining Denver Water employees. Developing programs associated with training, education, personal and professional development, counseling, support and equal opportunity for employees. Administration of programs related to Denver Water's healthcare, wellness, benefits and retirement programs.

### Goals for 2009

- Implement a revised, more in-depth new employee orientation program which ensures all new hires are given the information they need to navigate and succeed at Denver Water.
- Identify opportunities for executive staff to strengthen their working relationships and mechanisms for resolving conflicts.
- Continue to develop ways for employees to access Human Resources and Benefit related information.

### Accomplishment During 2008

- In response to feedback from employees, completed a total revision of the employee evaluation process. The new process promotes accountability through the use of performance standards.
- Hired a record 209 employees during 2008, reducing our vacancy rate from 8% to 4% in a 12 month period.
- Revised the employee pay grade and step increase policy so that employees in later steps receive smaller increases each year rather than larger increases every other year.



#### Regular & Introductory Employees (At End of Year)

Section	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Human Resources	<u>24.8</u>	<u>20.0</u>	<u>20.0</u>	<u>20.0</u>	<u>21.0</u>
<b>Total</b>	<b>24.8</b>	<b>20.0</b>	<b>20.0</b>	<b>20.0</b>	<b>21.0</b>

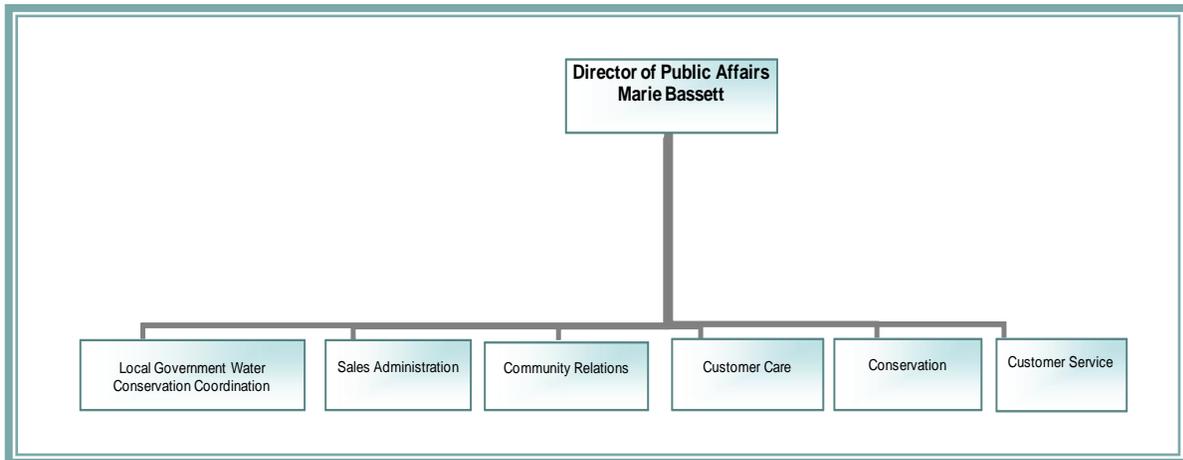
*Human Resources creates programs for training, education, personal, and professional development.*

#### Human Resources Expenditure History (Thousands of Dollars)

	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Payroll	\$ 2,938	3,536	3,019	2,230	2,230
Employee Benefits	16,812	12,596	14,006	11,358	13,646
Materials & Supplies/Plant Equip	100	239	145	295	169
Prof & Other Services	<u>2,271</u>	<u>2,242</u>	<u>2,968</u>	<u>2,165</u>	<u>2,781</u>
<b>Total</b>	<b>\$ 22,121</b>	<b>18,613</b>	<b>20,138</b>	<b>16,048</b>	<b>18,826</b>



Carla Elam-Floyd,  
Manager of Human  
Resources



## Public Affairs Highlights

Under the direction of the Manager, the Public Affairs Division facilitates relationships with persons and entities outside of Denver Water. In that capacity, the division responds to customer concerns and manages customer relations. The major sections of the Public Affairs Division include Community Relations, Water Conservation, Customer Care, Customer Service Field, and Sales Administration.

### *Goals for 2009*

- Work with others to implement the new Customer Information System to provide better service by allowing employees to retrieve all customer information at one time. Customer water use will be tracked more often as the change from bi-monthly to monthly billing occurs and this information will be used to individually assist customers to reduce their water use.
- Community Relations section will design and implement communication strategies with other stakeholders, specifically employees and key leaders throughout the state, as Denver Water completes the Integrated Resource Plan and continues the permit process for the enlargement of Gross Dam.

### *Accomplishments During 2008*

- Began dedicated outreach to suburban governments to assist their efforts to conserve water through hardware replacements. Efforts with the City & County of Denver increased and the national platform of the DNC was used to showcase conservation successes.
- Through the Customer Information System project, Denver Water worked to streamline business processes, reorganize business sections and automate routine manual tasks.

#### Public Affairs Goals

##### Customer

- Provide reliable service
- Provide excellent service

##### Public Responsibility

- Promote water efficiency and wise water use

##### Organization

- Communication



#### Regular & Introductory Employees (At End of Year)

Section	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Director of Public Affairs	6.0	7.0	7.0	8.0	8.0
Community Relations	4.2	5.4	7.4	6.0	7.6
Conservation	10.0	12.0	17.0	15.0	17.0
Central Services	N/A	3.0	3.0	3.0	3.0
Customer Care	108.0	39.3	45.7	43.0	45.2
Customer Services - Field	N/A	60.0	65.0	66.0	85.0
Meter Inspection Group	N/A	7.0	8.0	8.0	8.0
Sales Administration	<u>11.6</u>	<u>12.6</u>	<u>13.6</u>	<u>12.0</u>	<u>14.8</u>
<b>Total</b>	<b>139.8</b>	<b>146.3</b>	<b>166.7</b>	<b>161.0</b>	<b>188.6</b>

\* In 2007 employees were moved in order to better define work groups.

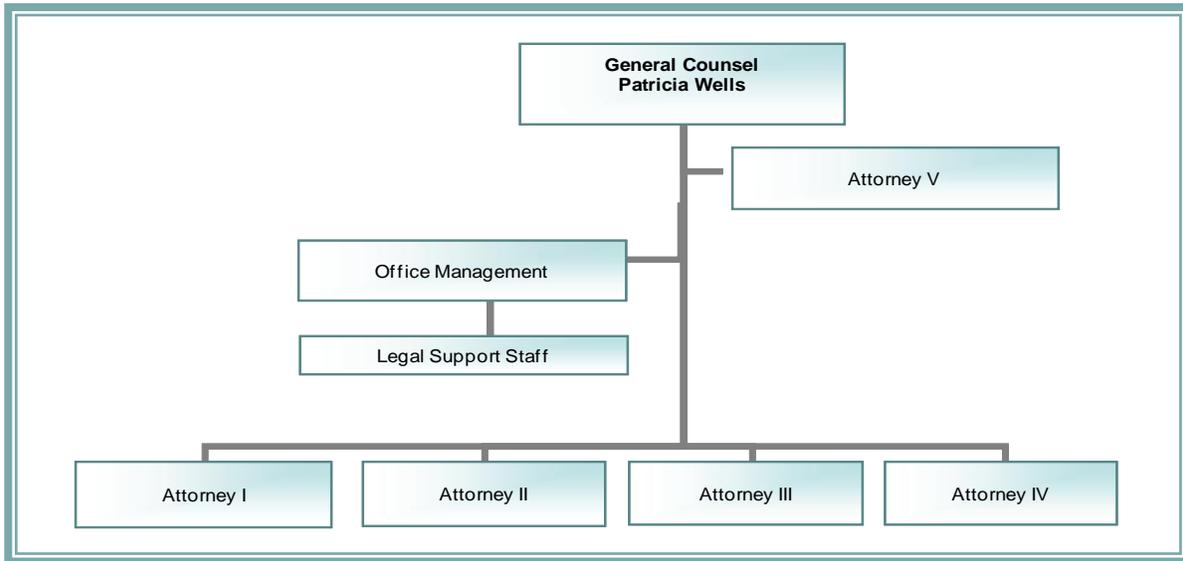
*Major sections of Public Affairs include Community Relations, Water Conservation, Customer Care, Customer Service, and Sales Administration.*

#### Public Affairs Division: Expenditure History (Thousands of Dollars)

	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Payroll	\$ 6,812	6,911	8,256	8,321	8,949
Materials & Supplies/Plant Equip	2,353	1,689	2,796	3,216	4,642
Prof & Other Services	3,296	3,907	7,398	3,691	6,565
General Equipment	17	7	40	158	32
Refunds	405	776	508	1,048	580
All Other Miscellaneous	<u>1,901</u>	<u>1,627</u>	<u>2,012</u>	<u>2,055</u>	<u>2,472</u>
<b>Total</b>	<b>\$ 14,784</b>	<b>14,917</b>	<b>21,010</b>	<b>18,489</b>	<b>23,240</b>



Marie L. Bassett,  
Director of Public Affairs



## Legal Highlights

The types of litigation services the Legal Division provides include water rights cases, diligence cases, property suits and condemnations, and actions to recover Board charges and damages for injury to Board property and rights. Also, the Legal Division represents Board interests in administrative hearings related to personnel problems, contract disputes, customer complaints, and reviews a variety of contract documents.

### Legal Goals

#### Customer

- Provide reliable service

#### Financial

- Exercise responsible financial stewardship

#### Organization

- Promote accountability
- Improve efficiencies
- Communication

### Goals for 2009

- Continue to provide legal advice and assistance regarding real estate, water rights, operation needs, claims, lawsuits, employee disputes, personnel policies, benefits, contracts, negotiations, environmental permitting, legislation, and regulatory proceedings.
- Resolve through negotiation or litigation the various claims and lawsuits brought against Denver Water.
- Participate in mediation efforts with West Slope entities to help formulate workable agreements whenever consensus is reached.

### Accomplishments During 2008

- Provided legal expertise and opinion in relation to ongoing water right negotiations with Western Slope water users.
- Provided litigation support and leadership to Denver Water staff involved in litigation related to our Blue River water rights.
- Provided guidance and legal assistance to the Retirement Plan Committee in their efforts to review Denver Water's Retirement Program.



#### Regular & Introductory Employees (At End of Year)

Section	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Legal	13.3	13.8	13.6	12.0	13.6
<b>Total</b>	<b>13.3</b>	<b>13.8</b>	<b>13.6</b>	<b>12.0</b>	<b>13.6</b>

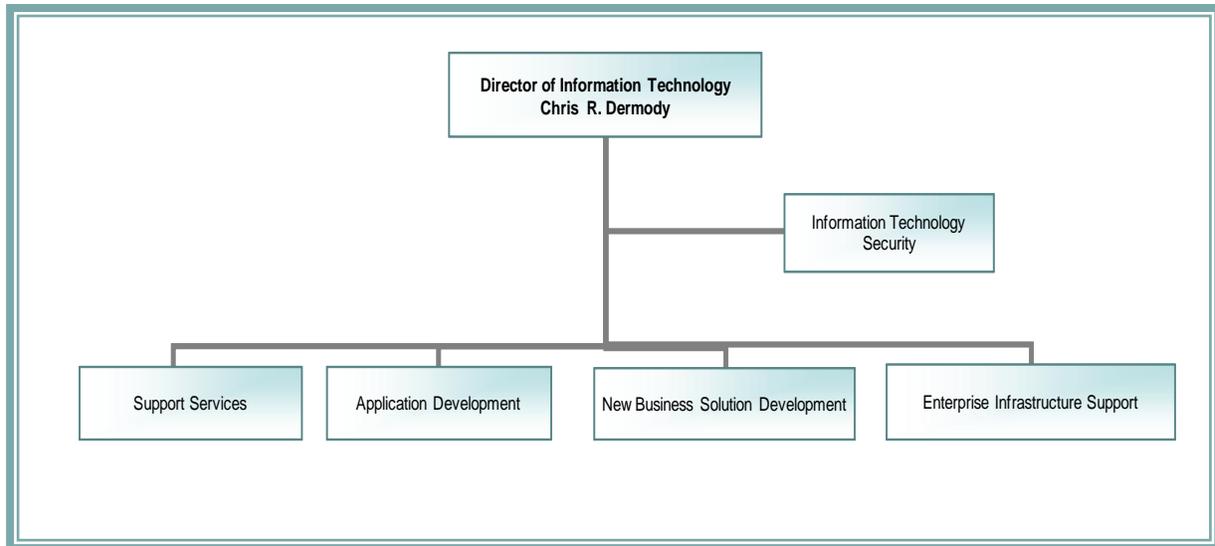
*Provides legal advice and assistance regarding real estate, water rights, operation needs, claims, lawsuits, employee disputes, personnel policies, benefits, contracts, negotiations, environmental permitting, legislation, and regulatory proceedings.*

#### Legal Expenditure History (Thousands of Dollars)

	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Payroll	\$ 1,038	1,110	1,117	1,178	1,165
Materials & Supplies/Plant Equip	2	4	2	3	2
Prof & Other Services	553	386	303	1,398	359
All Other Miscellaneous	927	353	606	1,544	730
<b>Total</b>	<b>\$ 2,520</b>	<b>1,853</b>	<b>2,028</b>	<b>4,123</b>	<b>2,256</b>



Patti L. Wells,  
General Counsel



### Information Technology Goals

#### Customer

- Provide reliable service

#### Financial

- Exercise responsible financial stewardship

#### Organization

- Promote accountability
- Improve efficiencies
- Communication

## Information Technology Highlights

The Information Technology Division partners with all other divisions within Denver Water to develop, implement and support IT based business solutions and tools aimed at improving customer service, operations and organizational efficiencies.

### Goals for 2009

- Implement a new Customer Information System.
- Implement improved enterprise asset management capabilities, continuing with a focus on distribution system assets.
- Implement a new time keeping system.

### Accomplishments During 2008

- Implemented a major upgrade to the Geographic Information System that provides geospatial data through a database model and new editing and maintenance tools.
- Implemented a new mobile workforce management system for emergency services.
- Implemented automation solutions related to valve inspection, construction management reporting, conservation programs, on-line enrollment for automatic bill payment, electronic voucher payments, records and document tracking, health and safety tracking, consolidation of payment vendors, and on-line open benefit enrollment.



**Regular & Introductory Employees (At End of Year)**

<b>Section</b>	<b>2006 Actual</b>	<b>2007 Actual</b>	<b>2008 Budget</b>	<b>2008 Actual</b>	<b>2009 Budget</b>
Information Technology	58.8	57.8	67.0	61.0	70.0
<b>Total</b>	<b>58.8</b>	<b>57.8</b>	<b>67.0</b>	<b>61.0</b>	<b>70.0</b>

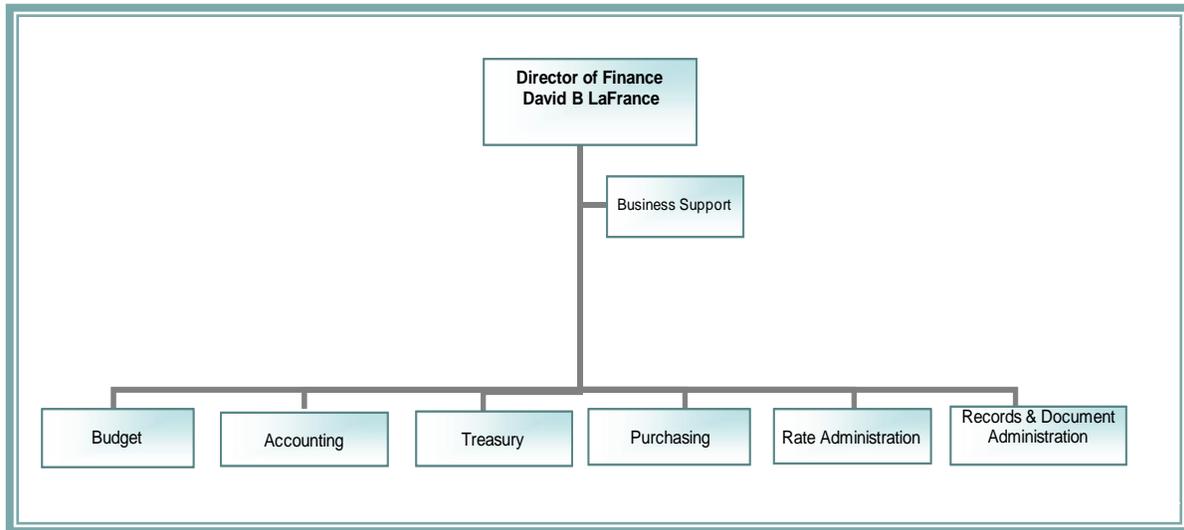
*Provides availability of technologies on a 24/7 basis and appropriate network and data security measures.*

**Information Technology:  
Expenditure History (Thousands of Dollars)**

	<b>2006 Actual</b>	<b>2007 Actual</b>	<b>2008 Budget</b>	<b>2008 Actual</b>	<b>2009 Budget</b>
Payroll	\$ 5,179	5,267	5,631	5,369	5,552
Materials & Supplies/Plant Equip	789	2,133	1,600	2,677	1,829
Utility & Pumping	1,375	1,402	1,484	1,458	1,617
Prof & Other Services	5,134	6,566	12,713	16,216	20,906
General Equipment	628	338	3,814	53	72
<b>Total</b>	<b>\$ 13,105</b>	<b>15,706</b>	<b>25,242</b>	<b>25,773</b>	<b>29,976</b>



Christopher R. Dermody  
Director of Information  
Technology



## Finance Division Highlights

The Finance Division is responsible for planning, management, budgeting, and reporting of Denver Water's financial resources, including acting as a disbursing authority for the Manager and a custodian of the Department's documents and records.

### *Goals for 2009*

- Finalize contracts between Denver Water and S. Adams County to reconcile cost sharing of gravel pit project expenditures.
- Reconcile cost sharing of CIS project expenditures with Denver Wastewater Management.
- Lead development, analysis and monitoring of cost based water rates.
- Assist in the implementation of a new time keeping system.
- Perform a review of records and documents inventory at Iron Mountain.
- Assist in the implementation of a new Customer Information System.

### *Accomplishments during 2008*

- Led a comprehensive evaluation of System Development Charges.
- Issued \$1.8 million of Clean Renewable Energy Bonds.
- Facilitated a multi-divisional evaluation of the Denver Water Retirement Program
- Reviewed all insurance policies.

#### Finance Objectives

##### Financial

- Exercise responsible financial stewardship

##### Public Responsibility

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

##### Organization

- Improve efficiencies



#### Regular & Introductory Employees (At End of Year)

Section	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Director of Finance	10.0	9.0	9.0	9.0	10.0
Treasury Operations	7.0	7.0	8.0	7.0	7.0
Budget Section	4.0	4.0	4.0	4.0	4.0
Accounting	17.0	18.0	18.0	19.0	19.0
Rate Administration	2.0	2.0	3.0	3.0	3.0
Records & Document Admin	8.0	6.0	8.0	6.0	8.0
Purchasing	<u>9.0</u>	<u>8.0</u>	<u>8.0</u>	<u>8.0</u>	<u>8.0</u>
<b>Total</b>	<b>57.0</b>	<b>54.0</b>	<b>58.0</b>	<b>56.0</b>	<b>59.0</b>

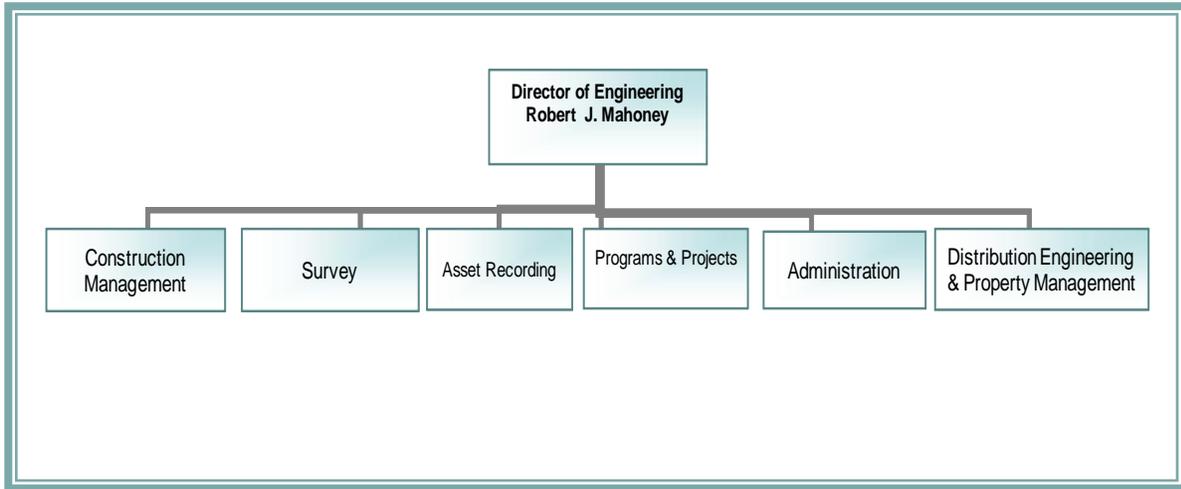
*Responsible for planning, management, budgeting and reporting of Denver Water's financial resources.*

#### FINANCE DIVISION Expenditure History (Thousands of Dollars)

		2006	2007	2008	2008	2009
		<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Payroll	\$	3,362	3,343	3,503	3,629	3,722
Employee Benefits		14,328	14,868	17,841	15,844	23,431
Materials & Supplies/Plant Equip		684	651	487	456	546
Prof & Other Services		907	1,995	1,709	1,877	2,859
General Equipment		5	-	-	-	-
Contract Payments		-	-	-	123	-
Refunds		37	85	93	1,102	93
Debt Service		46,237	53,678	49,448	49,575	51,655
All Other Miscellaneous		49	32	40	36	76
<b>Total</b>	<b>\$</b>	<b>65,609</b>	<b>74,652</b>	<b>73,121</b>	<b>72,642</b>	<b>82,382</b>



David B. LaFrance,  
Director of Finance



### Engineering Goals

#### Customer

- Provide reliable service
- Provide excellent service

#### Financial

- Exercise responsible financial stewardship

#### Public Responsibility

- Develop additional supplies for the future

#### Organization

- Promote accountability
- Improve efficiencies

## Engineering Division Highlights

The Engineering Division is responsible for the engineering, construction, and property related support activities for Denver Water's infrastructure.

### Goals for 2009

- Complete, design and start construction of the Williams Fork Dam Outlet and Small Hydro Project.
- Complete, design and start construction of a new inlet control at Cheesman Dam.
- Complete the construction of Cat Reservoir Pump Station and place Miller Reservoir online.
- Continue progress on the Vault Rehabilitation and Pipe Rehabilitation Programs.

### Accomplishments During 2008

- Completed construction of the Foothills Treatment Plant Chlorine Contract Basin and Chemical Feed Improvements.
- Completed construction of the Montclair Reservoir Pump Station.
- Completed Marston Reservoir Aeration Project.
- Continued work on the Pipe Rehabilitation, Vault Rehabilitation, and S. Boulder Diversion Canal Replacement Programs.



#### Regular & Introductory Employees (At End of Year)

Section	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Director of Engineering	8.0	4.0	4.0	3.0	4.0
Programs & Projects	36.0	41.0	51.0	49.0	55.0
Survey	26.0	25.0	27.0	26.0	27.0
Asset Recording	N/A	7.0	7.0	7.0	8.0
Distribution/Property Mgmt	37.0	39.0	39.0	41.0	44.0
Construction Management	<u>19.0</u>	<u>23.0</u>	<u>24.0</u>	<u>21.0</u>	<u>24.0</u>
<b>Total</b>	<b>126.0</b>	<b>139.0</b>	<b>152.0</b>	<b>147.0</b>	<b>162.0</b>

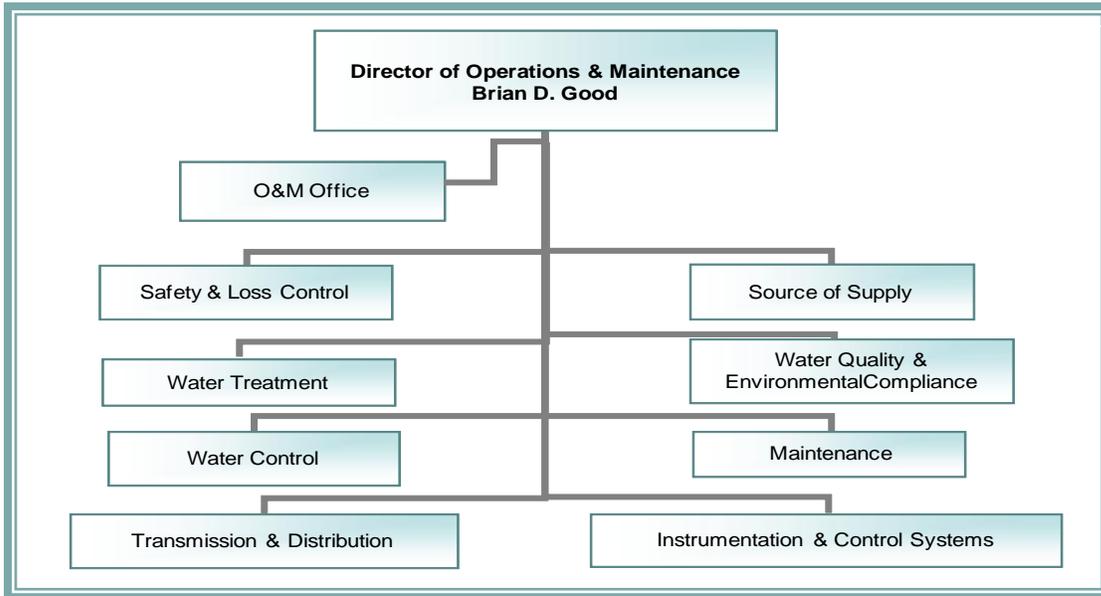
*Oversees the geospatial information and technology.*

#### Engineering Division: Expenditure History (Thousands of Dollars)

	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Payroll	\$ 8,542	9,359	10,395	10,528	10,812
Materials & Supplies/Plant Equip	661	1,597	3,125	3,016	5,124
Utility & Pumping	90	177	63	152	145
Prof & Other Services	5,395	8,783	7,887	13,410	5,569
General Equipment	132	231	-	409	375
Contract Payments	54,005	53,953	48,527	36,904	44,401
Refunds	25	2	18	9	-
<b>Total</b>	<b>\$ 68,850</b>	<b>74,102</b>	<b>70,015</b>	<b>64,428</b>	<b>66,426</b>



Robert J. Mahoney,  
Director of Engineering



## Operations & 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.

### Goals for 2009

- Work with Information Technology to implement a program that utilizes an integrated system of GIS, a work and maintenance management system, and Mobile Workforce which will benefit Transmission and Distribution for emergency response and locating our facilities and infrastructure.
- Continue to increase employee awareness of safety & security. Continue to ensure the security of the water system through both technological changes and interaction with other agencies.
- Evaluate the options and potential impacts of moving to inherently safer technology as it relates to disinfection.

### Accomplishments During 2008

- Successfully staffed security and put emergency crews on standby for the Democratic National Convention.
- Assisted in the disinfection and flushing of Alamosa's water system during the salmonella outbreak.
- Successfully minimized the impact to as few Denver Water customers as possible during the Conduit 94 main break and repair at 56<sup>th</sup> Ave. and I-25.

#### Operations & Maintenance Goals

##### Customer

- Provide reliable service

##### Organization

- Promote accountability
- Improve efficiencies
- Communication



### Regular & Introductory Employees (At End of Year)

Section	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Plant Office	3.0	3.0	3.0	3.0	4.0
Water Quality & Compliance	31.8	32.0	33.0	32.0	33.0
Safety & Loss Control	13.0	14.0	15.0	15.0	16.0
Source of Supply	56.0	53.0	62.0	60.0	62.0
Water Treatment	86.0	90.0	93.0	92.0	92.0
Water Control	55.0	54.0	59.0	57.0	61.0
Transmission & Distribution	154.0	144.0	166.0	145.0	158.0
Instrumentation & Control	6.0	11.0	12.0	11.0	13.0
Maintenance and Warehouse	<u>124.0</u>	<u>120.0</u>	<u>124.0</u>	<u>123.0</u>	<u>124.0</u>
<b>Total</b>	<b>528.8</b>	<b>521.0</b>	<b>567.0</b>	<b>538.0</b>	<b>563.0</b>

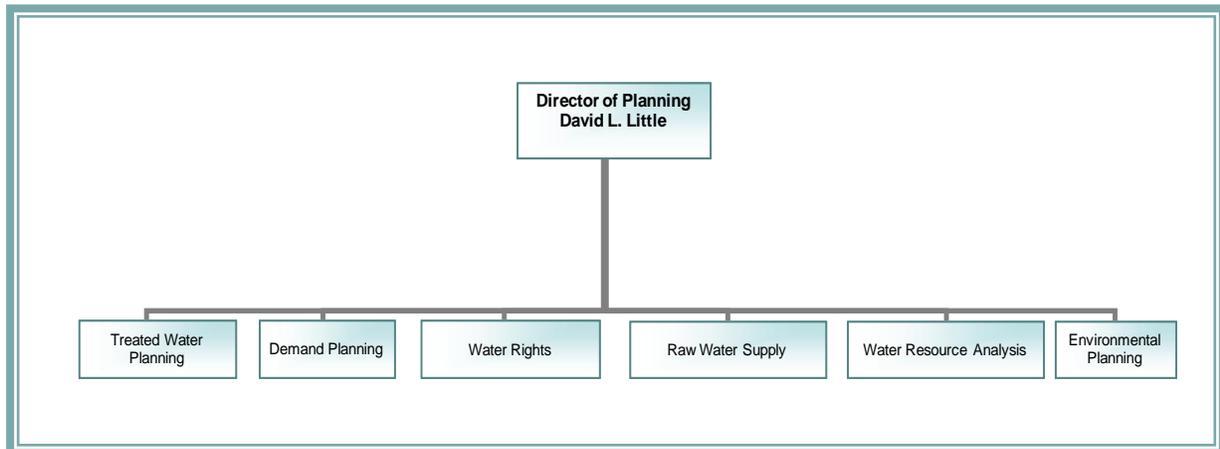
*Operates and maintains nine major dams and reservoirs.*

### Operations and Maintenance Division Expenditure History (Thousands of Dollars)

	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Payroll	\$ 29,938	29,979	31,167	31,917	31,993
Materials & Supplies/Plant Equip	13,629	13,196	16,778	17,180	15,702
Utility & Pumping	5,966	5,141	6,265	6,537	6,774
Prof & Other Services	10,806	10,679	12,143	13,344	13,008
General Equipment	1,576	2,017	3,145	2,405	3,399
<b>Total</b>	<b>\$ 61,915</b>	<b>61,012</b>	<b>69,498</b>	<b>71,383</b>	<b>70,876</b>



Brian D. Good,  
Director of Operations &  
Maintenance



## Planning Highlights

The Planning Division is responsible for identifying the necessary water supply and treated water facility needs and the options for meeting those needs. These efforts include managing the demand for water, protecting the Board's water resources, and accounting for future uncertainties in water supply planning.

### Planning Goals

#### Financial

- Exercise responsible financial stewardship

#### Public Responsibility

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

#### Organization

- Promote accountability
- Improve efficiencies
- Communication

### Goals for 2009

- Complete the draft Environmental Impact Statement (EIS) for the Moffat Collection System Project.
- Assist the Board in its negotiations with West Slope entities on long-standing issues related to Denver's trans-basin diversions.
- Finalize future planning scenarios, establish water system performance criteria, complete screening and major evaluation of supply and demand options, and develop initial water system strategies which will lead to final an Integrated Resources Plan (IRP) in 2010.
- Establish a new, more efficient 10-Year capital plan/annual budget process that reduces duplication and shortens completion time.

### Accomplishments During 2008

- Initiated the process for the 2010 IRP which charts the long term course for Denver Water.
- Continued planning for the development of the treated water distribution system.
- Continued development of a solid monitoring and evaluation program to ensure that the conservation plan effectively accomplishes its objectives.
- Initiated a joint Front Range climate change vulnerability study in conjunction with various Front Range water providers, the Colorado Water Conservation Board, and the Water Research Foundation.
- Preserved Denver Water's ability to use its water resources by successfully addressing water rights issues, endangered species studies, and other environmental concerns.



**Regular & Introductory Employees (At End of Year)**

Section	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Director of Planning	2.0	2.0	2.0	2.0	2.0
Environmental Planning	5.6	4.6	5.6	5.0	5.6
Raw Water Supply	6.0	6.0	6.0	6.0	6.0
Water Rights	7.0	7.0	8.5	7.0	8.0
Water Resource Analysis	10.7	10.8	11.0	11.0	11.0
Water Resource Planning	4.0	4.0	0.0	2.0	2.0
Demand Planning	N/A	N/A	5.0	4.0	5.0
Hydraulics	<u>7.0</u>	<u>7.0</u>	<u>7.0</u>	<u>8.0</u>	<u>8.0</u>
<b>Total</b>	<b>42.3</b>	<b>41.4</b>	<b>45.1</b>	<b>45.0</b>	<b>47.6</b>

*Address risks and uncertainties that influence long-range planning for water resources in a semi-arid region.*

**Planning Division  
Expenditure History (Thousands of Dollars)**

	2006	2007	2008	2008	2009
	<u>Actual</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Payroll	\$ 3,317	3,381	3,568	3,561	3,939
Materials & Supplies/Plant Equip	29	45	54	39	54
Utility & Pumping	80	215	253	283	253
Prof & Other Services	3,294	2,968	4,125	3,310	4,711
Contract Payments	-	-	16	-	16
General Equipment	-	-	5	-	-
<b>Total</b>	<b>\$ 6,720</b>	<b>6,609</b>	<b>8,021</b>	<b>7,193</b>	<b>8,973</b>



David Little,  
Director of Planning

# Strategic Overview



## Contents

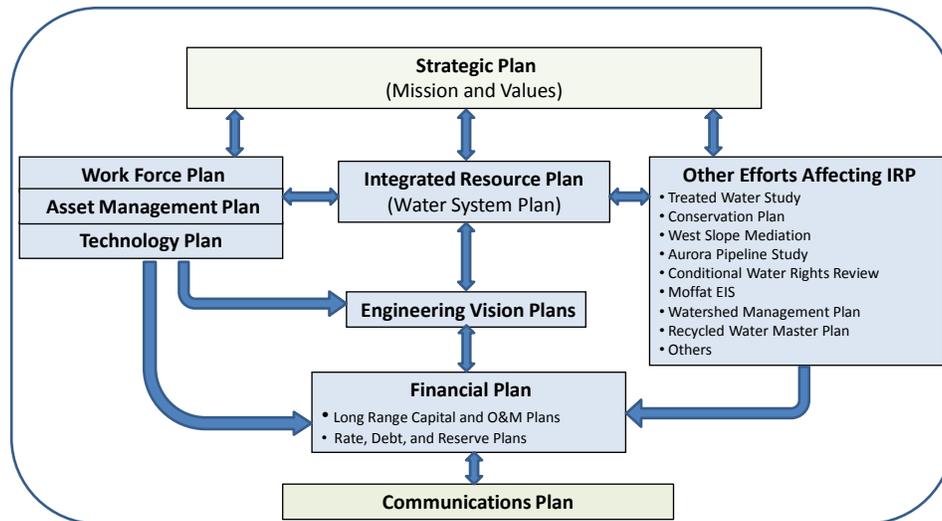
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### Strategic Overview

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The past few years have been a time of unprecedented uncertainty for water providers in the Western United States. The potential impact of sustained or repeated drought, growing populations, limited water supply, and aging infrastructure have changed the way Denver Water looks at and plans for the future. These uncertainties coupled with the current economic situation are driving Denver Water's short term and long range planning.

### 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 2008, Denver Water staff undertook the first major revision of the Strategic Plan in more than 10 years. The process began by hiring a strategic planning professional who led interviews with executive staff and Board Members, as well as a series of employee and stakeholder focus groups. All employees were invited to give input and provide feedback throughout the process. Through this process recurring issues to be addressed were identified and a two-day strategic planning retreat was held to refine our Mission Statement and Values and develop strategies to advance the organization toward a 2013 Vision.

The major themes that were addressed during the 2009 Strategic Plan update were related to customers, employees, management roles and responsibilities, Board roles and responsibilities, proactively addressing change and stewardship of our assets and water supply.

The table to the right outlines the Denver Water Vision for 2013. In the Strategic Plan, strategies have been identified to ensure that the organization achieves this vision. Many of the strategies outlined in the plan do not have a direct budgetary impact. Examples of such strategies are having executive-level staff spend more time in the field to understand what employees do every day, improving communications, attending more community meetings, and encouraging employees to volunteer in the community. Other strategies, such as implementing the Conservation Plan, visiting other utilities to gain efficiencies through best practices, and developing enterprise-wide asset management plan, will require the dedication of financial resources and are reflected either in the 2009 Annual Budget or the long-range plans.

The Strategic Plan is currently in the hands of all Denver Water employees for comments and feedback. Once finalized, timelines and measurements will be established and quarterly updates and reports will be developed.

### Our Vision for 2013

1. We are recognized as the best water utility in the country and consistently are among the most desirable places to work in the state.
2. We have the trust of our customers, Board and employees.
3. Employees feel valued and believe their work makes a difference. Everyone within Denver Water is fully engaged and committed to achieving the goals of the organization.
4. We have become a more green organization.
5. We are highly regarded for planning for uncertainties such as climate, regulatory and demographic changes.
6. We have played a key role and been the catalyst for solving Front Range water supply problems.
7. We are a responsible steward of the natural environment.
8. We have reduced the controversies regarding our water rights.
9. Denver Water maintains a leadership role within Colorado regarding Colorado River Compact issues.
10. The 2010 Integrated Resource Plan is being successfully implemented.
11. Denver Water has a reputation for being a good neighbor and a community resource.
12. Water conservation is recognized by our employees and customers as necessary and important in managing water as a precious resource.
13. Wasting water is universally viewed as being socially irresponsible.
14. We have a highly reliable and well maintained infrastructure.
15. We have become a well respected applied research organization.
16. We are financially strong and fiscally prudent.
17. Denver Water is a leader among water utilities in optimizing the use of technology.
18. We have achieved the goals set forth in the 2009 Strategic Plan.

## **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 narrow 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 all currently under development.

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 the recent severe drought, catastrophic wildfires, terrorist attacks, climate change, the pine beetle impact on our watersheds, and risks of regulatory changes. The IRP process addresses the need for an expanded, more fully integrated long-range planning process that will:

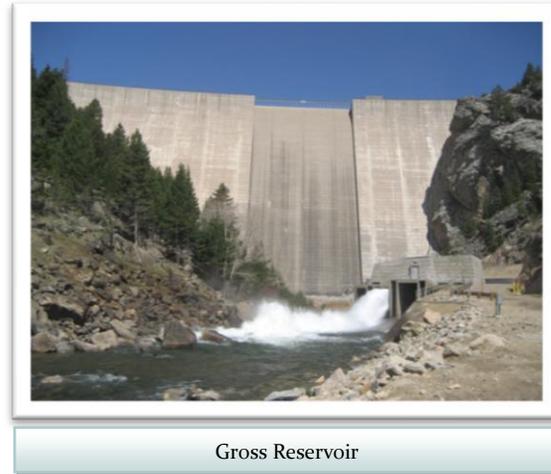
1. Incorporate demand planning and conservation opportunities.
2. Address emerging water quality challenges.
3. Integrate planning across the raw water, treatment, distribution, and recycling water systems in a more complete manner.
4. Redefine the appropriate levels for system reliability and water service goals.
5. Develop planning strategies for addressing 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 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 Long Term Capital Plan. Examples of these projects are the Moffat Collection System and Gravel Pit storage, which are discussed in the section below. When the IRP is completed in 2010, the results will be integrated into the long-range Capital Plan.

## **Long Term Financial Planning**

Each year Denver Water engages in a long term planning process that looks at capital and operating priorities for the next 10 years. Staff in the Rate Administration section then conducts the analysis to determine the optimal combination of rates, debt, and cash reserves needed to finance the plan.

The 2009-2018 Financial Plan reflects Denver Water's focus on planning for the water needs for 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 reflected in our long term budget.

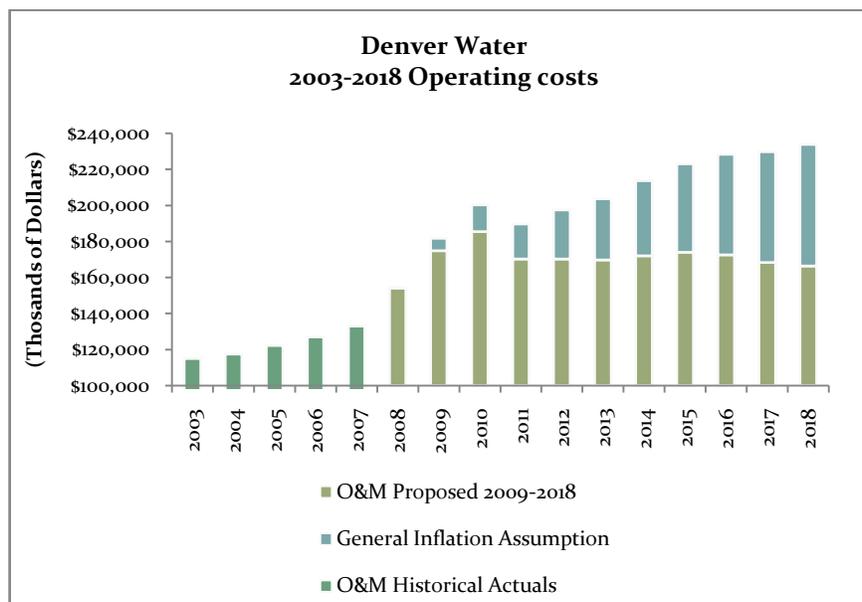


The single largest project in the 10-Year Capital Plan is the Moffat Collection System project. Currently, over 80% of Denver Water's system relies on the unimpeded operation of just one of our reservoirs (Strontia Springs). An emergency above this reservoir or an extreme drought could result in a shortage 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 Long Term Plan estimate for the project is \$226 million, with construction scheduled for 2012-2015. The 2009 budget contains \$1.4 million for the completion of the Environmental Impact Statement and the commencement of design work.

The Long Term Capital Plan also outlines \$51.1 million in funding for our Gravel Pit Storage Projects over the next 10 years. 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 2009, \$5.5 million has been allocated for construction work on the gravel pits including construction of pump stations at two of the gravel pit facilities, slope stabilization, interconnect pipes, and fencing.

The Denver Water commitment to non-potable reuse is also reflected in the Long Term Capital Plan. There is a total of \$48 million allocated to the expansion of the recycled water plant and distribution system in the next 10 years. The distribution system will grow to connect new customers to the system. An expansion of the recycled water plant is scheduled for 2014-2015 and will add 15 MGD capacity to the facility.

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. This commitment is also reflected in the Long Term Capital Plan, as well as the 2009 Approved Budget.



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.

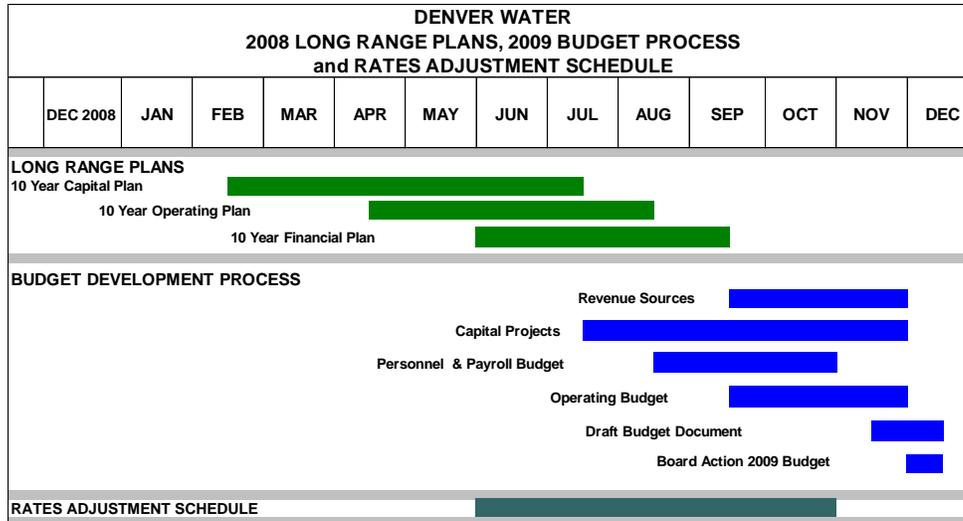
The largest single operating expenditure in the planning horizon is the removal of sediment from the Strontia Springs Reservoir. During the Buffalo Creek (1996) and Hayman (2002) fires, much of the vegetation in this watershed was destroyed. As a result, rainstorms now push sediment into the reservoir and 8-10% of the storage capacity has been lost. Over the next several years, Denver Water will engage in a \$26 million project to regain lost capacity by removing the sediment and piping it to our Kassler Facility, over 6 miles downstream. The 2009 Approved Budget allocates \$0.6 million for design work on this project.

The 2009-2018 Operating Plan also reflects Denver Water's continued efforts to encourage our customers to use water wisely in all situations. In 2006, The Denver Water Board directed staff to accelerate conservation programs in order to achieve its stated goal of 29,000 acre-feet of water savings in 2016 rather than in 2050 as originally planned. Denver Water expects to spend \$130.1 million on conservation programs in the next 10 years. In 2009, \$10.3 million will be spent on education and outreach, rebates and incentives, and monitoring and evaluation of each program.

As with most public water utilities, Denver Water is also anticipating significant future cost increases for chemicals, maintenance, security, and employee benefits. These increases are reflected in the Long Term Plan and the 2009 Annual Budget.

Once the Long Term Capital and Operating priorities have been finalized and incorporated into the Financial Plan, the Finance Division, lead by Rate Administration, works to develop the strategy to finance the plan. The draft Long Term Financial Plan is presented to the Board in July. After Board approval, the water rates are developed for the following year.

## Annual Budget Process



The annual budget process begins in earnest in July, when the 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 will be 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 of up to \$20,000 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.

## 2009 Changes to the Budget and Planning Process

In recent years Denver Water has made great strides in aligning the Long Term and Annual planning processes. Although the total amount of time needed for both processes has decreased, there is still room for improvement. With this in mind we undertook a major review of our budget and planning processes at the end of 2008. The goal for the review was to design a system and implement supporting technology that:

1. Facilitates better, more reliable data within our budget system. This speaks to the timeliness and accuracy of the information rather than how good the estimates are.
2. Improves communication and information sharing among Divisions that must collaborate on Capital Projects or Operating Activities.
3. Includes a Capital Priority system that outlines the Board and Staff priorities as defined in the IRP and Strategic Plan; includes guidelines as to how projects outside the strategic vision are put into the plan.
4. Defines the process by which new projects are added to the plan or existing projects are moved or changed. The process should include approvals and workflow as a mechanism to ensure that the necessary parties are in agreement when a project changes.
5. Allows for driver-based budgeting in some areas. The determination of what drivers to include and how to go about that is not in scope for this phase.
6. Provides the ability to budget in more detail within the system.
7. Allows related Capital projects to be linked, consolidated and reported in a variety of ways (ex. By location, program, asset category)
8. Condenses the Long Term and annual budgeting into one process with a very short time frame.
9. Is as simple and streamlined as possible.

The result of the review is a new process that achieves all the goals listed above and also allows real time forecasting of project changes and their impact on monthly cash flow. In addition to the usual year-to-date budget to actual reports and end-of-year forecast, we will be able to provide information on how changes made in the most recent quarter have impacted our long-range plans for the next 36 months. New projects that will begin more than 36 months out will be reviewed by the Planning Division and evaluated for relevance to our long-range objectives, regulatory requirements, and system needs. Recommendations for the placement and timing of the projects will be presented to executive staff at an annual planning meeting.

Currently a Budget Improvement Team is working to implement the process as well as the technology to support it. The 2010-2019 Ten-Year and 2010 Annual Budget will be developed using the new process.

## 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, complete 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 of contributions and deductions to investment balances.
- Investment Balances:* 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 begin each year with minimum reserves that are sufficient to provide 25% of the next year's operating costs, 50% of replacement capital and equipment purchases, 1 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. The Denver Water budget is prepared using a modified accrual basis in which revenues are recorded when they become available and expenditures are recorded at the time liabilities are incurred.
- Accounting Standards:* The Board's financial statements are prepared in accordance with principles generally accepted in the United States of America (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).

- 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.
- 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.
- 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.
- 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.
- Investments:* Protection of principal is the Board's 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. Current Investment Policy authorizes investments in U.S. Government obligations and government sponsored federal agency securities, commercial paper, corporate fixed income securities, money market funds and repurchase agreements. The official policy defines allowable credit risk and minimum/maximum maturities for each investment type.
- Debt Guidelines:* Denver Water has no legal debt limits other than those set by the Board covenants. 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 expenditures for the period. Within the Water Works Fund there are legally restricted funds and Board designated funds. As outlined above, the Board targets investment balances 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 or operating needs.

<b>2009 Investment Balance Summary</b>				
<b>(\$000)</b>				
	<b>2008 Budget</b>	<b>2008 Actual</b>	<b>2009 Budget</b>	
Beginning Balance 01/01	\$ 226,160	\$ 226,160	\$	198,311
Total Sources	\$ 251,782	\$ 255,651	\$	305,300
Total Uses	\$ 291,433	\$ 283,500	\$	305,344
Ending Investment Balance 12/31	\$ 186,509	\$ 198,311	\$	198,267
<b>Less: Board Designated Cash</b>				
Land Sale Proceeds	\$ 11,735	\$ 12,038	\$	12,038
Blue River Decree Litigation	\$ 5,000	\$ 5,000	\$	5,000
OPEB Designated Funds	\$ 3,591	\$ 3,591	\$	6,591
Total Board Designated Cash	\$ 20,326	\$ 20,629	\$	23,629
<b>Less: Legally Restricted Cash:</b>				
Debt Reserve Funds and Capital Project Accounts	\$ 8,481	\$ 8,827	\$	6,788
Total Legally Restricted Cash	\$ 8,481	\$ 8,827	\$	6,788
<b>Available Investment Balance</b>	<b>\$ 157,702</b>	<b>\$ 168,855</b>	<b>\$</b>	<b>167,850</b>
Less: Operating/Insurance Reserve (30% of Operating)	\$ 49,865	\$ 49,865	\$	49,865
Less: Part II/III Capital Reserve (50% Replacement Capital)	\$ 27,125	\$ 27,125	\$	27,125
<b>Available for Future Operating &amp; Capital 12/31</b>	<b>\$ 80,713</b>	<b>\$ 91,866</b>	<b>\$</b>	<b>90,861</b>

## 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 debts (advance refunding) and for non-recurring capital expenditures. Operating expenditures and capital improvements of a normal recurring nature are financed in the calculation of the revenue requirement from rates and are therefore financed on a “pay-as-you-go” basis.

The Treasury Administration 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, 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 is 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, more stringent 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 -excluding System Development Charges divided by Interest Requirements) 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.



# Budget Summary



## Contents

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### Budget Summary

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The Denver Water 2009 Adopted Budget represents the Board and the Organization's commitment to our customers, and our environment. Our mission to deliver high quality water and excellent service while being responsible stewards of the assets we manage is reflected in the budget priorities.

**2006 - 2009 Comparison of Sources and Uses of Funds**  
(Thousands of Dollars)

	2006 Actual	2007 Actual	2008 Budget	2008 Actual	2009 Budget
<b>Beginning Investment Balance</b>	\$ 159,276	\$ 149,198	\$ 226,160	\$ 226,160	\$ 198,311
<b>Sources:</b>					
Operating Revenue	\$ 195,054	\$ 194,224	\$ 203,875	\$ 204,232	\$ 212,028
Non-Operating	\$ 2,661	\$ 2,843	\$ 2,846	\$ 3,140	\$ 3,157
Hydropower	\$ 2,496	\$ 2,392	\$ 3,873	\$ 4,315	\$ 3,305
System Development Charges	\$ 22,389	\$ 26,213	\$ 22,981	\$ 19,138	\$ 17,016
Participation	\$ 2,735	\$ 3,314	\$ 1,986	\$ 2,444	\$ 11,605
Reimbursements & Grants	\$ 1,586	\$ 13	\$ 1,000	\$ 2,753	\$ -
Interest on Investments	\$ 6,937	\$ 9,295	\$ 6,682	\$ 8,133	\$ 4,944
Other	\$ 13,160	\$ 9,563	\$ 8,539	\$ 9,696	\$ 9,170
Subtotal Sources	\$ 247,018	\$ 247,857	\$ 251,782	\$ 253,851	\$ 261,225
Debt Proceeds	\$ -	\$ 99,158	\$ -	\$ 1,800	\$ 44,075
<b>Total Sources:</b>	\$ 247,018	\$ 347,015	\$ 251,782	\$ 255,651	\$ 305,300
<b>Uses:</b>					
<b>Operation &amp; Maintenance Programs:</b>					
Raw Water	\$ 6,855	\$ 7,962	\$ 9,687	\$ 8,857	\$ 12,327
Recycled Water	\$ 2,176	\$ 2,203	\$ 2,636	\$ 2,786	\$ 3,658
Water Treatment	\$ 13,174	\$ 13,220	\$ 15,346	\$ 15,635	\$ 17,303
Delivery	\$ 15,755	\$ 16,597	\$ 18,341	\$ 19,824	\$ 17,380
Conservation	\$ 2,832	\$ 4,722	\$ 9,871	\$ 6,568	\$ 10,260
Customer Service	\$ 7,143	\$ 6,962	\$ 8,110	\$ 7,968	\$ 9,241
General Plant	\$ 6,448	\$ 7,447	\$ 8,230	\$ 10,049	\$ 8,924
Administration	\$ 29,588	\$ 33,251	\$ 38,002	\$ 38,623	\$ 38,362
Distributed Indirect Costs	\$ 43,100	\$ 40,747	\$ 44,070	\$ 40,789	\$ 48,761
<b>Total Operation &amp; Maintenance Expenditures</b>	\$ 127,071	\$ 133,111	\$ 154,293	\$ 151,099	\$ 166,216
<b>Capital Programs:</b>					
Raw Water	\$ 32,976	\$ 22,983	\$ 28,030	\$ 25,366	\$ 28,505
Recycled Water	\$ 22,086	\$ 20,632	\$ 3,485	\$ 2,695	\$ 2,011
Water Treatment	\$ 2,570	\$ 11,375	\$ 17,179	\$ 17,843	\$ 6,647
Delivery	\$ 13,973	\$ 18,528	\$ 16,669	\$ 13,677	\$ 21,592
Conservation	\$ 2,111	\$ 1,657	\$ 10	\$ 31	\$ -
Customer Service	\$ 1,474	\$ 81	\$ -	\$ 137	\$ -
General Plant	\$ 8,571	\$ 7,777	\$ 22,272	\$ 23,048	\$ 28,440
<b>Total Capital Expenditures</b>	\$ 83,761	\$ 83,033	\$ 87,645	\$ 82,797	\$ 87,195
<b>Debt Service</b>	\$ 46,264	\$ 53,909	\$ 49,495	\$ 49,604	\$ 51,933
<b>Total Uses</b>	\$ 257,096	\$ 270,053	\$ 291,433	\$ 283,500	\$ 305,344
<b>Ending Investment Balance</b>	\$ 149,198	\$ 226,160	\$ 186,509	\$ 198,311	\$ 198,267
<b>Change in Investment Balance</b>	\$ (10,078)	\$ 76,962	\$ (39,651)	\$ (27,849)	\$ (44)

*The table above shows a comparison of Denver Water's 2009 Budget to the 2008 Budget and actual expenditures from 2006 through 2008. A discussion of priorities, issues, and trends is presented in the following sections.*

## Priorities and Issues

Denver Water operates on an enterprise 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 long term 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.

### *The Economy*

The change in the national and local economy presented a particular challenge for Denver Water. As an enterprise fund operating on an enterprise basis, we do not receive any revenue from taxes. Our revenue vulnerabilities are directly related to water consumption and indirectly to the economic climate. For example, we may face revenue shortfalls in an abnormally wet or dry year, but not necessarily when consumer spending is down. How then, should the Denver Water Board respond to the current economic crisis?

Although Denver Water is not anticipating a significant revenue shortfall in 2009, our Board directed us to make significant changes to planned 2009 expenditures to mitigate unanticipated economic impacts in this uncertain time. In response to this guidance, Denver Water made the following reductions to the 2009 budget before presenting it to the Board for approval.

Operating Revenue: Operating revenue forecasts are based on a projection of customer demand for water over the year. The customer demand estimate used to develop the Long Term Financial Plan and set rates was a system-wide demand for treated water of 70 billion gallons in 2009. In an effort to insure against a drop in demand related to the impact of the economy on our customers, we reduced this demand projection by 5%. The resulting decrease in our 2009 Operating Revenue budget is \$11.6 million.

System Development Charges: The forecast for System Development Charges generally relies on average increases in the historical number of new taps and System Development Charge increases. In light of the drastic decline in new housing starts in the area, this projection was reduced 15% during the long term planning process. Between the long term planning process and the Annual Budget, we looked at recent information and identified a 27% decline in 2009 SDC revenue from 2007 to 2008. In anticipation of a continued decline, we reduced our SDC revenue projection by an additional 10%, to a level that is 35% below the 2007 actual SDC revenue.

Debt Proceeds: Denver Water had been planning to issue approximately \$135.0 million in revenue bonds in January of 2009. Although Denver Water holds an AA/Aa2 or better credit rating from S&P on our general obligation and revenue bonds, the high cost of issuing debt made it unattractive to access the municipal bond market in January. Instead, we have budgeted a bond issue of \$44.1 million in December 2009, but will evaluate market conditions throughout the year.

Capital Expenditures: During the drought of 2002-2004, Denver Water delayed or deferred over \$20 million in scheduled capital projects resulting in a substantial backlog of projects and increased risk to our system. The decision to delay another \$22.0 million in capital spending in 2009 was a difficult one to make. Engineering and Operating & Maintenance staff worked together to reprioritize projects that had been approved during the long term planning process.

Denver Water will continue the design work on the delayed projects. In the event of an economic turnaround, or the availability of economic stimulus funds for water infrastructure projects, we will evaluate whether to move forward with the construction of these projects during the year.

Operating Expenditures: Much of Denver Water's operating expenditures are in the form of fixed costs. We closely examined our planned 2009 operating budget and we were able to reduce it by \$13.6 million. This 7.6% decrease was achieved through reductions in discretionary employee training, travel to industry conferences, hiring, office equipment and other discretionary items.

Although Denver Water proactively took steps to mitigate the effects of an economic downturn, further reductions may be needed if our customers use less water or are unable to afford their water bills. Denver Water staff and Board Members will continue to monitor the impact of the economy on our community and will respond accordingly.

*The 2009 Denver Water adopted expenditure budget was reduced \$37.0 million from the amount approved during the Long Term Process.*

### *Water Use, Revenue, and the Economy*

Denver Water is faced with the seemingly contradictory relationship between water conservation efforts 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, customers may 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.

Although Denver Water's financial position remains strong, we must be conscious of the impact a continued recession may have on our customers' ability to pay their water bills. Our average annual water bill for customers both inside and outside the City and County of Denver remain among the lowest along the Colorado Front Range and that should facilitate our customers' ability to continue to pay their water bills. We have developed a set of key indicators such as the number of water service turn-offs, delinquent notices, and foreclosures in the area which we will monitor in 2009 and if we see changes in these indicators that point to increased hardship for our customers, we will respond accordingly.

### *Summary*

Denver Water begins 2009 in a strong financial position with a watchful eye on the economy and the impact of the current recession on our customers and our organization. In the sections that follow our revenue projections and budget drivers for 2009 are described in detail.

Throughout the discussion of revenue and expenditures our commitment to providing high quality service at the lowest possible rates is reflected. The 2009 budget also has strong linkages to our long-term and strategic planning objectives.

### **Key Indicators:**

Denver Water is tracking the following key indicators for signs that the recession might be impacting customer ability to pay water bills:

#### Percent of active taps turned off:

This indicator will provide information as to whether the percentage of total system active taps that are disconnected at the end of each month is increasing. A higher percentage may indicate that more customers are struggling to pay their bills. This number has been a stable 1.8% for the past four years.

Number of new taps sold: Denver Water relies on System Development Charges to offset the cost of adding capacity to our system. In 2008 Denver Water sold 26% fewer new taps than were sold in 2007.

Non-pay shut-offs: This is another indicator which will provide information about the number of customers who have had their water disconnected each month. This number increased slightly (<1%) between 2006 and 2007 and remained stable in 2008.

Foreclosures: Foreclosures filings may provide an early indicator that we should be prepared for reduced water sales revenue if the properties remain vacant for an extended period of time. The Denver Metropolitan area actually experienced an 11% decline in the number of foreclosures from 2007 to 2008.

# Sources of Funds

Denver Water's revenue is largely derived from the sale of water to customers. In 2009 we anticipate that 81% of proceeds excluding debt will come from water sales. Because our revenues are so closely tied to the water consumption of our customers, we must carefully analyze expected changes in consumption in order to accurately predict revenue.

Other key sources of revenues include System Development Charges (Tap Fees), Participation, Fees and the sale of Hydropower. The projected revenue budget for Denver Water in 2009 is \$305.3 million.



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**2006-2009 COMPARISON OF SOURCES OF FUNDS**  
(In Thousands of Dollars)

	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2008</b>	<b>2009</b>
	<b>Actual</b>	<b>Actual</b>	<b>Budget</b>	<b>Actual</b>	<b>Budget</b>
Operating (Water Sales)	\$ 195,054	\$ 194,224	\$ 203,875	\$ 204,232	\$ 212,028
Non-Operating	\$ 2,661	\$ 2,843	\$ 2,846	\$ 3,140	\$ 3,157
Hydro Power	\$ 2,496	\$ 2,392	\$ 3,873	\$ 4,315	\$ 3,305
System Development Charges	\$ 22,389	\$ 26,213	\$ 22,981	\$ 19,138	\$ 17,016
Participation	\$ 2,735	\$ 3,314	\$ 1,986	\$ 2,444	\$ 11,605
Reimbursements and Grants	\$ 1,586	\$ 13	\$ 1,000	\$ 2,753	\$ -
Interest on Investments	\$ 6,937	\$ 9,295	\$ 6,682	\$ 8,133	\$ 4,944
Other	\$ 13,160	\$ 9,563	\$ 8,539	\$ 9,696	\$ 9,170
<b>Subtotal Sources:</b>	<b>\$ 247,018</b>	<b>\$ 247,857</b>	<b>\$ 251,782</b>	<b>\$ 253,851</b>	<b>\$ 261,225</b>
Debt Proceeds	\$ -	\$ 99,158	\$ -	\$ 1,800	\$ 44,075
<b>Total Sources:</b>	<b>\$ 247,018</b>	<b>\$ 347,015</b>	<b>\$ 251,782</b>	<b>\$ 255,651</b>	<b>\$ 305,300</b>

*The projected revenue budget for Denver Water in 2009 is \$305.3 million.*

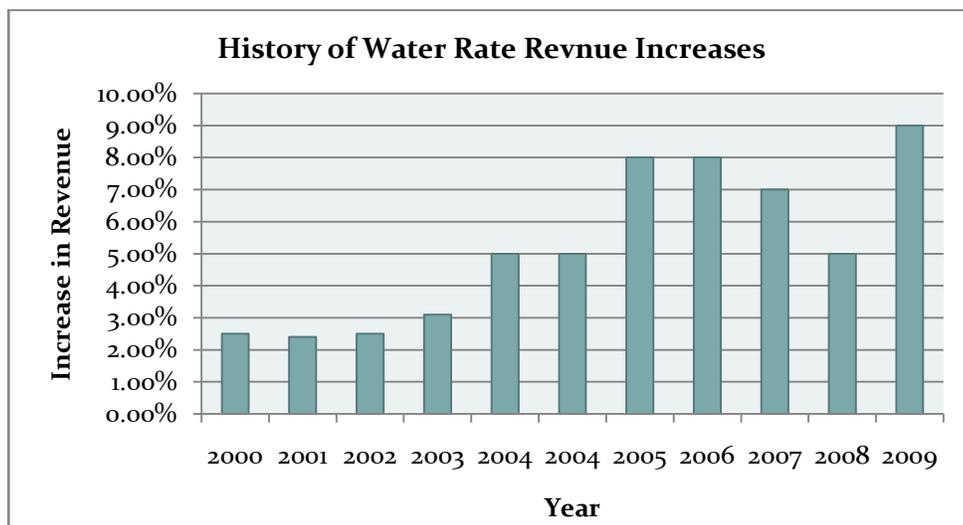


## Water Rates

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

## 2009 Key Issues

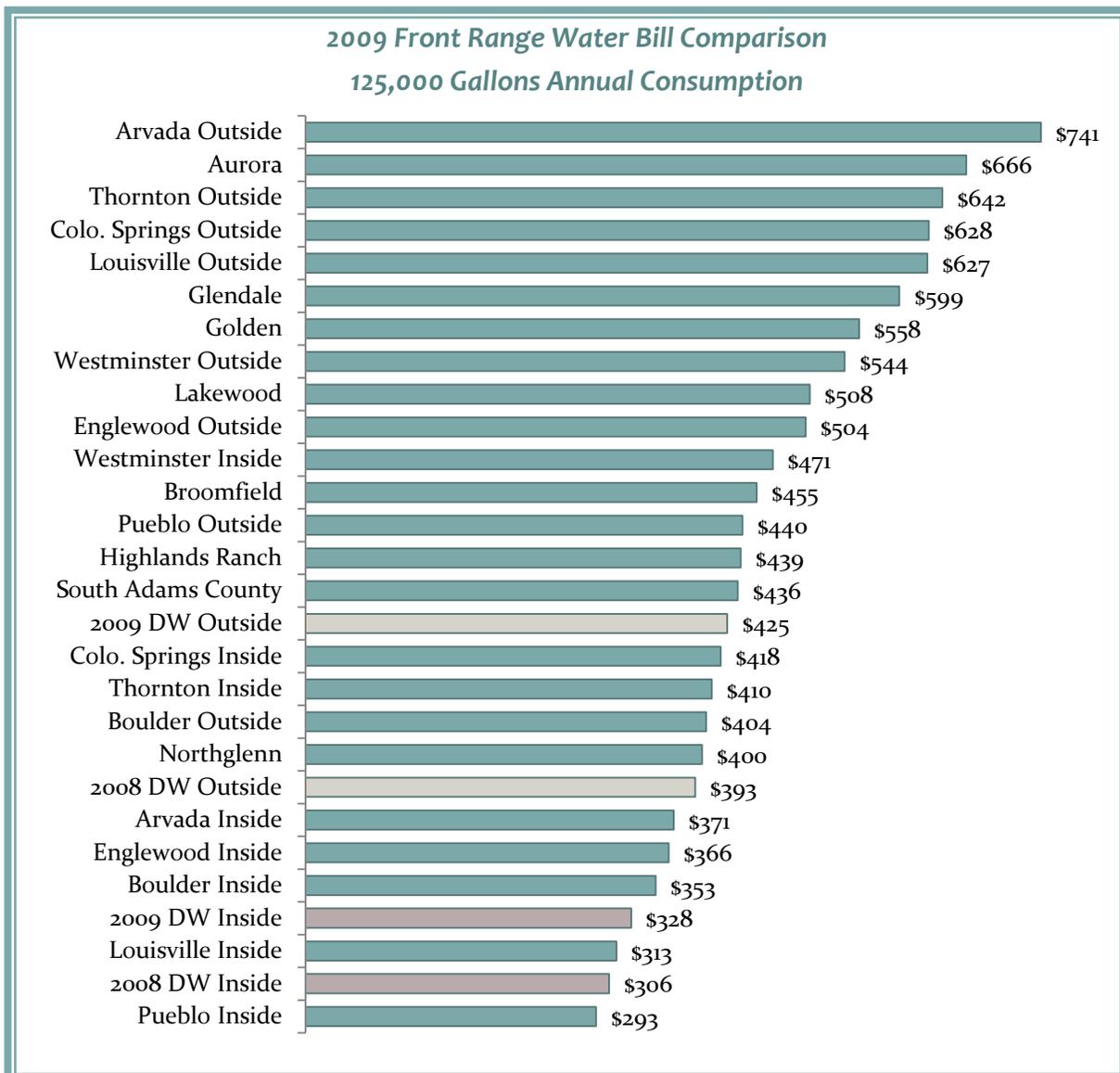
- The approved 2009 water rates are expected to result in an overall total system revenue increase of 9.0%. The actual rate increase experienced by individual customers will vary depending on their rate class and consumption characteristics.
- The estimated annual 2009 bill increases for single family residential customers with average consumption characteristics are:
  - Inside City 7.5%
  - Read & Bill 6.6%
  - Total Service 7.9%
- The rate design for commercial; industrial and governmental customers was modified to feature a 2 to 1 seasonal summer/winter rate differential. For the majority of these customers, the average annual 2009 bill increase/decrease is expected to be within 5%.
- 2009 water rates include a continued phase-in to full cost rates for commercial, industrial and governmental irrigation-only customers. 2009 is the second year of a three-year phase-in to full cost rates for these customers.



## Comparative Water Bills

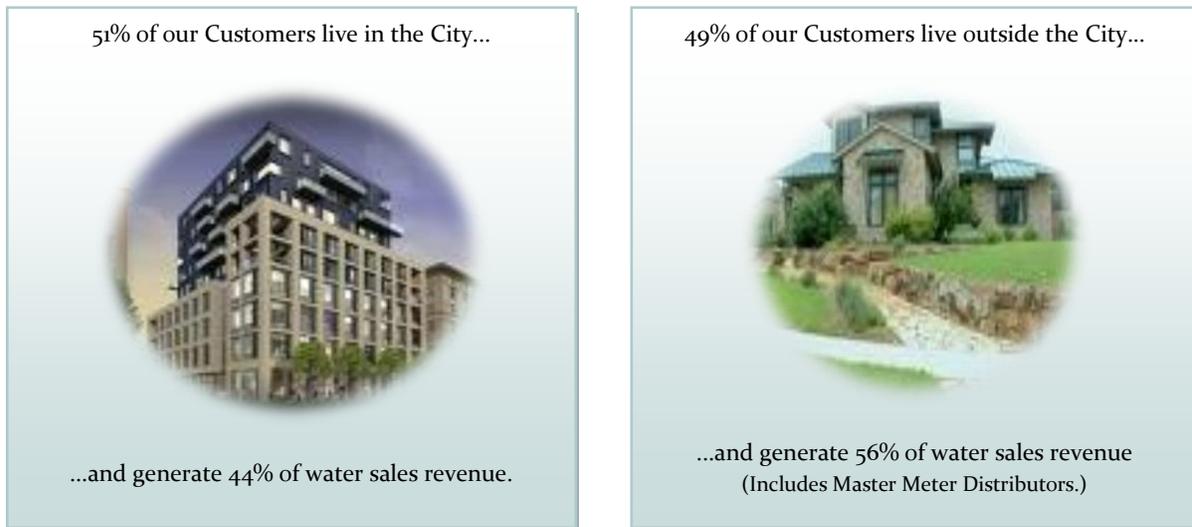
The following table compares Denver's annual residential water bills with those of other independent suppliers in the Denver Metropolitan area for a representative residential customer based on usage of 125,000 gallons per year. This information is for comparison purposes only.

Rates for Denver Water customers living inside the city remain among the lowest in the metro area, while rates for Denver Water residential customers in the suburbs still fall below the median among area water providers.



## 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, billing customers, as well as operation and maintenance of the distribution system.



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 24% of our revenue from water sales.

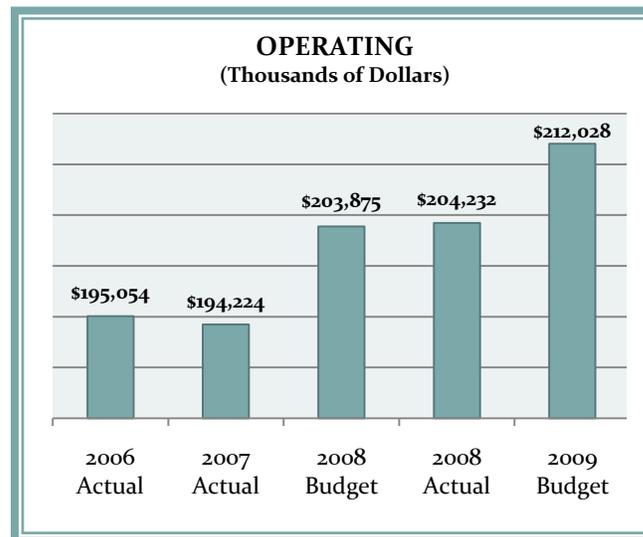
## Operating (Water Sales)

Operating Revenues are generated from the sale of water to customers. In 2009 we anticipate that 81% of our revenue (not including debt) will result from water sales. The funds are used to pay normal operation and maintenance expenditures, replacement of facilities, 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 consumers 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 2009 forecast of revenues from the sale of water was based on a demand forecast of 70 billion gallons of treated water. This number is 17.9% below the historical normal demand projection. In formulating the 2009 Budget we reduced Water Sales Revenue an additional 5% in an effort to mitigate any impacts the downturn in the economy may have on our customer's water use patterns or ability to pay bills.

Reporting change in 2008: Special Assessments - were included in Operating Revenue, now included in Other.



### 2009 Budget for Operating (Water Sales)

**Metered Water Sales \$144.2 million**

**Private Fire Protection \$1.0 million**

**Government Water Sales \$8.4 million**

**Master Meter \$52.0 million**

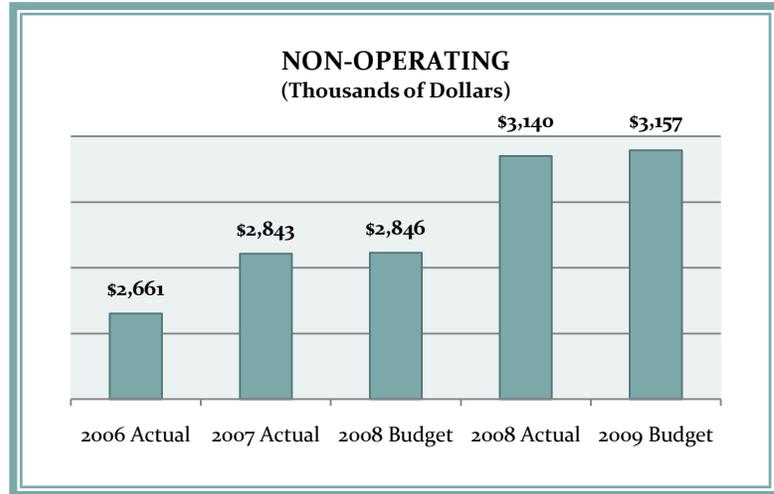
**Non-Potable Water \$5.3 million**

**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 revenues are estimated based on historical trends.

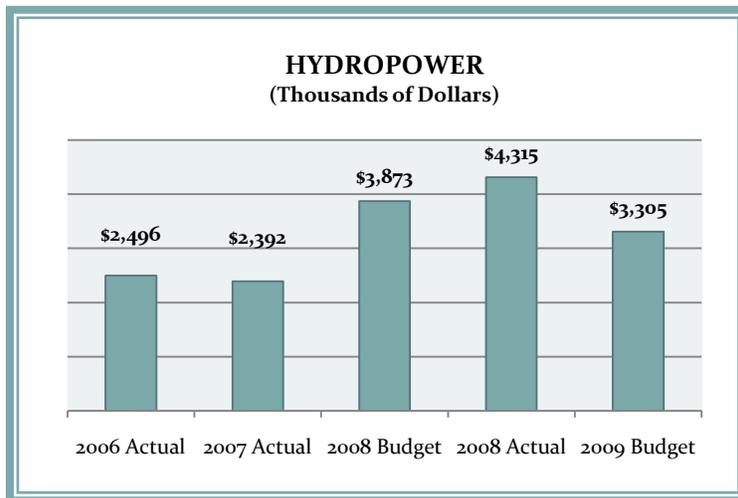


**2009 Budget for Non-Operating**  
Contract Work \$1.6 million  
Other Non-Operating Income \$1.5 million

## 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. In 2008 revenues increased significantly due to the first full year of operations at Gross Reservoir.

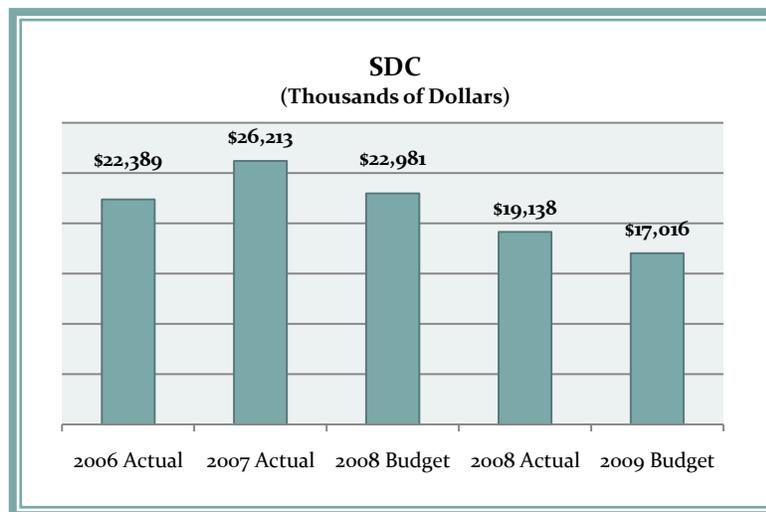
Projections are based on assumptions of normal weather, hydrological conditions and actual amounts. Actual revenues vary depending on precipitation and reservoir levels.



**2009 Budget for Hydropower**  
Hydropower \$3.3 million

## 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 major 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.

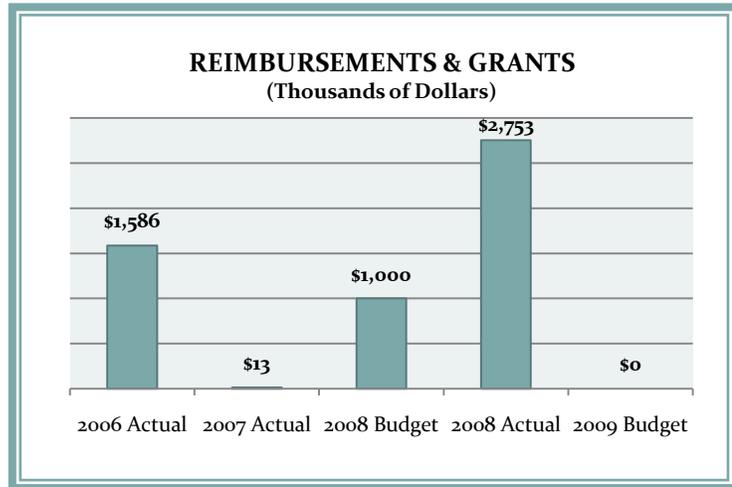
System Development Charge revenue is based on an estimate of the blended average cost for new taps, the anticipated growth rate for the number of new taps and any anticipated rate increases. In calculating the 2009 estimated revenues from System Development Charges, the Rate Administration Section assumed a 0.75 growth rate and a 10% increase in SDCs. In developing the 2009 SDC budget, we reduced the calculated projection by 25% in anticipation of a continued slowdown in the construction industry.

***2009 Budget for System Development Charges***  
***System Development Charges \$17.0 million***

## Reimbursements and Grants

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.

While Denver Water may receive some reimbursements in 2009, we have not received any firm commitments and therefore dollars were not budgeted for in an effort to be more conservative in 2009.

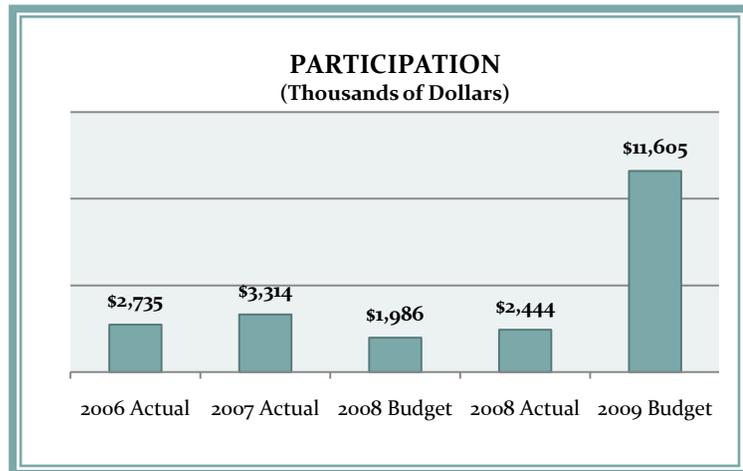


\*Reporting change in 2008: Reimbursements Received - were included in Reimbursements and Grants, are now in Other.

## Participation

A participation agreement is one in which a distributor or developer pays for a portion of the cost 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.



### **2009 Budget for Participation**

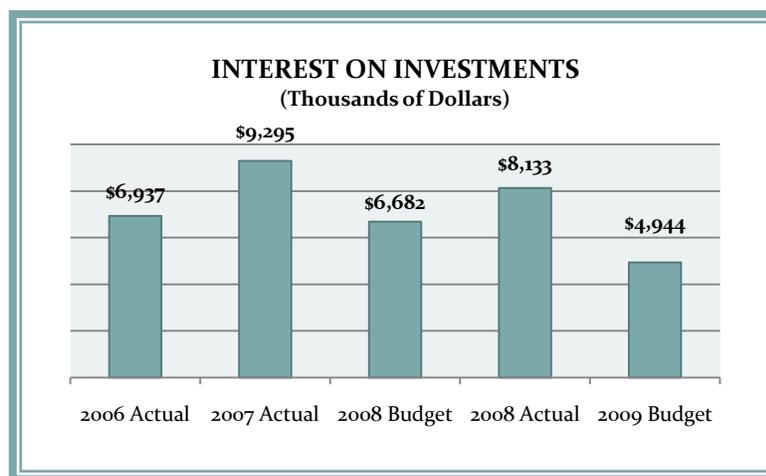
**South Adams County for Lupton Lakes \$2.9 million**

**FRICO (Farmers Reservoir & Irrigation Company) \$7.5 million**

**Tap Assessments \$1.2 million**

## Interest on Investments

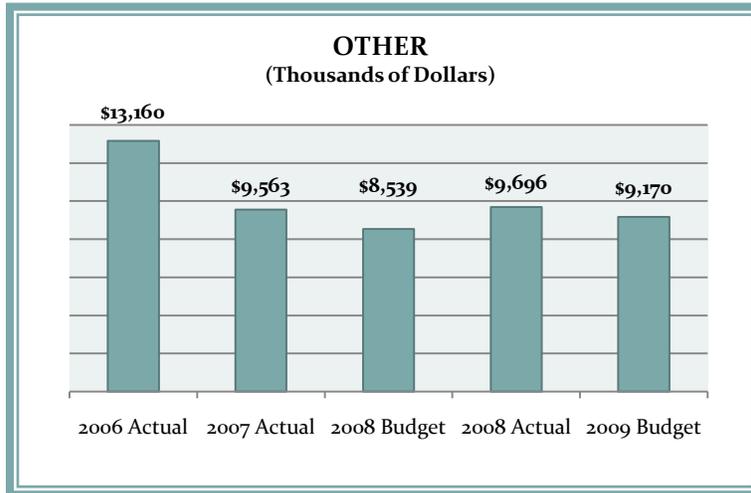
The projection for interest on investments is based on estimates of month-by-month investment balances and assumptions about prevailing interest rates on authorized investments. Due to the current low yields on treasury securities and other approved investments, interest in 2009 is projected to be significantly lower than in 2008.



**2009 Budget for Interest on Investments**  
**Interest Income \$4.9 million**



**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 wastewater and recycle it. Once build-out is complete, the project will supply up to 17,000 acre feet 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. By using recycled water for these special needs, we can free up enough drinking water to serve about 36,000 households.



### Other

Other revenue consists of reimbursements for the relocation of mains and fire hydrants, proceeds from the sale of surplus assets, employee payments for health and dental insurance and minor items not included elsewhere.

\*Reporting change in 2008: Reimbursements Received - were included in Reimbursements and Grants, now in other. Special Assessments - were included in Operating Revenue, now included in other.

### 2009 Budget for Other

**Billable Work \$0.9 million**

**Miscellaneous Income \$0.6 million**

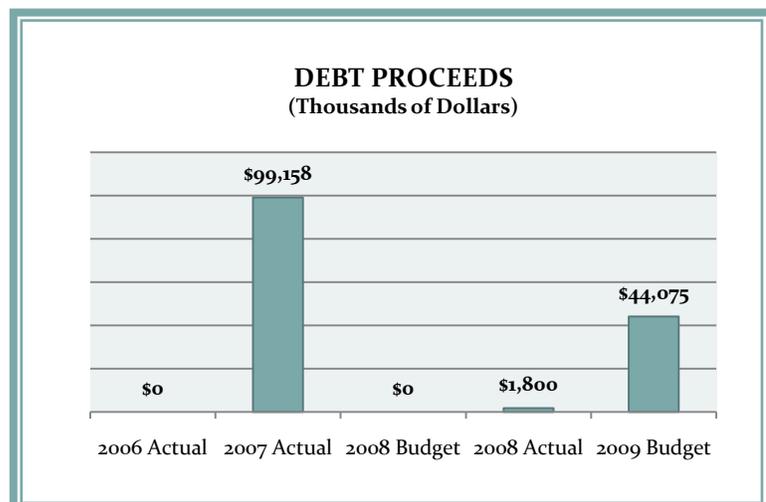
**Employee Insurance Collected \$1.7 million**

**Special Assessments \$4.1 million**

**Reimbursements Received \$1.9 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.



### 2009 Budget for Debt Proceeds

**Debt Proceeds \$44.1 million**

# Uses of Funds



## Expenditures are presented in four sections:

**Expenditures by Type –**  
Providing a brief description, actual and projected costs are classified for such items as payroll, direct materials, and professional services.

**Expenditures by Program –**  
Are identified by the areas of operation where they occur, for example, Raw Water, Recycled Water, Delivery, and General Plant.

**Operations and Maintenance Expenditures –**  
These are expenditures whereby operating costs are categorized by program.

**Capital Expenditures –**  
The costs related to expansion, improvements, and acquisitions. Capital expenditures are budgeted by program as well.

## Contents

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### Uses of Funds

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# Expenditures By Type



## Contents

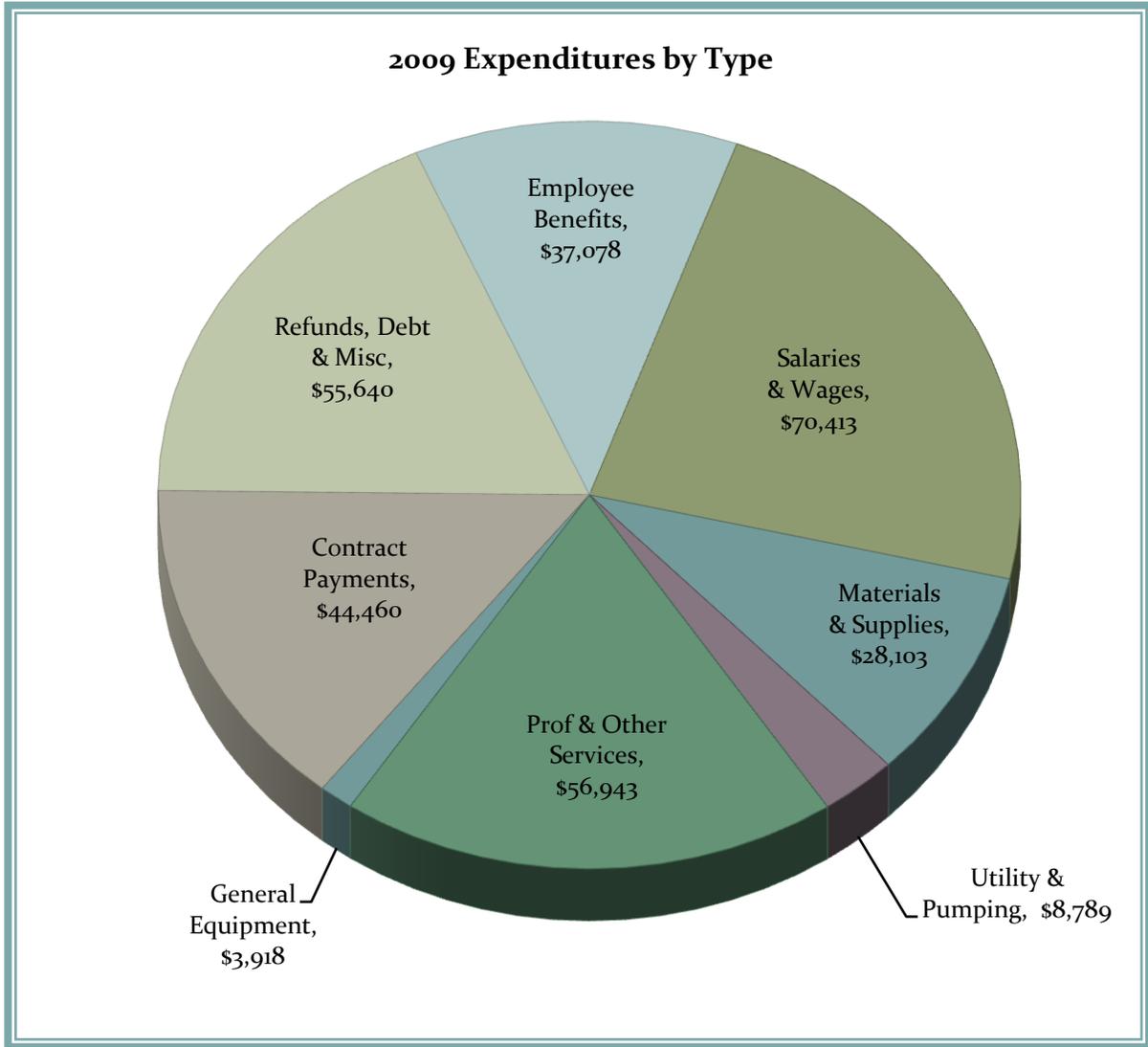
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The projected expenditure budget for Denver Water in 2009 is \$305.3 million. Each has been broken out into separate categories, regardless of whether the expenditure is operating or capital.

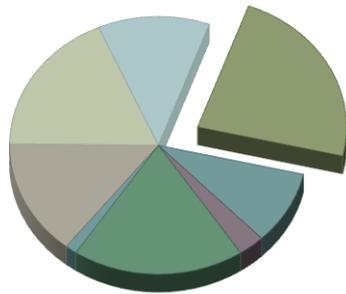
Categorizing data this way is useful for trend analysis and for highlighting the impact different expenditures have on the budget.



### 2009 Expenditures

(In Thousands of Dollars)

2006 Actual	2007 Actual	2008 Budget	2008 Actual	2009 Budget
\$257,096	\$270,053	\$291,433	\$283,500	\$305,344



**SALARIES AND WAGES**  
(In Thousands of Dollars)

2006 Actual	2007 Actual	2008 Budget	2008 Actual	2009 Budget
\$62,922	\$64,833	\$68,366	\$68,820	\$70,413

### Salaries and Wages

Wage and salary adjustments are based on the annual market survey. The average increase across all job families for 2009 is 3.4%.

The Board and staff have agreed to manage hiring during the year in recognition of the current economic situation. The Manager will review each request to fill a vacancy during the year. The majority of increase in positions in 2009 is related to the Board’s direction to implement monthly billing effective in July 2009.

#### 2009 Budget for Salaries and Wages

**Regular Wages \$58.2 million**

**Overtime Pay \$2.0 million**

**Holiday, Vacation, Sick \$8.3 million**

**Other Pay Expenses \$1.9 million**

### Employee Benefits

This category of expenditures 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.

The significant increase in the 2009 budget is primarily related to the defined benefit contribution. In 2008 the required contribution was \$7.5 million. For 2009 we are estimating that contribution will need to be \$14.5 million due to the market losses of the past year. There are also modest increases budgeted for health benefits.



**EMPLOYEE BENEFITS**  
(In Thousands of Dollars)

2006 Actual	2007 Actual	2008 Budget	2008 Actual	2009 Budget
\$31,138	\$28,207	\$31,848	\$27,926	\$37,078

#### 2009 Budget for Employee Benefits

**Retirement Fund \$14.5 million**

**Health Insurance \$12.1 million**

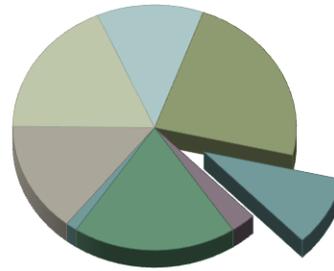
**All Other Benefits \$10.5 million**

## Materials & Supplies

The 2009 Budget is an increase of \$3.1 million from the 2008 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.

Expenditures in this category have been trending upward as the prices of steel, concrete, asphalt, water treatment chemicals and other supplies have risen.



**MATERIALS & SUPPLIES**  
(In Thousands of Dollars)

2006 Actual	2007 Actual	2008 Budget	2008 Actual	2009 Budget
\$17,396	\$19,557	\$24,995	\$26,895	\$28,103

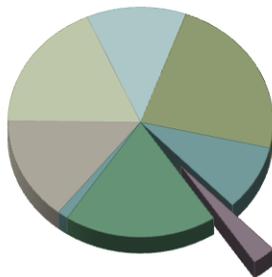
### 2009 Budget for Materials & Supplies

*Materials and Supplies for Direct Use \$15.1 million*

*Chemicals Purchased for Direct Use \$5.6 million*

*Store Issues \$6.8 million*

*Materials and Supply – Purchase for Warehouse Stock \$0.6 million*



**UTILITY & PUMPING**  
(In Thousands of Dollars)

2006 Actual	2007 Actual	2008 Budget	2008 Actual	2009 Budget
\$7,511	\$6,934	\$8,064	\$8,431	\$8,789

## Utility & Pumping

The 2009 Budget is an increase of \$0.7 million from the 2008 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.

The majority of the increase in 2009 is related to higher electricity costs.

### 2009 Budget for Utility & Pumping

*Electricity, Gas, Water & Sewer \$4.0 million*

*Communications \$1.6 million*

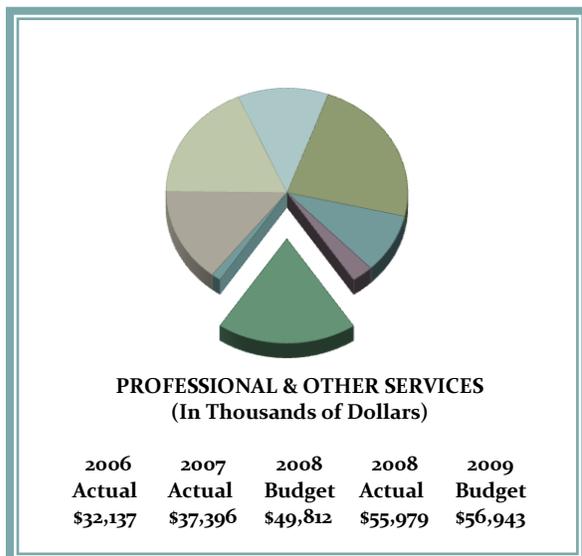
*Power Purchased for Pumping \$3.2 million*

## Professional & Other Services

The 2009 Budget is an increase of \$7.0 million from the 2008 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. Employee expenses such as travel, training, conference and meeting related expenses are budgeted under other services.

The majority of the increase for 2009 is for computer services related to the Customer Information System Project.



### 2009 Budget for Professional & Other Services

*Professional Services \$19.1 million*

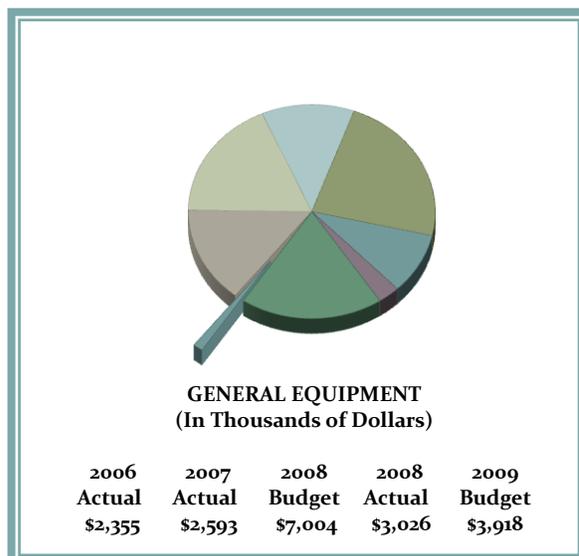
*Other Services \$37.8 million*

## General Equipment

The 2009 Budget is a decrease of \$3.0 million from the 2008 Budget.

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

The unusually high budget in 2008 was for hardware and other items related to the CIS projects which were incorrectly categorized as General Equipment.



### 2009 Budget for General Equipment

*Vehicles \$3.1 million*

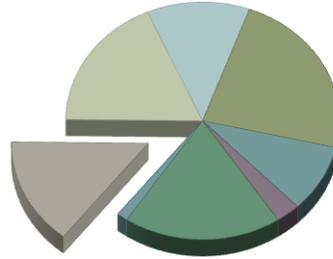
*All Other General Equipment \$0.8 million*

### Contract Payments

The 2009 Budget is a decrease of \$4.1 million from the 2008 Budget.

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

Due to the reduction in the 2009 capital budget, we are anticipating less spending in this category.



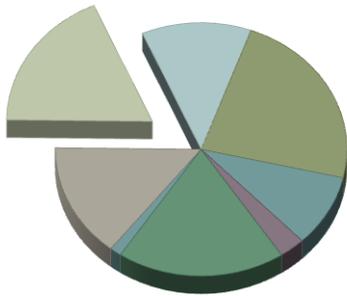
**CONTRACT PAYMENTS**  
(In Thousands of Dollars)

2006 Actual	2007 Actual	2008 Budget	2008 Actual	2009 Budget
\$54,007	\$53,959	\$48,549	\$37,044	\$44,460

#### 2009 Budget for Contract Payments

*Contract Payments and Construction Materials- \$44.3 million*

*Land, Land Rights and Water Rights \$.2 million*



**REFUNDS DEBT AND MISC**  
(In Thousands of Dollars)

2006 Actual	2007 Actual	2008 Budget	2008 Actual	2009 Budget
\$49,630	\$56,574	\$52,795	\$55,379	\$55,640

### Refunds, Debt and Miscellaneous

The 2009 Budget is an increase of \$2.8 million from the 2008 Budget.

Debt service comprises 93% of the expenses budgeted in this category. The remaining 7% is made up of conservation incentives, unemployment insurance and insurance/legal claims.

The majority of the increase is related to debt service.

#### 2009 Budget for Refunds Debt and Misc

*Refunds \$0.7 million*

*Debt Service \$51.7 million*

*All Other Miscellaneous \$3.3 million*

# Expenditures by Program



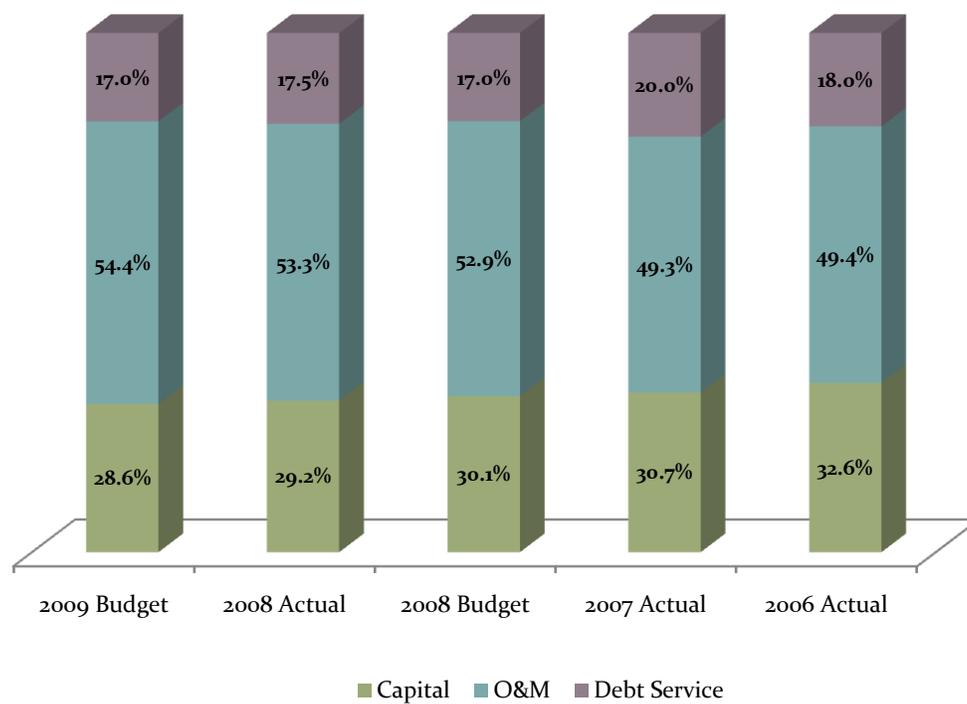
## Contents

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## Expenditures by Program



## PROGRAM EXPENDITURES SUMMARY 2006-2009

(Thousands of Dollars)

PROGRAM ELEMENTS	2006 Actual	2007 Actual	2008 Budget	2008 Actual	2009 Budget
<b>CAPITAL PROGRAMS</b>					
Raw Water	\$ 32,976	\$ 22,983	\$ 28,030	\$ 25,366	\$ 28,505
Recycled Water	\$ 22,086	\$ 20,632	\$ 3,485	\$ 2,695	\$ 2,011
Water Treatment	\$ 2,570	\$ 11,375	\$ 17,179	\$ 17,843	\$ 6,647
Delivery	\$ 13,973	\$ 18,528	\$ 16,669	\$ 13,677	\$ 21,592
Conservation	\$ 2,111	\$ 1,657	\$ 10	\$ 31	\$ -
Customer Service	\$ 1,474	\$ 81	\$ -	\$ 137	\$ -
General Plant	\$ 8,571	\$ 7,777	\$ 22,272	\$ 23,048	\$ 28,440
<b>Total Capital</b>	<b>\$ 83,761</b>	<b>\$ 83,033</b>	<b>\$ 87,645</b>	<b>\$ 82,797</b>	<b>\$ 87,195</b>
<b>OPERATIONS &amp; MAINTENANCE PROGRAMS</b>					
Raw Water	\$ 6,855	\$ 7,962	\$ 9,687	\$ 8,857	\$ 12,327
Recycled Water	\$ 2,176	\$ 2,203	\$ 2,636	\$ 2,786	\$ 3,658
Water Treatment	\$ 13,174	\$ 13,220	\$ 15,346	\$ 15,635	\$ 17,303
Delivery	\$ 15,755	\$ 16,597	\$ 18,341	\$ 19,824	\$ 17,380
Conservation	\$ 2,832	\$ 4,722	\$ 9,871	\$ 6,568	\$ 10,260
Customer Service	\$ 7,143	\$ 6,962	\$ 8,110	\$ 7,968	\$ 9,241
General Plant	\$ 6,448	\$ 7,447	\$ 8,230	\$ 10,049	\$ 8,924
Administration	\$ 29,588	\$ 33,251	\$ 38,002	\$ 38,623	\$ 38,362
Distributed Indirect Costs	\$ 43,100	\$ 40,747	\$ 44,070	\$ 40,789	\$ 48,761
<b>Total Operations &amp; Maintenance</b>	<b>\$ 127,071</b>	<b>\$ 133,111</b>	<b>\$ 154,293</b>	<b>\$ 151,099</b>	<b>\$ 166,216</b>
Debt Service	\$ 46,264	\$ 53,909	\$ 49,495	\$ 49,604	\$ 51,933
<b>Total Expenditures</b>	<b>\$ 257,096</b>	<b>\$ 270,053</b>	<b>\$ 291,433</b>	<b>\$ 283,500</b>	<b>\$ 305,344</b>



RECEIVE & PAY

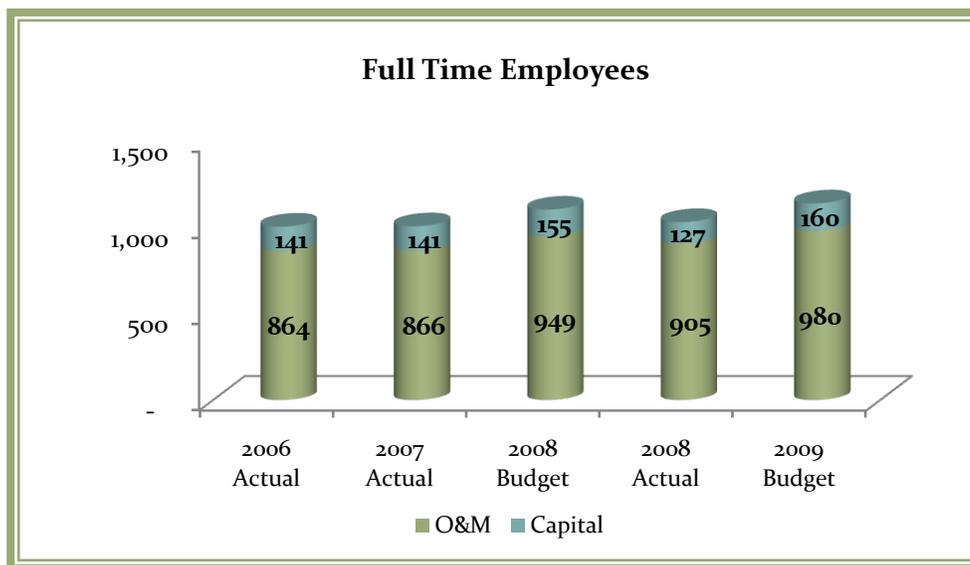
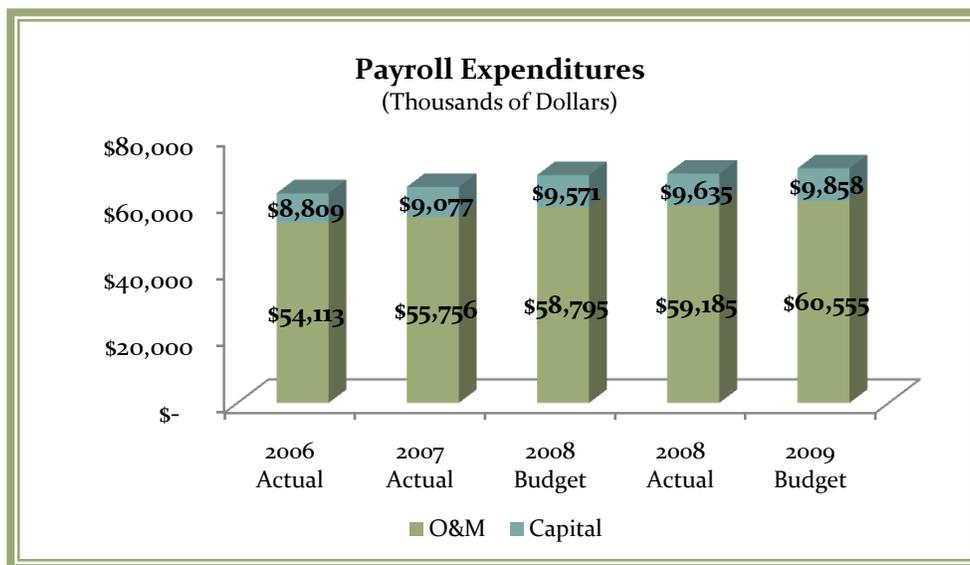
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DENVER WATER BILLS IN YOUR E-MAIL  
ANYTIME ...24/7

ANYWHERE... you have access to your e-mail

PAY ANY DATE YOU WANT!





## Payroll Expenditures

Total payroll (including regular wages, paid leaves, overtime, and disability payments) for 2009 is projected at \$70.4 million and will support 1,140 regular employees as well as 111.8 full time temporary and project positions. The 2009 payroll percentage is 14% to capital projects and 86% to operating activities. The capital percentage is in line with our 2008 actual experience. The total payroll also assumes a 5% overall vacancy rate, 1% lower than the 2008 vacancy rate.



# Operations & Maintenance



Denver Water engages in specific activities to carry out Strategic and Integrated Resource Plan policies aimed at delivering high quality water at the lowest cost possible. These activities have been grouped into eight broad categories or programs that follow the flow of water from the raw water source to the customer's tap.

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### Key Budget Drivers



Personnel, materials, fuel and vehicle costs related to the monthly billing project.



Accelerated water savings.



Increased contribution to the Defined Benefit Plan.

Operations & Maintenance					
(Thousands)	2006 Actual	2007 Actual	2008 Budget	2008 Actual	2009 Budget
Raw Water	\$ 6,855	\$ 7,962	\$ 9,687	\$ 8,857	\$ 12,327
Recycled Water	\$ 2,176	\$ 2,203	\$ 2,636	\$ 2,786	\$ 3,658
Water Treatment	\$ 13,174	\$ 13,220	\$ 15,346	\$ 15,635	\$ 17,303
Delivery	\$ 15,755	\$ 16,597	\$ 18,341	\$ 19,824	\$ 17,380
Conservation	\$ 2,832	\$ 4,722	\$ 9,871	\$ 6,568	\$ 10,260
Customer Service	\$ 7,143	\$ 6,962	\$ 8,110	\$ 7,968	\$ 9,241
General Plant	\$ 6,448	\$ 7,447	\$ 8,230	\$ 10,049	\$ 8,924
Administration	\$ 29,588	\$ 33,251	\$ 38,002	\$ 38,623	\$ 38,362
Distributed Indirect Cost	\$ 43,100	\$ 40,747	\$ 44,070	\$ 40,789	\$ 48,761
<b>Total O&amp;M</b>	<b>\$ 127,071</b>	<b>\$ 133,111</b>	<b>\$ 154,293</b>	<b>\$ 151,099</b>	<b>\$ 166,216</b>

## Operations & Maintenance

Operations & Maintenance (O&M) expenditures are budgeted at \$166.2 million for 2009. This is an increase of 10% from the actual 2008 amount.

One of the key areas comprising the increase is the 2009 Conservation budget which reflects the continued implementation of the Board's direction to accelerate water savings through conservation programs. The total conservation budget for 2009 is \$10.3 million for a variety of Conservation Programs, an increase of \$3.6 million over the 2008 actual amount.

Each year the Board makes a contribution to fund the defined benefit plan. The amount of the annual contribution is dependent on an actuarial valuation as of December 31 of the previous year. The impact of the recent market downturn on our plan was significant and as a result the estimated 2009 contribution, which had been planned at \$9.2 million, is now projected to be \$14.5 million.



NEW

#### Conservation Programs in 2009

##### Residential Indoor/Outdoor Program

Spray nozzles for restaurants

Toilet giveaway pilot

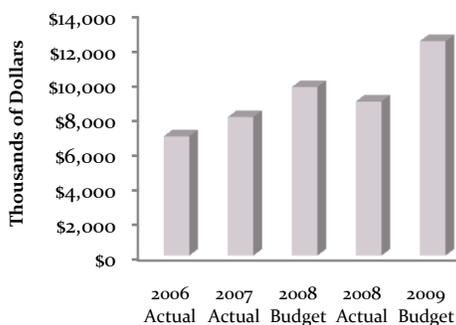
##### Emphasis on Denver Parks Efficiency

Xcel Energy



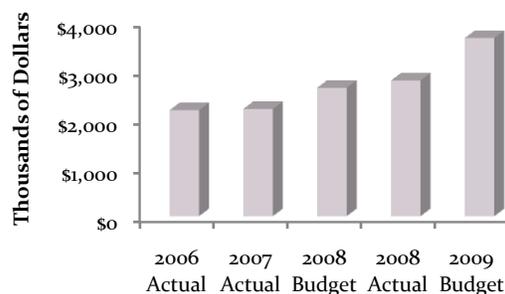
## Raw Water

The total 2009 O&M Budget for the Raw Water Program is \$12.3 million. This figure is \$3.4 million higher than the 2008 actual expenditure level of \$8.9 million. The major factors driving the increased costs include long range planning for water supply, the shift of some projects from capital to operating and an increase in the cost of the Dam Safety Program.



## Recycled Water

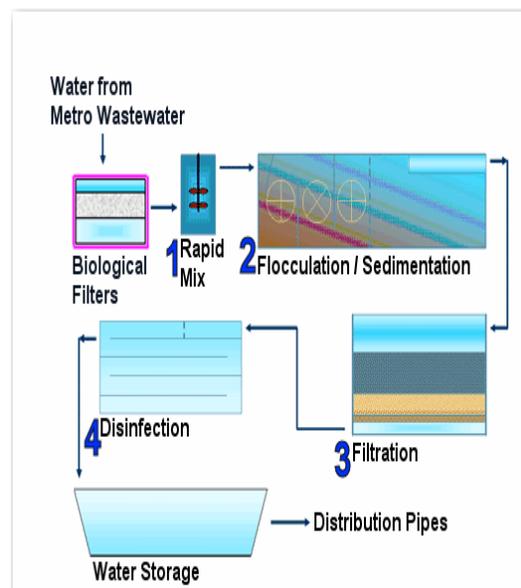
Denver Water opened its Recycled Water Plant in 2004. The plant receives wastewater from the Metro Wastewater facility after its treatment process, treats the wastewater to non-potable standards, and delivers the recycled water to industrial and irrigation users. Over the next 15 years, the recycled water distribution system will be expanded to serve more users. The 2009 Operating Budget for Recycled Water is \$3.7 million, which is 31.3% higher than 2008 actual amount. Per unit cost of water treatment chemicals continue to rise, additionally as customers are added to the system and demand rises, cost for chemicals, power and maintenance also increase.



## Recycled Water

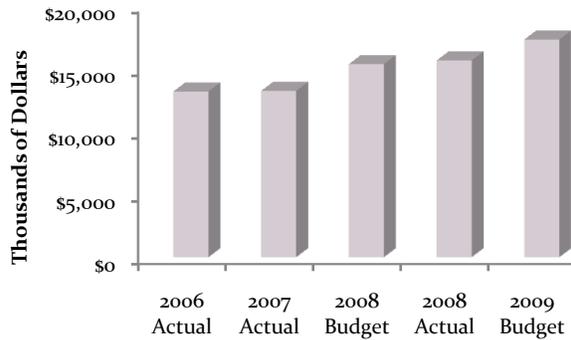
*The process that Denver Water uses to create recycled water is very similar to the process for creating drinkable water. The primary differences are the source of the water and a “pre-processing” treatment (Biological Aeration Filter) that wastewater goes through to remove ammonia concentrations not present in our mountain water.*

*The schematic shows for the four main steps in preparing water for use after the special aeration. Recycled water contains somewhat higher salt and mineral concentrations as well as other introduced elements that make it not safe to drink but acceptable for non-potable use.*



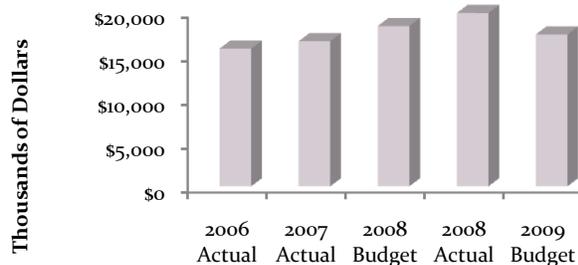
## Water Treatment

The Potable Water Treatment O&M budget was developed using a demand estimate of 70.0 billion gallons in 2009. The demand information is used to project chemical costs. Chemicals make up 29% of the total Water Treatment budget and actual chemical costs will vary with the amount of water treated. The 2009 budget of \$17.3 million is 10.6% higher than 2008 actual expenditures. The increase in cost is due to the fact that the costs of chemicals continue to rise. Other increases come from the need to develop as-built drawings for our treatment plants and the development of engineering visions and master plans for the plants.



## Delivery

The Delivery Program consists of costs related to maintaining our pumping and clear water storage facilities as well as those for operation of the distribution system. The 2009 O&M Budget for this program is \$17.4 million. Cost is driven by material prices and costs for energy related to pumping operations.



**What chemicals do you put in the water?**

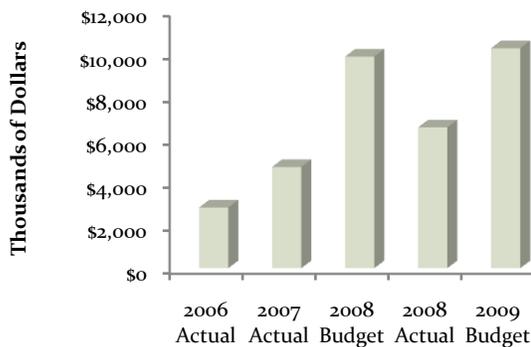
*During the treatment process aluminum sulfate and polymer are added to the untreated water. These chemicals bind with foreign matter such as dirt particles and form into large clumps that can be removed during the sedimentation and filtration portion of the treatment. After filtration, fluoride is added as needed to achieve fluoridation requirements set by the state health department. Finally a disinfectant is added to protect the drinking water from potentially harmful microscopic organisms. All chemicals that are added are certified food grade (safe for use in foods).*



## Conservation

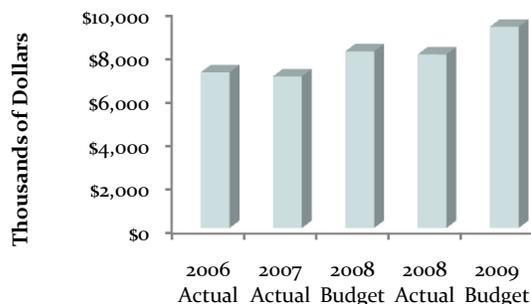
The Conservation Program Operating Budget for 2009 is \$10.3 million. This amount is 56.2% higher than the actual Conservation expenditures for 2008. Denver Water's conservation plan aims to accelerate the pace of water conservation in its service area and reduce overall water use from pre-drought usage (2001) by 22% prior to 2016. The plan is a significant part of Denver Water's future water supply planning. Denver Water's ability to provide long-term, reliable supplies for its customers rests on three strategies for augmenting existing supplies: conservation, recycled water and developing new supplies. Some highlights of the 2009 Conservation Plan include:

1. Increased emphasis on single family residential conservation.
2. Emphasis on Denver Parks efficiency. We will invest significant time in 2009 measuring each park's efficiency and working with parks staff to provide audits that will create a roadmap to water efficiency.
3. Continuation of community-based social marketing. Our goal in 2009 is to support conservation initiatives by maintaining overall awareness using traditional methods and by targeting specific audiences.



## Customer Service

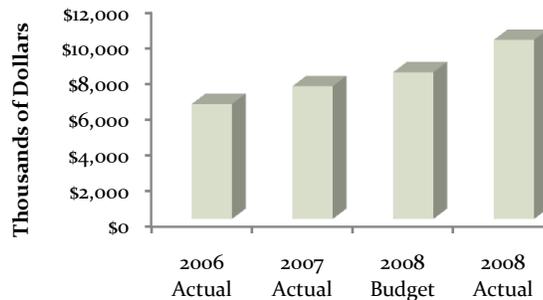
The Customer Service Budget for 2009 is \$9.2 million, 15.9% higher than 2008 actual. In 2009 we will increase staffing levels in the Customer Service office and begin a three year project that will replace current ERT's that have a battery life of 6-10 years with more cost effective ones that have a 20 year battery life expectancy.



*As part of the Use Only What You Need campaign, the Denver Water Running Toilet has made appearances at a local sporting and community events over the past few months, where intrigued onlookers were urged to "stop running toilets."*

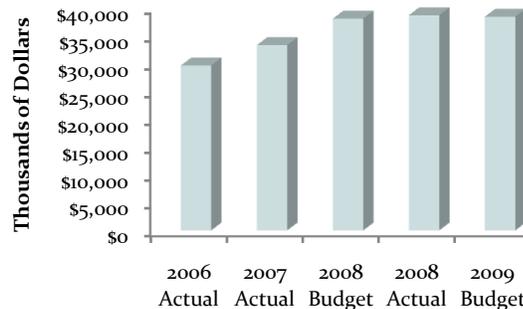
## General Plant

The General Plant program provides for the operation and maintenance of our vehicles, equipment and administrative facilities as well as safety, security and small tools. The 2009 Operating Budget is \$8.9 million. Last year costs were higher than budgeted due to unexpected expenditures for enhanced security at Dillon Dam and for the Democratic National Convention.



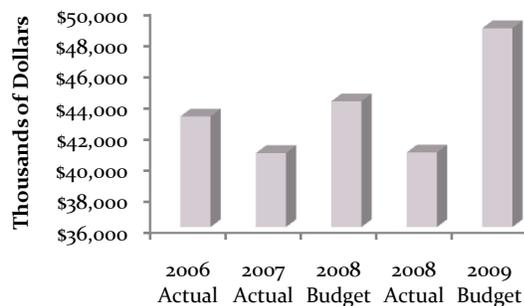
## Administration

The Administration program includes overhead costs for administrative activities, computer services and equipment and other administrative activities. The 2009 Operating Budget is \$38.4 million.



## Distributed Indirect Costs

The Distributed Indirect Costs program includes employee benefits, workers compensation. The 2009 Operating Budget is \$48.8 million, an increase of \$7.9 million over 2008 actual. The increase is largely driven by increases in benefits related to projected staff additions and the higher contribution to the defined benefit.



# Capital



## Contents

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### Capital

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Denver Water is responsible for the collection, storage, quality control and distribution of drinking water. Along with those responsibilities Denver Water is also responsible for operation, maintenance, additions, extensions, betterments, including those reasonably required for the anticipated growth and to provide for Denver's general welfare. This entails a capital improvement plan (CIP) that may add to, improve or extend the life of existing assets or replace assets as they wear out.

### Capital Improvement Plan

The Denver Water Capital Improvement Plan for 2009 is \$87.2 million. This figure is 5.4% higher than our 2008 capital spending

(In Millions)

Year	Budget	Actual	Variance
2006	\$ 85.5	\$ 83.7	\$ (1.8)
2007	\$ 99.1	\$ 83.0	\$ (16.1)
2008	\$ 87.6	\$ 82.8	\$ (4.8)
2009	\$ 87.2	\$ -	\$ -



### Major 2009 Capital Projects

There are three projects in the budget over \$5.0 million and these projects account for \$26.1 million or 29.9% of the total CIP.

The largest project in the capital plan is implementation of a new customer information system, which will enable us to be more responsive to our customers, to implement sophisticated rate designs and to make the switch from bimonthly to monthly billing.

The second largest project, Williams Fork Dam, will allow for additional hydropower generating capability, upgrade outlet works to address deficiencies and replace aging equipment.

The third project, Cheesman Reservoir involves installation of a new inlet control on the dam that will enable upstream control for three tunnels. This project will also upgrade the standby generator, replace and repair the spillway-bridge and concrete crest.

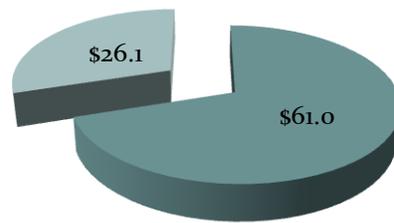
### Is Denver's tap water safe to drink?

*Yes, our water more than meets all regulatory mandates, and has never violated any standard.*

*Drinking water is regulated through the State Health Department (Colorado Department of Public Health and Environment) and the U.S. Environmental Protection Agency.*



2009 Capital Improvement Plan



■ Top 3 Capital Projects    ■ All Other Capital Projects

## 2009 Top 10 Capital Projects

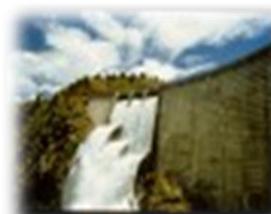
**Customer Information System-** Implement and deploy a customer care/billing system and business intelligence tools, improve billing accuracy, enhance customer service, and better understand customer needs. Operating impacts will be increases in costs for staff, postage, fuel and vehicles. These costs are included in the 2009 operating budget.

(Thousands of Dollars)			
2006	2007	2008	2009
Actual	Actual	Actual	Budget
\$ 1,568	\$ 1,277	\$ 9,486	\$ 13,913



**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 2009. Operating impacts will be the potential increase in hydropower revenue.

(Thousands of Dollars)			
2006	2007	2008	2009
Actual	Actual	Actual	Budget
\$ -	\$ -	\$ 1,795	\$ 6,262



**Cheesman Reservoir-** Design, purchase and install 3 new slide gates and a new jet flow gate. Replace spillway-bridge, spillway crest, stand-by generator and update dam's electrical system. No impact on operating budget.

(Thousands of Dollars)			
2006	2007	2008	2009
Actual	Actual	Actual	Budget
\$ 463	\$ 397	\$ 955	\$ 5,921



**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.

(Thousands of Dollars)			
2006	2007	2008	2009
Actual	Actual	Actual	Budget
\$ 3,449	\$ 4,209	\$ 3,530	\$ 3,916



**Conduit and 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.

(Thousands of Dollars)			
2006	2007	2008	2009
Actual	Actual	Actual	Budget
\$ 1,292	\$ 3,621	\$ 2,903	\$ 2,685



**Conduit 94 Assessment and Repairs-** Inspect and repair the conduit to prevent damage and to keep the pipe in service. No impact on operating budget.

(Thousands of Dollars)			
2006	2007	2008	2009
Actual	Actual	Actual	Budget
\$ -	\$ -	\$ -	\$ 2,565



**Cat Reservoir-** The design & construction of a pump station to deliver exchange water from Cat and Miller Reservoirs to the South Platte River. This will be achieved through a combination of gravity (where possible) and pumping. No impact on operating budget.

(Thousands of Dollars)			
2006	2007	2008	2009
Actual	Actual	Actual	Budget
\$ -	\$ 95	\$ 1,385	\$ 2,290



**Vault Modification Program-** An ongoing program to modify various underground vaults. No impact on operating budget.

(Thousands of Dollars)

2006 Actual	2007 Actual	2008 Actual	2009 Budget
\$ -	\$ 7	\$ 308	\$ 2,192



**Decentralization Station at Einfeldt-** Includes the construction of an office building and garages to expand the existing facility. This location allows for immediate access to I-25, University Boulevard and Colorado Boulevard. Once complete the site will allow Denver Water to increase crew and equipment for scheduled and emergency dispatching. No impact on operating budget.

(Thousands of Dollars)

2006 Actual	2007 Actual	2008 Actual	2009 Budget
\$ -	\$ -	\$ 56	\$ 1,716



**Roberts Tunnel Valve Control and Replacement-** Replace valves and the hydraulic control system in the outlet works. The hydraulic capacity of the tunnel and valves will be analyzed to determine possible problems. The valves should be replaced due to poor condition. No impact on operating budget.

(Thousands of Dollars)

2006 Actual	2007 Actual	2008 Actual	2009 Budget
\$ -	\$ -	\$ 15	\$ 1,534



# Glossary



## Contents

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### Glossary

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## Frequently Used Water Terms

Often the terms used by water industry members aren't ones employed in everyday conversation. With this in mind, we thought it would be useful to include common acronyms and definitions. Every attempt was made to keep the definitions simple, concise and easily understood.



May 9, 1936  
Streetcar Advertisement

# Acronyms

## A-E

### Cheesman

**ACP**

Accelerated Conservation Program

**AF**

Acre Foot

**AMWA**

Association of Metropolitan Water Agencies

**CAFR**

Comprehensive Annual Financial Report

**CBSM**

Community Based Social Marketing

**COP**

Certification of Participation

**CIP**

Capital Improvement Plan

**CIS**

Customer Information System

**CWA**

Clean Water Act

**DIA**

Denver International Airport

**DW**

Denver Water

**EIS**

Environmental Impact Statement

**EPA**

Environmental Protection Agency

**ERT**

Encoder Receiver Transmitter

**FERC**

Federal Regulatory Energy Commission

# Acronyms

## F-Z

Cheesman

**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

**NRCS**

Natural Resources Conservation

**NWRS**

National Water Resource Association

**RCRA**

Resource Conservation and Recovery Act

**PACSM**

Platte and Colorado Simulation Model

**POS**

Point of Service

**WUWC**

Western Urban Water Coalition

# 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 (AWC)**

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 its 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.

### **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.

# Definitions

## C-D

**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 (non-stores issues only).

**Disbursements**

Money paid out for expenses, liabilities or assets.

**Discretionary Employee**

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

**Division**

Largest organizational unit reporting to the Manager.

# Definitions

## E-G



### **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 (ERT)**

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.

### **General Equipment**

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

### **General Obligation Bonds (GO Bonds)**

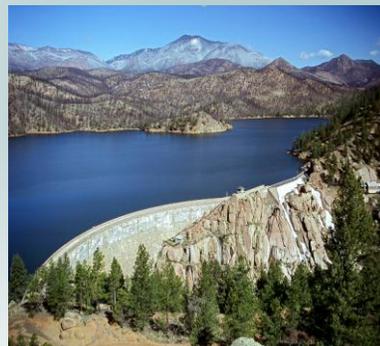
A security representing the promise to repay borrowed money secured by the full faith and credit of the governmental borrower.

### **Geographic Information System**

A component of our Enterprise Asset Management system. This system is used in large part to record the geographic location and many other attributes of Distribution and Collection system assets. From the GIS, we produce many types of maps, as well as analysis related to our assets, and the world around them.

# Definitions

## G-I

**Goals**

Overall end toward which effort is directed.

**Governmental Accounting Standards Board (GASB)**

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 (IRP)**

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

**Interest Requirements**

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

**Investment Balance**

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

**Introductory Employee**

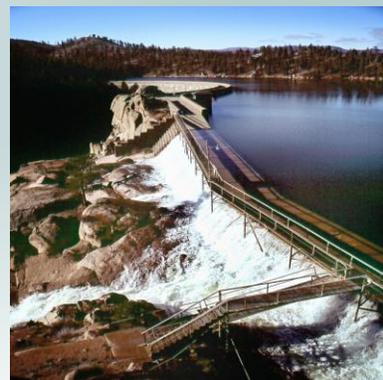
An employee who is newly appointed to a position and is serving an introductory period, generally of six month's duration.

**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.

# Definitions

## L-N

**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 Workforce**

Mobile Workforce (the Service Suite system) is a component of our Enterprise Asset Management system that enables scheduling, dispatching, sharing of work order information and work completion reporting for our field workers.

**Modified Accrual Basis**

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

**Municipal Water Utilities**

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

**Net Revenues**

Gross Revenue less Operating and Maintenance Expenses.

**Non-Operating Revenue**

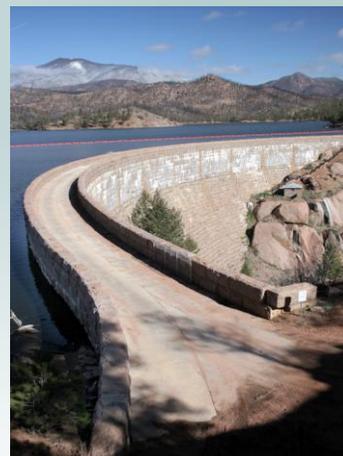
As used in this document, revenue received from payments for services such as main inspections, installation of taps, calculating and mailing of sewer bills and other such services.

**Non-Potable**

Water not suitable for drinking. (See also Potable)

# 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**

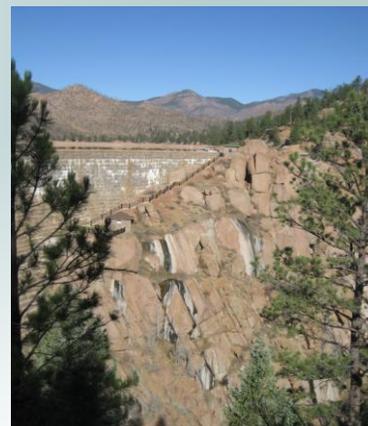
Water that does not contain pollution, contamination, objectionable minerals or infective agents and is considered safe for domestic consumption; drinkable. (See also Nonpotable)

### **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.)

# Definitions

## P-R



### **Professional Services**

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

### **Program**

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

### **Program Budget**

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

### **Program Element**

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

### **Project Employee**

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

### **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.

# Definitions

## R-S

**Reservoir**

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

**Revenues**

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 (SDWA)**

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

**Stores Issues**

Includes materials and supplies issued from inventory 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.

# Definitions

## T-Z

**Tap**

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

**Temporary Employee**

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

**Type of Expenditure**

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

**Utilities & 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 A



2009 - 2013 DRAFT

# Denver Water Strategic Plan



As you may recall, Denver Water currently is engaged in a process to update its strategic plan. The strategic plan is a management tool used to focus the work of an organization and to ensure that employees are working toward a common goal. Such a plan discusses where the organization is going in the next few years and how it will get there.

Denver Water's strategic planning team and a strategic planning professional interviewed Board Members, Senior Staff and key leaders within the organization as part of the planning process. All employees also were invited to provide feedback on the organization's strengths, weaknesses, opportunities and future challenges.

More than 100 current Denver Water employees participated in focus groups and shared their opinions. Others gave input via e-mail, phone calls or hallway conversations. As promised, all the data gathered was presented to the Manager and Directors at a strategic planning meeting in September. The information was analyzed, and recurring themes and issues were addressed. The result is the draft 2009-2013 Denver Water Strategic Plan.

We are sending the draft strategic plan to all Denver Water employees to seek input and feedback. This plan outlines Denver Water's organizational mission, values and goals for the utility to accomplish in the next five years. In the following pages, you will find a summary of the mission, values, goals and strategies in the draft plan.

Please review the information and take a moment to comment on it. You can use the comment form on Page 7, or send an e-mail to [SPFeedback@denverwater.org](mailto:SPFeedback@denverwater.org). If you would like to receive a response to your comment, please include your name and mail code. If not, your comments will remain anonymous.

The strategic planning team undertook this process with the intent of producing a document to guide the organization for the next few years. The basis for the goals and strategies was the employee feedback we received. As a result, this truly is a plan that belongs to all Denver Water employees. In order to achieve what we state in this plan, we all need to work together. Please take a moment to review the draft plan summary and share your comments.

## OUR MISSION STATEMENT

**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.**

## OUR VALUES

Customer Service	We exist for the purpose of serving our customers.
Heritage	We value our heritage of planning for and providing a reliable, high-quality water supply and excellent service at a reasonable cost.
Stewardship	We are responsible and accountable stewards in our use of public land and water, and environmental and financial resources.
Diversity	We value a work force and business partners that reflect the diversity of the community we serve.
Accountability	We hold each other accountable for accomplishing the mission of the organization.
Planning	We plan for the long term.
Respect	We show respect and courtesy in our relationships.
Transparency	We strive to be open and forthright in all of our interactions.
Innovation	We are progressive, creative and open to new ideas and technologies to meet the challenges of the future.
Safety	We value the safety of our customers and the public. We promote the highest level of health and safety for our employees.
Employees	We value individuals, their perspectives and their contributions to teamwork.

## OUR VISION FOR 2013

1. We are recognized as the best water utility in the country and consistently are among the most desirable places to work in the state.
2. We have the trust of our customers, Board and employees.
3. Employees feel valued and believe their work makes a difference. Everyone within Denver Water is fully engaged and committed to achieving the goals of the organization.
4. We have become a more green organization.
5. We are highly regarded for planning for uncertainties such as climate, regulatory and demographic changes.
6. We have played a key role and have been the catalyst for solving Front Range water supply problems.
7. We are a responsible steward of the natural environment.
8. We have reduced the controversies regarding our water rights.
9. We maintain a leadership role within Colorado regarding Colorado River Compact issues.
10. The 2010 Integrated Resource Plan is being successfully implemented.
11. We have a reputation for being a good neighbor and a community resource.
12. Water conservation is recognized by our employees and customers as necessary and important in managing water as a precious resource.
13. Wasting water is universally viewed as being socially irresponsible.
14. We have a highly reliable and well-maintained infrastructure.
15. We have become a well-respected applied research organization.
16. We are financially strong and fiscally prudent.
17. We are a leader among water utilities in optimizing the use of technology.
18. We have achieved the goals set forth in the 2009 Strategic Plan.



GOAL CATEGORY	GOAL	STRATEGIES	RESPONSIBILITY	
CUSTOMER	Develop an enterprise-wide customer centric culture.	<p>Measure our current level of customer service based on input from our customers and employees to gain insight on what we need to do to improve.</p> <p>Research and identify what other urban water utilities and other service-driven companies are doing in order to improve our customer service.</p> <p>Ensure Manager and Directors spend time with office and field employees engaged in customer service activities to gain a broader understanding of customer-service experience. Manager and Directors should meet with customers on an ongoing basis to gain first-hand insight, i.e. community meetings.</p> <p>Pursue opportunities to attend community meetings to solicit input about Denver Water and to share information about Denver Water's efforts on specific programs.</p> <p>Reinstitute "Apology Card" to apologize for errors we make, the face value of which can be applied toward a future water bill. Make the card available to all employees who interface with customers as a part of their normal job.</p> <p>Implement the Conservation Plan.</p>	<p>Public Affairs</p> <p>Public Affairs/Directors</p> <p>Manager/Directors</p> <p>Public Affairs</p> <p>Public Affairs/O&amp;M/Finance</p>	
	Assist our customers in using water more wisely and eliminating waste.		<p>Public Affairs</p>	
	Incorporate sustainability and wise use concepts in planning and in all of our operational and financial decisions.		<p>Examine what other utilities have done and use this insight to develop a sustainability plan for managing our facilities.</p>	<p>Engineering/O&amp;M/Green Team</p>
	Assure that our planning efforts are focused on a long-term perspective to continue our legacy of foresight.		<p>Develop and implement an Enterprise Asset Management Program, which enhances our ability to effectively maintain and upgrade our water system infrastructure.</p> <p>Establish Watershed Management Plans throughout our system. The first phase of the plans will focus on areas impacted by forest fires and beetle-kill.</p> <p>Explore opportunities to craft Stream Management Plans in our various watersheds.</p>	<p>IT/O&amp;M/Planning/Engineering</p> <p>Planning &amp; Watershed Mgmt. Team</p> <p>Planning</p>
STEWARDSHIP	Develop, coordinate, integrate and continuously update long-range master plans.	<p>Develop and continuously evolve an enterprise-wide information technology master plan that supports the enterprise in achieving its strategic goals.</p> <p>Take steps to coordinate the following long-range plans:</p> <ul style="list-style-type: none"> <li>Integrated Resource Plan</li> <li>Enterprise Asset Management Plan</li> <li>Financial/Capital/Operating Plans</li> <li>Communication Plan</li> <li>Work Force Plan</li> <li>Conservation Plan</li> <li>IT Plan</li> <li>Engineering Master Plan</li> <li>Sustainability Plan</li> </ul>	<p>IT</p> <p>Manager/Directors</p>	
	Increase our understanding of the perspectives of stakeholders affected by Denver Water in order to better shape policy.		<p>Engage in an effort to determine the satisfaction of vendors, contractors, developers and other business partners regarding their interactions with Denver Water.</p> <p>Solicit community input on decisions related to the use of our assets.</p> <p>Establish a baseline of information about how we are perceived in all the communities we are involved in and determine constructive actions to be taken to improve our relationships.</p>	<p>Finance</p> <p>Engineering/Public Affairs</p> <p>Public Affairs</p>
	Be active in the communities in which we operate.		<p>Encourage and facilitate participation by employees in community and charitable organizations.</p> <p>Redefine and revitalize the CAC as an important element of our community outreach program. Work toward establishing a clearer understanding of its original charter and future role.</p> <p>Increase the understanding of our collection system in communities affected by our decisions through an expanded number of meetings and site tours regarding these types of issues. Affected communities will include fire and rescue, first responders, police, other stakeholders, etc.</p>	<p>Manager/Human Resources</p> <p>Public Affairs</p> <p>Planning/O&amp;M/Public Affairs</p>
	Support the transition to efficient irrigation of all Denver and suburban parks.		<p>Meet with the City of Denver and suburban governments we serve to increase dialogue and to improve our working relationships.</p> <p>Revamp our existing Internet and Intranet Web sites so they are valuable resources for our customers, employees and others.</p> <p>Develop "brand" recognition that accurately reflects that Denver Water is a leader in the water industry committed to high standards of operations and community involvement, as well as a great place to work.</p>	<p>Public Affairs</p> <p>IT/Public Affairs</p> <p>Public Affairs</p>
OUTREACH	Clearly articulate Denver Water's future direction and vision.		<p>Public Affairs</p>	

EMPLOYEES		Manager/Directors/HR
<p>Engage employees in creating and achieving strategies that help fulfill our vision.</p> <p>Ensure that Denver Water is a desirable place to work.</p> <p>Share information with and receive feedback from all levels of the organization.</p> <p>Create a comprehensive work force development plan to address retiring retirements in key positions and changes in the labor market.</p> <p>Build a higher level of understanding, trust and appreciation among employees at all levels of the organization.</p> <p>Assure that management and the Board spend sufficient time and energy on strategic thinking and planning.</p> <p>Enhance unity and cohesiveness among senior staff.</p> <p>Identify internal conflicts between divisions and empower all levels of employees to resolve differences in the best interest of Denver Water.</p>	<p>Develop a series of performance matrices to reward employees for reduced water consumption, better customer service and other key goals and objectives.</p> <p>Revisit and refine the ELITE and ERP programs to develop one program that rewards and recognizes employees. Consider a "field crew of the month" and "call center employee of the month" as well as other programs.</p> <p>Appoint a committee to apply for awards that would recognize Denver Water for its industry leadership.</p> <p>Implement an improved new employee orientation program that explains the important customer service functions performed at Denver Water.</p> <p>Develop opportunities for employees to cross-train and/or spend time with peers in other areas.</p> <p>Develop ways for employees to easily access information regarding Board Meetings, staff meetings, major decisions, etc., through a hot line or personal e-mails, blogs and wiki.</p> <p>Reinstitute "Ask the Manager" and institute "Ask the Directors."</p> <p>Develop a team that includes field employees to identify strategies for more timely communication of important information to employees in the field, without e-mail and at remote facilities.</p> <p>Ensure management is accountable for addressing non-productive employees in their respective areas.</p> <p>Develop and implement an intern program for high school and college students, which demonstrates that Denver Water is a great place to work and creates an excellent pool of employee candidates.</p> <p>Ensure Manager and Directors get out of the office and meet with employees as an opportunity to listen, answer questions and gain a better understanding of issues. This may include the Manager going out with two or three Directors to various facilities.</p> <p>Establish a standard that requires important information to be disseminated from Directors downward in each division to managers and supervisors and then to all employees. Additionally, ensure Code 4 is sent to every employee.</p> <p>Set aside one Senior Staff Meeting each month to use as a study session to discuss in detail one or more specific issues.</p> <p>Develop annual division goals to tie into the strategic plan. Manager and Directors will conduct a thorough discussion prior to the development of goals.</p> <p>Develop a protocol for managing e-mails within the organization to decrease unnecessary e-mails, which consume too much valuable time.</p> <p>Develop a process for synchronizing our organization and divisional goals with the strategic plan and the budgeting process.</p> <p>Ensure Directors recognize the need to delegate work in order to have the time to think strategically and to manage the strategic plan.</p> <p>Identify opportunities for Manager and Directors to strengthen their working relationships and mechanisms to resolve conflict that occurs from time to time. Look at conducting an off-site "team-building" meeting/retreat (shoulder to shoulder).</p> <p>Develop new methods and a different norm of operating day-to-day that is less hierarchical so as not to drive all the decision-making to the highest level of the organization.</p> <p>Evaluate the organizational structure and the manner in which tasks are completed, and implement changes to reduce conflict and enhance efficiency and job satisfaction.</p> <p>Gain a deeper understanding of the goals of individual Board members and assist the Board in defining their collective goals. This should occur when a new Board member joins the Board and with each Board member at the beginning of each year.</p> <p>Engage the Board in active participation in the strategic planning and IRP processes.</p> <p>Assure that every new Board member is fully oriented to the key knowledge needed to perform as a Board member.</p> <p>Solicit Board member input in designing a new Board member orientation program. Additionally, include having an outside expert on Board governance issues.</p> <p>Come to a conclusion on the mediation with the West Slope.</p> <p>Learn from others about predications for change and find out how others are responding. Identify knowledge gaps to fill in our planning efforts.</p> <p>Use scenario analysis in our planning process.</p> <p>Establish multi-disciplinary Best Practice Teams to visit other organizations to gain insight about how to identify and address change.</p> <p>Develop redundancy for critical functions and resources needed to address unforeseen circumstances.</p> <p>Enhance working relationships and participation in research projects with local universities and research organizations (e.g. AWWA, RF, and WRF).</p> <p>Collaborate with other utilities to identify and fulfill practical research needs typically ignored by academics.</p> <p>Visit other utilities that are respected for their applied research to learn from their successes and failures.</p> <p>As the existing lab reaches its useful life and as new sources of water are contemplated for the Denver system, consider opportunities to expand in-house analytical and research capabilities.</p>	<p>HR</p> <p>Manager/Directors</p> <p>HR</p> <p>Directors/Section Heads</p> <p>Public Affairs/HR/IT</p> <p>Public Affairs/Manager</p> <p>Public Affairs/Supervisor Forum</p> <p>HR</p> <p>HR</p> <p>Manager/Directors</p> <p>All Employees</p> <p>Manager/Directors</p> <p>Manager/Directors</p> <p>IT</p> <p>Manager/Directors</p> <p>Directors</p> <p>HR</p> <p>Manager/Directors</p> <p>Manager/Directors</p> <p>Manager &amp; Board</p> <p>Manager &amp; Board</p> <p>Manager/Directors</p> <p>Manager/Directors</p> <p>Board</p> <p>HR/Directors</p> <p>All Divisions</p> <p>Manager/Directors</p> <p>Directors/Section Heads</p> <p>O&amp;M</p> <p>O&amp;M</p> <p>O&amp;M</p> <p>O&amp;M</p>
MANAGEMENT ROLES & RESPONSIBILITY		
BOARD ROLES & RESPONSIBILITY		
PROACTIVELY ADDRESS CHANGE	<p>Anticipate change, lead change when appropriate, influence outcomes where possible and be capable of adapting to change.</p> <p>Formalize and expand Denver Water's applied research program.</p>	



**In fall 2008, the strategic planning team conducted focus groups with more than 100 Denver Water employees. Below are the most common employee concerns as voiced by the focus group participants, as well as the strategy identified to address these concerns.**

EMPLOYEE CONCERNS/COMMENTS	STRATEGY TO ADDRESS CONCERN
Employees do not feel valued and recognized for good performance.	Develop a series of performance matrices to reward employees for reduced water consumption, better customer service and other key goals and objectives. (Goal Category: Employees)
We are not training current employees to step in and fill the positions that will be vacated by retirees.	Develop opportunities for employees to cross-train and/or spend time with peers in other areas. (Goal Category: Employees)
The compartmentalization of Divisions and Sections is one of Denver Water's largest weaknesses.	Evaluate the organizational structure and the manner in which tasks are completed and implement changes to reduce conflict and enhance efficiency and job satisfaction. (Goal Category: Management Roles and Responsibility)
We have not done an adequate job of educating our customers on the complexities of the water system.	Pursue opportunities to attend community meetings to solicit input about Denver Water and to share information about our efforts on specific projects/programs. (Goal Category: Customer)
There is a feeling of disconnect between the Board, Senior Staff and employees. Having a volunteer Board that doesn't take time to learn about the entire organization leads to policy decisions made without full information.	Ensure that every new Board member is fully oriented to Denver Water and has the key knowledge needed to perform as a Board member. (Goal Category: Board Roles and Responsibility)
There is a lack of trust between employees and senior management.	Manager and Directors should get out of the office and meet with employees, providing an opportunity to listen, answer questions and gain a better understanding of issues. (Goal Category: Management Roles and Responsibility)
Communication and trust were identified by employees as top priorities to be addressed.	Develop ways for employees to easily access information regarding Board meetings, staff meetings, major decisions etc. Possible solutions include hot lines, personal e-mails, blogs and wiki. (Goal Category: Employees)
Current employee orientation is inadequate.	Implement an improved new employee orientation program that explains the important customer service functions performed at Denver Water. (Goal Category: Employees)

# Appendix B

## 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. Denver Water desires to maintain its stand-alone revenue bond rating at a level of AA or better. After consulting with the rating agencies, Denver 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.

## Calculations

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**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)*

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**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.)*

# Appendix C

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**TITLE:** Plant and Equipment

**ABSTRACT:**

Capitalization - the accounting for plant and equipment expenditures depends on whether they are initial acquisition costs or post-acquisition costs, and whether they are retirement units or retirement unit components. Initial acquisition costs of retirement units are capitalized if they have a serviceable life of more than one year and have a cost of \$5,000 or more. Post-acquisition costs on an existing retirement unit are capitalized if the Retirement unit has a remaining serviceable life of more than one year, the post-acquisition costs are \$5,000 or more, and the costs result in a substantial betterment to the retirement unit. Costs not meeting these criteria, including replacements of retirement unit components not involving betterments, regardless of cost, are expensed. (See flowchart on last page of this policy).

Depreciation - Capitalized costs are depreciated over the estimated serviceable lives of the property using the straight line method without recognizing salvage values, unless estimated salvage exceeds 25% of cost.

Retirement - When a retirement unit is retired, the related cost and accumulated depreciation are removed from the accounts, and the resulting gain or loss is reflected in current income.

**PURPOSE:**

To establish guidelines for the capitalization, depreciation, retirement, and administration of plant and equipment.

**DEFINITIONS:**

***Betterment*** - Post-acquisition costs for major modification work on a retirement unit which result in:

- a. an increase in the original capacity, productivity, operating efficiency, or economic value of the retirement unit, or
- b. a renewal or restoration of the retirement unit, extending its serviceable life beyond the period which was originally contemplated at time of acquisition.

***Initial Acquisition Costs*** - Costs incurred for:

- a. Acquiring retirement units of plant and equipment, whether as:
  1. an addition of a new retirement unit which did not previously exist, or

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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:

Purchase Costs - 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.

Construction Costs - 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.

Equipment Installation Costs - 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.

**Post-Acquisition 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 refurbishing 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. Post-Acquisition Costs

##### 1. Capitalization Criteria

**Post-acquisition costs** of a **retirement unit** are capitalized if they meet all of the following three conditions:

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- a. 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 **post-acquisition 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

Depreciation begins the month following the month in which the equipment is

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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.

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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
3. 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
2. the property is fully depreciated, i.e., accumulated depreciation equals depreciable cost.

#### Retirement

##### 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.

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## 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

1. 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.
2. 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:

**GENERAL CHARACTERISTICS OF EQUIPMENT**

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)
Portability	Portable in nature. Does not	Permanent in nature. Requires

	usually require installation. Includes vehicles & "M" Machines.	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.	\$5000 or more.

## **BACKGROUND:**

Capitalization - 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

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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.

Depreciation - 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.

Retirement - 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



# Appendix D

**USE ONLY  
WHAT YOU  
NEED.**



## 2009 Budget Revisions

At the request of the Board, Denver Water staff analyzed the 2009 Approved Budget to determine whether operating cost reductions might be implemented and used to fund unbudgeted capital projects with an emphasis on those that might have a positive economic impact.

In addition to the spending changes, we also revisited the 2009 budget for sources of funds and, where necessary, made changes. The net result is that our 2009 end of year investment balance will be \$14.5 million less than estimated under the 2009 Approved Budget.

The Board of Water Commissioners adopted the budget revisions on April 8, 2009.

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#### 2009 Budget Revisions

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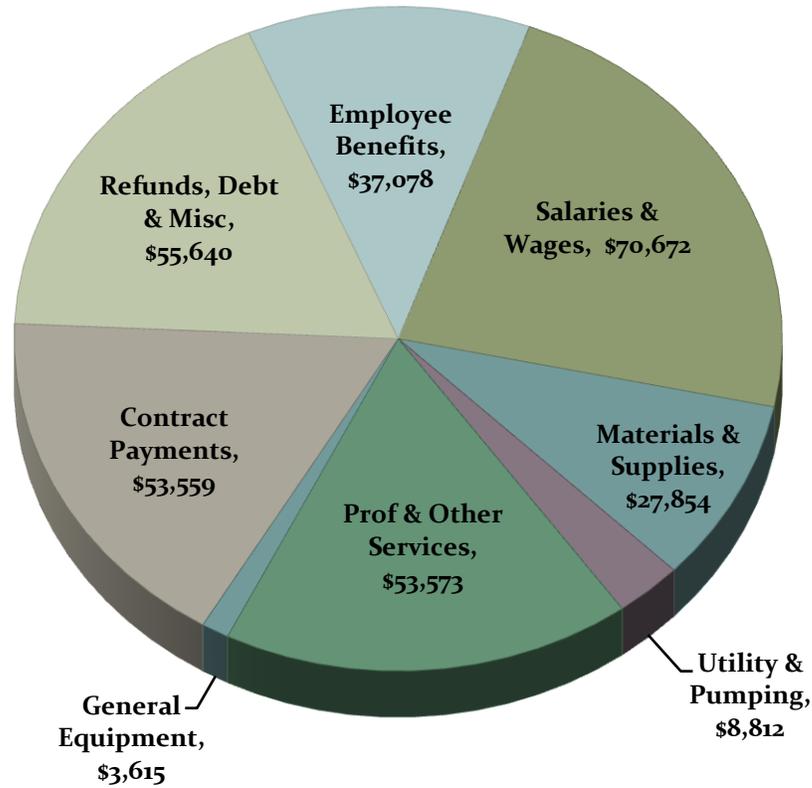
### Comparison of 2009 Approved Budget to 2009 Revised Budget

	2009 Approved Budget	2009 Revised Budget	Change
<b>Sources of Funds</b>			
Water Sales	212,028	212,028	-
System Development Charges	17,016	8,000	(9,016)
Participation	11,605	11,605	-
Bond Proceeds	44,075	44,075	-
All Other Sources	<u>20,576</u>	<u>20,576</u>	<u>-</u>
<b>TOTAL SOURCES OF FUNDS</b>	<b>305,300</b>	<b>296,284</b>	<b>(9,016)</b>
<b>Uses of Funds</b>			
<i>Capital</i>			
Part I Capital	32,945	43,235	10,290
Part II Capital	32,662	31,148	(1,514)
Part III Capital	<u>21,588</u>	<u>20,954</u>	<u>(634)</u>
<b>Total Capital</b>	<b>87,195</b>	<b>95,337</b>	<b>8,142</b>
<i>Operating and Maintenance</i>			
Raw Water	12,327	12,325	(2)
Recycled Water	3,658	3,517	(141)
Water Treatment	17,303	16,972	(331)
Delivery	17,380	17,095	(285)
Conservation	10,260	9,665	(595)
Customer Service	9,242	9,209	(33)
General Plant	8,924	9,241	317
Supporting Activities	<u>87,122</u>	<u>85,509</u>	<u>(1,613)</u>
<b>Total O&amp;M</b>	<b>166,216</b>	<b>163,533</b>	<b>(2,683)</b>
<i>Debt Service</i>	<u>51,933</u>	<u>51,933</u>	<u>-</u>
<b>TOTAL USES of FUNDS</b>	<b>305,344</b>	<b>310,803</b>	<b>5,459</b>
<b>Net Cash Flow</b>	<b>(44)</b>	<b>(14,519)</b>	<b>(14,475)</b>

**2006 - 2009 Comparison of Sources and Uses of Funds**  
(Thousands of Dollars)

	2006 Actual	2007 Actual	2008 Budget	2008 Actual	2009 Budget	2009 Revised Budget
<b>Beginning Investment Balance</b>	\$ 159,276	\$ 149,198	\$ 226,160	\$ 226,160	\$ 198,311	\$ 198,311
<b>Sources:</b>						
Operating Revenue	\$ 195,054	\$ 194,224	\$ 203,875	\$ 204,232	\$ 212,028	\$ 212,028
Non-Operating	\$ 2,661	\$ 2,843	\$ 2,846	\$ 3,140	\$ 3,157	\$ 3,157
Hydropower	\$ 2,496	\$ 2,392	\$ 3,873	\$ 4,315	\$ 3,305	\$ 3,305
System Development Charges	\$ 22,389	\$ 26,213	\$ 22,981	\$ 19,138	\$ 17,016	\$ 8,000
Participation	\$ 2,735	\$ 3,314	\$ 1,986	\$ 2,444	\$ 11,605	\$ 11,605
Reimbursements & Grants	\$ 1,586	\$ 13	\$ 1,000	\$ 2,753	\$ -	\$ -
Interest on Investments	\$ 6,937	\$ 9,295	\$ 6,682	\$ 8,133	\$ 4,944	\$ 4,944
Other	\$ 13,160	\$ 9,563	\$ 8,539	\$ 9,696	\$ 9,170	\$ 9,170
Subtotal Sources	\$ 247,018	\$ 247,857	\$ 251,782	\$ 253,851	\$ 261,225	\$ 252,209
Debt Proceeds	\$ -	\$ 99,158	\$ -	\$ 1,800	\$ 44,075	\$ 44,075
<b>Total Sources:</b>	\$ 247,018	\$ 347,015	\$ 251,782	\$ 255,651	\$ 305,300	\$ 296,284
<b>Uses:</b>						
<b>Operation &amp; Maintenance Programs:</b>						
Raw Water	\$ 6,855	\$ 7,962	\$ 9,687	\$ 8,857	\$ 12,327	\$ 12,325
Recycled Water	\$ 2,176	\$ 2,203	\$ 2,636	\$ 2,786	\$ 3,658	\$ 3,517
Water Treatment	\$ 13,174	\$ 13,220	\$ 15,346	\$ 15,635	\$ 17,303	\$ 16,972
Delivery	\$ 15,755	\$ 16,597	\$ 18,341	\$ 19,824	\$ 17,380	\$ 17,095
Conservation	\$ 2,832	\$ 4,722	\$ 9,871	\$ 6,568	\$ 10,260	\$ 9,665
Customer Service	\$ 7,143	\$ 6,962	\$ 8,110	\$ 7,968	\$ 9,241	\$ 9,209
General Plant	\$ 6,448	\$ 7,447	\$ 8,230	\$ 10,049	\$ 8,924	\$ 9,241
Administration	\$ 29,588	\$ 33,251	\$ 38,002	\$ 38,623	\$ 38,362	\$ 36,865
Distributed Indirect Costs	\$ 43,100	\$ 40,747	\$ 44,070	\$ 40,789	\$ 48,761	\$ 48,644
<b>Total Operation &amp; Maintenance Expenditures</b>	\$ 127,071	\$ 133,111	\$ 154,293	\$ 151,099	\$ 166,216	\$ 163,533
<b>Capital Programs:</b>						
Raw Water	\$ 32,976	\$ 22,983	\$ 28,030	\$ 25,366	\$ 28,505	\$ 33,021
Recycled Water	\$ 22,086	\$ 20,632	\$ 3,485	\$ 2,695	\$ 2,011	\$ 1,553
Water Treatment	\$ 2,570	\$ 11,375	\$ 17,179	\$ 17,843	\$ 6,647	\$ 12,570
Delivery	\$ 13,973	\$ 18,528	\$ 16,669	\$ 13,677	\$ 21,592	\$ 20,076
Conservation	\$ 2,111	\$ 1,657	\$ 10	\$ 31	\$ -	\$ -
Customer Service	\$ 1,474	\$ 81	\$ -	\$ 137	\$ -	\$ -
General Plant	\$ 8,571	\$ 7,777	\$ 22,272	\$ 23,048	\$ 28,440	\$ 28,117
<b>Total Capital Expenditures</b>	\$ 83,761	\$ 83,033	\$ 87,645	\$ 82,797	\$ 87,195	\$ 95,337
<b>Debt Service</b>	\$ 46,264	\$ 53,909	\$ 49,495	\$ 49,604	\$ 51,933	\$ 51,933
<b>Total Uses</b>	\$ 257,096	\$ 270,053	\$ 291,433	\$ 283,500	\$ 305,344	\$ 310,803
<b>Ending Investment Balance</b>	\$ 149,198	\$ 226,160	\$ 186,509	\$ 198,311	\$ 198,267	\$ 183,792
<b>Change in Investment Balance</b>	\$ (10,078)	\$ 76,962	\$ (39,651)	\$ (27,849)	\$ (44)	\$ (14,519)

## Expenditures by Type



### DENVER WATER Expenditure History (Thousands of Dollars)

	2006 <u>Actual</u>	2007 <u>Actual</u>	2008 <u>Budget</u>	2008 <u>Actual</u>	2009 <u>Budget</u>	2009 <u>Revised Budget</u>
Salaries & Wages	\$ 62,922	64,833	68,366	68,820	70,413	70,672
Employee Benefits	31,138	28,207	31,848	27,926	37,078	37,078
Materials & Supplies	17,396	19,557	24,995	26,895	28,103	27,854
Utility & Pumping	7,511	6,934	8,064	8,430	8,789	8,812
Prof & Other Services	32,137	37,396	49,812	55,979	56,943	53,573
General Equipment	2,355	2,593	7,004	3,026	3,918	3,615
Contract Payments	54,007	53,959	48,549	37,044	44,460	53,559
Refunds	472	865	619	2,162	673	673
Debt Service	46,237	53,678	49,448	49,575	51,655	51,655
All Other Miscellaneous	2,921	2,031	2,728	3,643	3,312	3,312
<b>Total</b>	<b>\$ 257,096</b>	<b>270,053</b>	<b>291,433</b>	<b>283,500</b>	<b>305,344</b>	<b>310,803</b>