



DENVER WATER'S 2010 STRATEGIC RATE INITIATIVE

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INTRODUCTION

Denver Water consistently has worked to tailor its water rate structure to meet the ever-changing needs of its water system. Denver Water now is examining a possible new rate structure for 2010 and beyond with three initial alternatives under consideration.

Public participation and input is a key element in determining Denver Water's new rate structure. An online survey will be conducted on denverwater.org through Oct. 31, 2008, and customers are encouraged to provide feedback.

KEY RATE DESIGN PRINCIPLES

Denver Water attempts to adhere to the following principles in designing current and future water rates.

Rates must be:

- Capable of sending a strong conservation price signal so that at higher consumption levels, customers must pay more for water than they do at lower consumption levels;
- Capable of sending clearly delineated price signals for peak and off-peak consumption. Specifically, the rate design must have the ability to charge more for water during the summer outdoor irrigation season (peak) and less for water for winter and/or indoor consumption (off-peak);
- To the maximum extent possible, the rate designs selected by Denver Water must thoughtfully balance the sometimes competing interests of our diverse customer base (large lot owners vs. small lot owners, commercial vs. residential, etc.) while still serving the Board's overarching water conservation objectives;
- Cost-based to ensure equity between individual customer rate classes;
- Easy for customers to understand and Denver Water to administer;
- Capable of providing revenue stability and predictability with a minimum of unexpected variances;
- Legally defensible.

DENVER WATER BOARD'S LONG-TERM OBJECTIVE

Denver's Board of Water Commissioners has established a variety of policy objectives under the overarching theme of conserving our water supply to ensure it remains an intergenerational resource for the social and economic good. Water rates will be a critical tool in achieving this objective from a variety of perspectives.

For example:

- Demand reductions induced by water rate designs will contribute to the overall Denver Water Conservation Program objective of achieving 16,000 acre-feet of conservation savings by 2016 and 29,000 acre-feet of conservation savings by 2045.
- Rate design induced Conservation savings will have a direct impact on the demand forecasting and resource acquisition assumptions used in Denver Water's integrated resource plan. These assumptions will in turn define future expenditures for capacity-related infrastructure.
- The use of sophisticated conservation rate designs will demonstrate Denver Water's commitment to sustainability to its customers and a variety of important external stakeholders.

- Water rate designs allowing for the efficient implementation of drought surcharges are a critical tool in curtailing consumption and ensuring Denver Water's financial viability during periods of severe drought.

DENVER WATER'S RATEMAKING PROCESS

Denver Water conducts an annual cost-of-service study to determine whether existing water rates are adequate to recover the cost of providing service. Denver Water's cost-of-service methodology is premised on the fact that a water utility must invest in and operate facilities that meet its customers' base load and peak load demand.

All customers have a base load demand, which essentially is the basic amount of water they use on average throughout the year. Denver Water's investment in, and operating costs for, these facilities are relatively low per thousand gallons of water delivered because the costs are spread over a larger volume of usage, which occurs during the course of the entire year. Because all customers have a base load demand, they share in Denver Water's base load costs in direct proportion to their annual usage.

In contrast, not all customers have the same peak demand. Peak demand is the amount of water a customer uses at a peak time, which usually is the summer and usually is caused by outdoor irrigation. Because of this summertime spike in demand, Denver Water's storage, treatment, distribution and other facilities need to be oversized.

Oversizing facilities results in investment and operating costs that are recovered from our peaking customers during the summer months. As a result, customers who do not peak on the system, or peak less than others, pay lower rates because they are not allocated as much of the cost associated with the peak-load facilities. Conversely, those who peak more pay more.

Denver Water's cost-of-service study follows standards established by the American Water Works Association (AWWA). Key steps in the process of determining cost-of-service water rates include:

Revenue Requirement Determination. This step involves determining, as part of the 10-year financial planning process, the revenue requirement from water rates (that is, the costs of providing service that must be recovered via water rate revenues).

Demand Forecasting. This step involves forecasting water demand for the entire Denver Water system and for each customer rate class.

Assigning Costs to Functional Categories. This step involves assigning the revenue requirement from water rates to functional cost categories, such as supply, treatment, pumping, transmission, distribution and administration.

Classifying Costs by Type. This step involves classifying the revenue requirement from water rates based on the engineering design and/or operational purpose for which a cost was incurred. Costs generally are incurred to meet customer base (average) or peak water demands, provide customer service functions, such as meter reading or billing, or provide fire protection services.

Determining the Cost-of-Service for Each Customer Class. This step involves determining the revenue requirement from water rates for specific customer rate classes by assigning them the costs they are responsible for creating. In general, cost responsibility is a function of customer rate class annual and peak water demands relative to the demands of other customer rate classes.

Water Rate Design. The final step in the ratemaking process is rate design. This is the process of developing a combination of fixed charges and consumption charges that will recover the revenue requirement from water rates for each specific customer rate class.

Denver Water currently uses an inclining block rate structure for Single-Family Residential customers. Inclining block rate structures are used by many utilities to encourage efficient water use, reduce peak system demands and recover costs from those high-consumption customers who cause a higher cost of service.

Denver Water has been adjusting its increasing block rates since they were first implemented. In 1999, Denver Water changed its increasing block rates from two consumption blocks to three consumption blocks. In 2006, Denver Water added a fourth consumption block. With each of these changes, Denver Water has raised the price differential between the consumption blocks, and this differential was further adjusted by the Board in 2007.

There is a link between rate design and Denver Water's emphasis on water conservation. Conservation is, of course, one of Denver Water's long-term strategies for meeting the future needs of all its customers. In its discretion over rate design, the Board also develops links between its rates and the need to recover the cost of oversizing its system for peaking, encourages peak demand reductions in order to minimize future cost increases from capacity additions, fully recovers the cost of operating the utility and participates in many other objectives.

The 2007 Single-Family Residential rate design adopted by the Board specifically was intended to encourage conservation as well as the other objectives listed above.

DENVER WATER'S HISTORICAL COMMITMENT TO SUSTAINABILITY

The Board of Water Commissioners' desire to investigate the possible implementation of new conservation rate structures for 2010 and beyond reflects the continuing evolution of Denver Water's long-term emphasis on water conservation. Some key Denver Water conservation milestones include:

1973: Implementation of a system development charge (tap fee) requiring new customers to pay a fee for the long-term capacity demands they impose on the Denver Water system. This ensures that new customers must pay at least a portion of the growth-related costs they create.

1977: Start of the universal metering program requiring all unmetered customers to be converted to fully metered water service. This is an essential step necessary to reduce water waste by ensuring customers begin paying for the actual amount of water they use.

1993: Start of a comprehensive Integrated Resources Planning (IRP) process designed to assess the need for new water resources to meet long-term demand. Included as part of the IRP is a comprehensive demand management analysis to determine how conservation programs could mitigate the need for expensive new supply-side resources.

1997: As part of the IRP process, the Board issues a comprehensive resource policy statement emphasizing the need for demand reductions from conservation in addition to the acquisition and/or construction of new supply-side resources.

1999: The Board creates greater incentives for Single-Family Residential customers to conserve water by adopting a new three-tier inclining block rate structure requiring customers to pay increasingly higher rates as their consumption moves beyond specific threshold amounts.

2000: Start of the automated meter reading program designed to increase the accuracy and efficiency of Denver Water meter-reading activities.

2001: Denver Water joins with the Denver Parks Department in a comprehensive analysis of the water conservation efficiency of the Department's irrigation systems.

2002: The Board adopts a variety of voluntary and mandatory drought response measures to cope with falling supply reserves. Included among these are mandatory watering restrictions and the implementation of drought surcharges and tap fee surcharges designed to significantly reduce water consumption.

2004: Completion of the first phase of Recycled Water Treatment Plant. At full build-out, the plant is capable of producing up to 17,000 acre-feet of recycled water annually. By using recycled water to meet outdoor irrigation demand, precious treated water supplies are preserved for consumptive uses.

2004: In response to the drought of 2002 - 2004, Denver Water implements a new 10-year financial planning process, which recognizes that even after a drought, water sales tend to remain at lower than pre-drought norms, a phenomenon referred to as "drought shadow."

2005: Start of the automated leak detection program to enhance Denver Water's ability to detect expensive and wasteful transmission main leaks.

2005: Start of the large meter replacement program to replace high-capacity meters that, over extended periods of time, tend to understate actual water consumption.

2006: Denver Water continues the evolution of its Single-Family Residential inclining block rate structure by adding a fourth consumption block for customers using more than 80,000 gallons in a single bimonthly billing period. This change results in enhanced conservation price signals being sent to high-consumption customers.

2006: Denver Water forms a rate design workgroup of key external stakeholders to evaluate alternative conservation rate structures for possible future implementation.

2006: The Board approves a supplement to the Board Resource Statement to guide Denver Water's resource planning efforts. The Resource Statement directs Denver Water staff to implement an accelerated conservation plan designed to achieve approximately 16,000 acre-feet of conservation savings by 2016. The accelerated conservation plan has evolved into Denver Water's comprehensive and industry-leading conservation program.

2007: The Board modifies the Single-Family Residential rate structure such that the rate charged in the consumption block (more than 80,000 gallons) is four times greater than the rate charged in the first consumption block (0 - 22,000 gallons). The adoption of this aggressive conservation rate design underscores the Board's commitment to long-term water conservation objectives.

2007: The Board creates the new Single-Family Residential Irrigation customer class designed to ensure that irrigation-only taps serving single-family communities pay rates that appropriately reflect the heavy peak loads they impose on the Denver Water system.

2007: Denver Water begins the process of selecting a vendor for a new customer information system designed to allow the billing of complex comprehensive rate structures.

2008: The Board creates the new Other Irrigation customer class designed to ensure that irrigation-only taps serving commercial, industrial and governmental customers pay rates that appropriately reflect the heavy peak loads they impose on the Denver Water system.

2008: The Board approves moving to monthly billing beginning July 2009. Monthly billing will, for the first time, provide Denver Water customers with the ability to correlate their water bills to climatic conditions and their associated consumption patterns. For example, a customer receiving a bill in early August should have the ability to mentally correlate the bill amount to his or her memory of weather conditions during July and his or her usage in response to those conditions.

2008: The Board approves a comprehensive public participation process for the 2010 Strategic Water Rate Initiative, which is designed to solicit input from external stakeholders regarding the possible implementation of a new rate structure in 2010 or some date beyond.

POTENTIAL RATE STRUCTURE ALTERNATIVES

Denver Water is examining three possible rate structures for 2010 and beyond. These are not the only three possible alternatives; rather they are a starting point to gather community comment.

1. Denver Water's existing rate structure;
2. A seasonal rate structure (winter and summer rates) with individualized water consumption blocks for each customer;
3. A water budget rate structure that sets a monthly individualized budget for water consumption based on factors such as lot size, irrigable areas and estimated indoor water needs.

RATE ALTERNATIVE 1: EXISTING RATE STRUCTURE

The first potential rate design for implementation in 2010 and beyond is to maintain Denver Water's existing rate structure (this is rate design Alternative #1). Denver Water is the sole utility provider of water service within the City and County of Denver. Denver Water also serves as the sole utility provider for many suburban locations outside the City and County of Denver through perpetual contractual agreements with suburban water distributors. The two types of outside city distributors that have entered into treated water retail service agreements with Denver Water are:

Read and Bill Distributors: A Read and Bill distributor owns and operates the transmission and distribution system within its specific service territory. However, Denver Water performs all other functions necessary to provide direct retail service to the end-user customers within the Read and Bill distributor district.

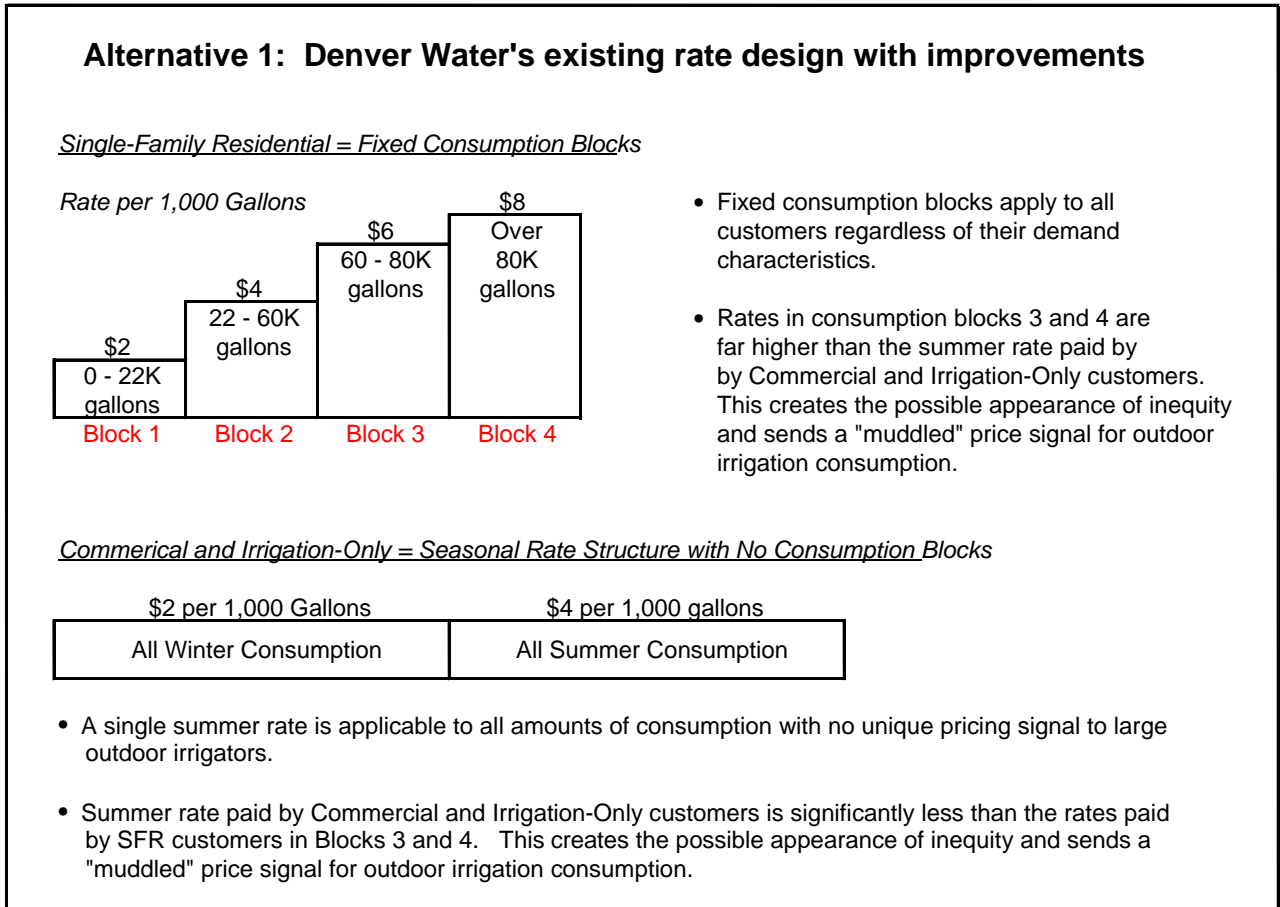
The seven primary functions Denver Water performs for Read and Bill distributors are: 1) water supply acquisition; 2) reservoir storage; 3) pumping; 4) transmission and distribution up to the Read and Bill distributor's boundaries; 5) meter reading; 6) billing; and 7) customer service. As of December 2007, Denver Water had a total of 15 Read and Bill distributors.

Total Service Distributors: Denver Water owns (or has taken dominion over) and operators the transmission and distribution system within Total Service distributor districts. As a result, Denver Water is responsible for every function required to provide direct retail service to the end-user customers and they receive the same level of service provided to customers inside the City and County of Denver.

The eight primary functions Denver Water performs for Total Service distributors are: 1) water supply acquisition; 2) reservoir storage; 3) pumping; 4) transmission and distribution up to the Total Service distributor's boundaries; 5) transmission and distribution within the Total Service distributor's boundaries; 6) meter reading; 7) billing; and 8) customer service. As of December 2007, Denver Water had 29 Total Service distributors. Denver Water currently has five treated water customer rate classes as illustrated in the table on the next page.

Denver Water Treated Water Customer Classes and Rate Designs (2008)			
Customer Class	Inside City	Outside City Read & Bill	Outside City Total Service
Single-Family Residential Rate Design = Inclining Block Block 1 (0 - 22,000 Gallons) Block 2 (22 - 60,000 Gallons) Block 3 (60 - 80,000 Gallons) Block 4 (Over 80,000 Gallons)	\$1.81 \$3.62 \$5.43 \$7.24	\$1.90 \$3.80 \$5.70 \$7.60	\$2.27 \$4.54 \$6.81 \$9.08
Single-Family Residential Irrigation-Only Rate Design = Seasonal Winter Summer	\$0.89 \$3.56	\$0.98 \$3.92	\$1.09 \$4.36
Small Multi-Family Rate Design = Inclining Block Block 1 (0 - 30,000 Gallons) Block 2 (Over 30,000 Gallons)	\$2.10 \$2.52	\$2.27 \$2.72	\$2.98 \$3.58
All Other (Commercial, Industrial, Governmental Non-Irrigation) Rate Design = Seasonal Winter Summer	\$2.06 \$2.47	\$2.50 \$3.00	\$2.98 \$3.58
Other Irrigation (Commercial, Industrial, Governmental Irrigation-Only) Rate Design = Seasonal Winter Summer	\$2.02 \$2.50	\$2.35 \$3.08	\$2.78 \$3.61

A graphical presentation of Denver Water's existing rate design is shown below.



Other information on Denver Water's existing rate structure (Alternative 1)

- Sends a strong conservation price signal to Single-Family Residential and Single-Family Residential Irrigation customers with heavy outdoor irrigation consumption.
- Currently being modified to send a strong conservation price signal to All Other and Other Irrigation customers with heavy outdoor irrigation consumption.
- Familiar to Denver Water customers.
- Achieves horizontal rate equity (all customers within a customer class pay the same bill if they have equivalent consumption).
- Achieves vertical rate equity (all customers within a customer class pay a higher bill as their water consumption increases).
- Single-Family Residential customers with large lots and heavy outdoor irrigation consumption often must pay the marginal Block 4 rate.

- The current rate structure sometimes encourages Single-Family Residential customers with exceptionally heavy outdoor water use to install separate, dedicated outdoor irrigation-only taps.
- During times of drought, it is difficult to implement drought surcharges for Single-Family Residential and Small Multi-Family customers with rate designs based on fixed consumption blocks.
- Unique rate designs for each customer class prevent Denver Water from sending a common price signal to all customers for peak outdoor irrigation consumption.
- Unique rate designs for each customer class may cause customer confusion and create the perception of inequity.

RATE ALTERNATIVE 2: SEASONAL RATE STRUCTURE

A second potential rate design for implementation in 2010 and beyond is a seasonal winter-summer rate structure featuring *individualized* consumption block thresholds for each customer (no more fixed consumption blocks such as 0 - 22,000 gallons). Under this alternative, all customers would be billed using a seasonal rate design regardless of their rate class. Each customer would have an individualized summer Block 1 consumption threshold based on their winter average consumption (i.e., their indoor consumption). During the summer months, two or three additional consumption blocks would be added to the winter rate design in order to send an appropriate irrigation price signal.

The table below illustrates a hypothetical rate schedule for a version of Alternative 2 featuring three summer consumption blocks. Note that the rates for Block 1 (indoor consumption) and Block 2 (initial outdoor irrigation consumption) differ for each customer class. However, the rates for Block 3, which reflects peak summer consumption, are the same for all customer classes. This is because the cost-of-peak consumption on the Denver Water system basically is the same for all customer classes.

Alternative 2 – Hypothetical Rate Design			
Consumption Blocks	Single-Family Residential	Irrigation-Only	All Other (Commercial, Governmental and Industrial)
<p>Block 1 (Applicable January - December)</p> <p>Block 1 reflects the amount of water necessary for each customer's indoor water usage. Block 1 is based on each customer's actual winter average consumption, which is considered to be representative of that customer's indoor consumption throughout the year.</p>	\$2.00	\$1.40	\$1.90
<p>Block 2 (Applicable May - October)</p> <p>Block 2 reflects the amount of water necessary for some average amount of outdoor irrigation usage. The amount of water allocated to Block 2 for each customer would be the same for all customers. For example, assume Denver Water determined that 20,000 gallons was an appropriate amount for outdoor irrigation usage by Single-Family Residential customers. If a customer's individualized Block 1 consumption threshold was 10,000 gallons per month, that customer's Block 2 threshold would be between 10,000 - 30,000 gallons per month.</p> <p>The Block 2 consumption amounts would differ for each customer class.</p>	\$3.20	\$3.80	\$3.00
<p>Block 3 (Applicable May - October)</p> <p>Block 3 reflects expensive peak summer consumption on the Denver Water system. Any amount of consumption above the Block 2 threshold would be billed at the expensive Block 3 rate.</p>	\$5.50	\$5.50	\$5.50

A graphical representation of Alternative 2 is shown below.

Alternative 2: Seasonal Rate Structure with Individualized Consumption Blocks

All Customers = Seasonal Rate Structure with Individualized Consumption Blocks

Individualized Summer Block 3 Consumption Threshold = All Amounts Above Block 2 (for "Above Average" Outdoor Irrigation Consumption) \$5 per 1,000 gallons
Individualized Summer Block 2 Consumption Threshold = Block 1 + "X" Additional Gallons (Allows for "Average" Amount of Outdoor Irrigation Consumption) \$3 per 1,000 gallons
Individualized Block 1 Consumption Threshold = Customer's Unique Winter Avg. Consumption (Serves as Proxy for Indoor Demand During Summer Irrigation Season) \$2 per 1,000 gallons

- Existing customer classes are retained.
- Seasonal rate structure with individualized consumption blocks applies to all customer classes (SFR, Commercial, Irrigation-Only, etc.).
- All customers have individualized consumption blocks based on their winter average demand.
- Blocks 2 and 3 are added in the summer to send the appropriate irrigation price signal.
- Block 3 rate is the same for all customers in each service level. The Block 3 rate would be set to equal the marginal rate paid by irrigation-only customers. This enhances the appearance of equity and sends a consistent price signal for peak outdoor-irrigation consumption to all customers.

Other information on a seasonal rate structure (Alternative 2)

- Establishes a clear delineation between indoor and outdoor consumption in the minds of most customers. Customers will be sent explicit price signals for less costly indoor demand (amounts within the Block 1 threshold) and more costly outdoor demand (amounts above the Block 1 threshold).
- Alternative 2 can be crafted to require all customers, regardless of rate class, to pay the same rate for peak consumption (summer Block 3). This approach has the benefit of establishing a single readily identifiable and easily understandable price point for peak irrigation consumption that will eliminate the perception of unfairness that currently may surround Denver Water's existing rate structure.
- Alternative 2 can be used for all types of customers (Single-Family Residential, Irrigation-Only, Commercial, Industrial and Governmental). This will help to eliminate customer confusion and may help to eliminate any perception of inequity between rate classes.
- Alternative 2 may allow consumption restrictions and/or drought surcharges to be implemented in a more equitable manner than currently is the case under our existing rate structure (Alternative 1). This is true because consumption restrictions could be imposed on the individualized consumption

block thresholds derived from each customer's actual winter average indoor consumption. This may be perceived more favorably than the imposition of restrictions on the "one-size-fits-all" fixed consumption thresholds of the existing rate structure (Alternative 1).

- A major challenge associated with Alternative 2 is determining the correct consumption thresholds for Blocks 2 and 3 during the summer irrigation season. Setting the correct consumption thresholds for the Single-Family Residential rate class is critical for the effective implementation of Alternative 2. If the Block 2 and 3 thresholds are set too low, customers with large lots may feel they are being treated in a discriminatory manner. If the Block 2 and 3 consumption thresholds are set too high, they will undermine the Board's conservation objectives by institutionalizing inefficient irrigation.
- Basing the Block 1 consumption threshold on each customer's actual winter average consumption may create an incentive for inefficient indoor water use. This problem can be overcome in at least one of two ways. First, many sewer utilities within Denver Water's service territory (for example, the Denver Public Works Department) base their rates on each customer's winter average consumption. Thus, if customers use water inefficiently in the winter months, it will increase their sewer bill. Second, Denver Water could impose a specific cap on the maximum amount of Block 1 consumption.

ALTERNATIVE 3: WATER BUDGET RATE STRUCTURE

Alternative 3 features the use of individualized water budgets, set by Denver Water, for Single-Family Residential and Irrigation-Only customers. At this time, it is unknown whether it is possible to craft water budget rate structures for Commercial, Industrial and Governmental customers due to the diversity of their consumption characteristics.

Under a water budget rate structure, the monthly budget for outdoor consumption is based on metrics such as gross lot size or irrigable area. The monthly budget for indoor consumption usually is based on an overarching assumption regarding the average number of people living in each household (zero for Irrigation-Only customers). The sum of these two amounts (budgeted indoor and outdoor consumption) represents the total consumption budget each customer is allowed during any given month.

Water budgets generally involve the use of inclining block and/or seasonal rate designs. Customers who stay within their monthly budget allotment pay standard rates for consumption. Customers who exceed their monthly allotment pay higher "penalty" rates for excess usage.

In theory, water budgets offer an excellent way for utilities to fairly and equitably determine the appropriate amount of consumption for each individual customer. This perception of fairness is enhanced because each customer's budget allocation is established using readily identifiable quantitative metrics, such as gross lot size or irrigable area. For this reason, water budgets may be viewed favorably by customers with large lots who feel Denver Water's existing Single-Family Residential rate design is discriminatory.

Water budgets also should provide an equitable basis for imposing drought surcharges because they allow consumption restrictions to be imposed on what is perceived as a reasonable amount of budgeted consumption. Water budgets encourage water use efficiency by sending very explicit conservation price signals to customers who exceed their monthly budget allotment. However, water budgets achieve the objective only if the budget allotment for irrigation is set low enough to ensure that large lot owners risk being charged the penalty rate.

If the water allotment is set too high, a water budget rate structure merely serves to provide rate relief to customers with heavy irrigation consumption. For example, assume 15 gallons per square foot of irrigable area is determined to be the correct metric for efficient outdoor irrigation consumption during the month of June. If the budget allotment for outdoor irrigation is set at an amount greater than 15 gallons per square foot, it may encourage inefficient water use.

Water budget rate structures can become very complex. For example, when one considers a budget metric such as 15 gallons per square foot in June, how should it be determined and applied?

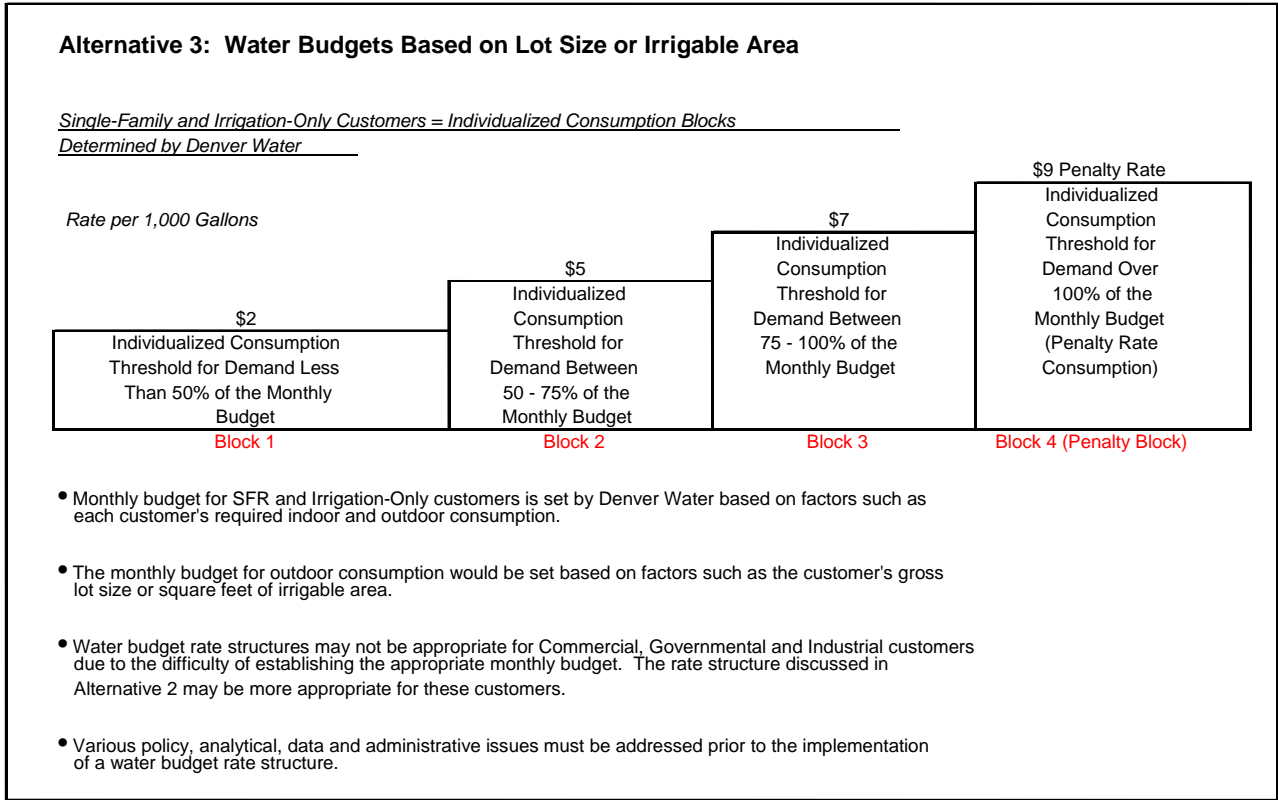
- Should it be determined on the customer's gross lot size or irrigable area?
- Should it reflect the correct amount of irrigation for Kentucky Blue Grass, another more efficient form of turf, or native vegetation?
- Should it assume all customers have highly efficient irrigation systems or something less optimal?
- Should it be reduced once a customer's lot size or irrigable area exceeds a specific baseline?

If these and other questions are not analyzed in a thoughtful manner, water budget rate structures can actually institutionalize less than optimal water use efficiency.

Water budgets also will cause the reconsideration of long-held fundamental assumptions regarding the fairness of specific rate structures. Key among these is the fact that water budgets explicitly violate traditional rate equity concepts that assume customers within a specific rate class should pay the same bill for an equal level of consumption. Under a water budget rate structure, if a low-consumption customer exceeds his monthly budget allotment and thus pays the penalty rate, he will pay more for the same volume of water than a high-consumption customer who stays within his budget allotment. A theoretical water budget rate schedule is show below.

Hypothetical Single-Family Residential Water Budget Rate Structure		
Bi-Monthly Service Charge		\$10.00
Consumption charge (\$/ 1000 gallons)		
Block	Consumption Amount	Rate
1	Up to 100% of Budget	\$2.75
2	Up to 120% of Budget	\$3.95
3	Up to 140% of Budget (Penalty Rate)	\$6.00

A graphical presentation of Alternative 3 is shown below.



Other information on a water budget rate structure (Alternative 3)

- May be considered more equitable than Denver Water's existing rate structure (Alternative 1) by high consumption Single-Family Residential and Irrigation-Only customers because their water budget is established using quantitative metrics such as gross lot size or irrigable area.
- Allows customers to be sent an explicit summer irrigation season pricing signal through the use of the penalty rate in excess of the budget.
- May eliminate the financial incentive for Single-Family Residential customers with heavy outdoor irrigation loads to install outdoor irrigation-only taps.
- Should be the best rate alternative for implementing fair and equitable drought surcharges and consumption restrictions imposed during periods of severe drought. This is true because restrictions would be imposed on a monthly budget allotment that is, by definition, at least adequate to meet a customer's indoor and outdoor watering needs.
- If customers exceed their weather-adjusted monthly budget, low-consumption customers *may* pay more, on an average rate per thousand gallon basis, than high-consumption customers who stay within their budget – for the same volume of water. This violates the traditional rate equity concept, which assumes customers within a specific rate class should pay the same bill for an equal level of consumption.
- Utilities using water budget rate structures must maintain a variance process that allows customers to correct what they believe are incorrect utility assumptions regarding gross lot size, irrigable area and number of people per household.

- Although generally viewed as being conservation-oriented, water budget rate structures actually can send a far weaker conservation pricing signal than traditional inclining block rate structures. A water budget rate structure will achieve Denver Water's long-term conservation objectives only if the water allotment per gross square foot of lot size or irrigable area is set low enough that large lot owners risk being charged the "penalty" rate. If the water allotment is set too high, water budget rate structures only serve to provide rate relief to customers with heavy outdoor irrigation consumption. If implemented improperly, water budget rate structures actually could undermine the Board's conservation objectives.
- It may be difficult to establish water budget rate structures for Commercial, Industrial and Governmental customers because of the diversity of their water consumption characteristics. For example, some Commercial customers may have zero outdoor irrigation consumption while others have significant amounts of outdoor irrigation consumption. There are questions about how to develop a budget-based rate structure that applies to all customers without creating an exceptionally large number of very narrowly defined rate classes. Unlike Single-Family Residential and Irrigation-Only customers, a one-size-fits-all methodology for establishing a budget based on lot size or irrigable area will not work.

TIMELINE/NEXT STEPS

Denver Water's first opportunity to implement a new water rate structure is January 2010. The Board will make a decision by December 2008 in order to provide ample time for analytical and technology challenges. The proposed schedule is as follows:

Fall 2008	Begin public participation process; Web site survey available on denverwater.org .
Nov. 2008	Board receives research and public opinion regarding rate design alternatives.
Dec. 2008	Board provides guidance on preferred January 2010 rate structure.
Ongoing 2009	Continue with customer outreach and communication regarding new 2010 rate structure.

To provide comments or feedback on proposed rate alternatives, e-mail dbwc@denverwater.org or call (303) 628-6553.