

Denver Water, working with FiSite Research, designed and implemented an on-line survey to assess opinions about three water rate structures: the existing rate structure, a seasonal rate structure, and a water budget rate structure. For each rate structure, the survey provided participants with a description and asked them to rate how well it would “suit their needs.” Participants were also asked to provide comments justifying their rating. After rating all three rate structures, participants were then asked to indicate which rate structure they preferred and to provide comments justifying their selection.

Potential participants could access the on-line survey on Denver Water’s website from September 18, 2008 until October 31, 2008. The survey was advertised through a number of outlets, including local newspapers, customer lists, and an email newsletter.

## **Survey Completes**

FiSite Research was able to complete surveys with 327 respondents. The vast majority of respondents were residential customers living in or around the Denver Water service area. Fewer than 5 percent of respondents reported that they were not residential customers. Removing those respondents from the survey data analyses did not appreciably change any of the observed trends. Thus, the data from all respondents are reported here.

The survey instrument is attached as Appendix C.

## Respondents’ Ratings of Water Rate Structures

Figures III-1 and III-2 show the degree to which each of the three rate structures listed in the survey “suit customer needs.” For each rate structure, the survey asked respondents to rank it on a 10-point scale, where 1 indicated that the rate structure “does not suit my needs at all” and 10 indicated that the rate structure “fully suits my needs.”

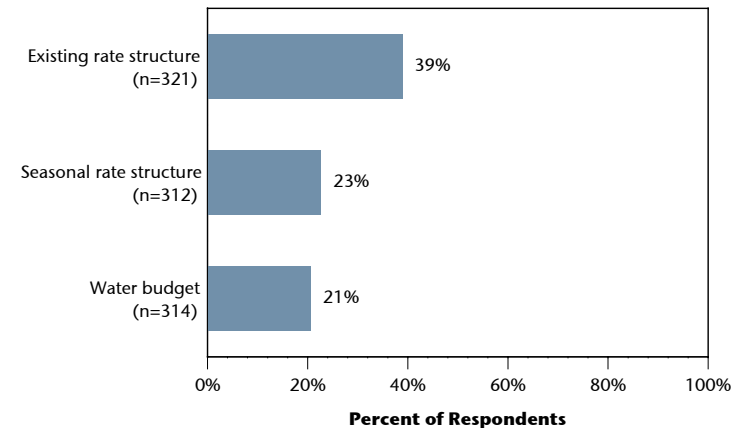
**The structure suits my needs well.** For each rate structure, Figure III-1 displays the proportion of respondents who report that it suits their needs relatively well (i.e., the combined percentage of respondents who gave each rate structure a rating of 8, 9, or 10).

As shown in Figure III-1, 39 percent of participants report that Denver Water’s existing rate structure suits their needs well, a larger proportion than for the seasonal (23%) and water budget (21%) rate structures.

**The structure does not suit my needs well.** For each rate structure, Figure III-2 displays the proportion of respondents indicating that it does not suit their needs well (i.e., the combined percentage of respondents who gave each rate structure a rating of 1, 2, or 3).

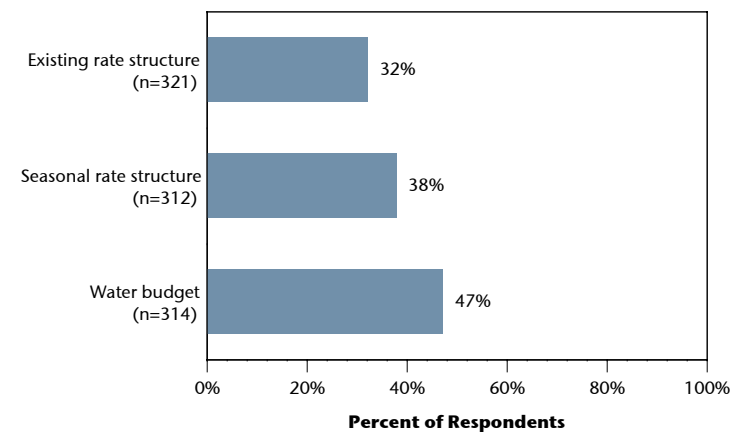
About one-third of participants report that Denver Water’s existing rate structure does not suit their needs well, a smaller proportion than for the seasonal (38%) and water budget (47%) rate structures.

**Figure III-1.**  
Rate structure suits my needs well (ratings of 8, 9, 10)



Source: BBC Research & Consulting from FiSite Research on-line survey report to Denver Water, 2008.

**Figure III-2.**  
Rate structure does not suit my needs well (ratings of 1, 2, 3)



Source: BBC Research & Consulting from FiSite Research on-line survey report to Denver Water, 2008.

After respondents evaluated each rate structure, the FiSite survey asked them to briefly comment on why they rated it the way that they did. The following pages summarize respondents' comments for each rate structure. More than 200 respondents provided comments in the on-line survey.

Of the respondents who rated Denver Water’s existing rate structure, 258 also provided comments about their rating. Approximately one-quarter of the participants gave comments indicating that they are satisfied with Denver Water’s existing rate structure, half of the participants gave comments indicating that they are dissatisfied with it, and about 5 percent gave comments indicating that they do not understand the rate structure.

## **Satisfied with Existing Rate Structure**

Of the people who report being satisfied with Denver Water’s existing rate structure, the majority indicate that it seemed like a fair way to charge people for the water that they use while still encouraging water conservation.

- “[The existing rate structure] seems to be fair. We try and conserve as much as possible, but our [water] use goes up in the summer because of lawn maintenance. It seems like a structure that encourages conservation.”
- “The more you use, the more you pay which is the way it should be. Water should be more expensive, making people use it more wisely.”
- “It keeps your 'eye on the ball' when considering running the hose, particularly for lawn and garden care. I think that economic incentive is a good way to keep people's usage reasonable.”

## **Dissatisfied with Existing Rate Structure**

Among people who report dissatisfaction with Denver Water’s existing rate structure, most say it is unfair because it does not account for individual differences across residents related to land conditions, lot size, and family size.

- “I bought a house with an existing sprinkler system and landscaping. To change it would cost big bucks, which I don’t have. This rate structure penalizes me for having landscape.”
- “People who use water in the summer to water trees, etc. should get a lower rate! We help the environment – not like some people who take one hour showers three times a day! Also, what about a family of two using more water than a family of five?”
- “[The] current structure does not account for significant differences in ... lot size, building area, or activity level among the members of a customer rate class. Of greatest concern is single family residential. A single class does not account for the meaningful differences between very small single family properties and very large single family properties ....”

## **Do Not Understand the Existing Rate Structure**

Of the people who report not understanding Denver Water's existing rate structure, many of them note that they do not understand how they are charged.

- “I can't grab the concept [of Denver Water's existing rate structure] ... I would have to have someone come out and explain [it] for my particular area.”
- “Maybe I am not understanding this, but it looks like I should be paying \$2 a month for my 6,000 gallon single-family consumption but have been paying \$24. Have I been overcharged?”

## **Other Comments**

Below are some other comments that respondents provide about Denver Water's existing rate structure.

- “I still would like to see monthly billing. An elderly neighbor had an enormous bill, because she had a leak in her system ... Had it been a monthly bill, she would have detected the leak much sooner. The same thing could happen to any number of people.”
- “Water is a scarce resource in the west and is much too cheap!”

Among respondents who rated the seasonal rate structure, 219 also provided comments about their rating. About one-quarter of the participants had comments that indicate they think the seasonal rate structure is a good idea, about 35 percent say that it is a bad idea, and another one-quarter indicate that they do not understand the rate structure.

## Seasonal Rate Structure is a Good Idea

Most of the people who indicate that the seasonal rate structure is a good idea report that it would be better than Denver Water's existing rate structure.

- “[The] seasonal rate structure is better for large lot customers. Customers with large lawns and gardens can still be efficient and not be penalized as much for keeping their property looking good.”
- “[The seasonal rate structure] is a really interesting concept. I like the fact that it specifically raises awareness of summer water usage and may be more effective at encouraging people to reduce their outdoor water use.”

Other respondents indicated that they liked the idea but still had concerns about it.

- “[The seasonal rate structure is] better than [the] existing structure. However, [there are] too many unknowns, and [it] still does not address the city/suburb rate differentials.”

- “[The seasonal rate structure] is better [than Denver Water's existing rate structure], but still rates should be fair. In my opinion a gallon of water should have a fixed cost for all ... just like other commodities.”

## Seasonal Rate Structure is a Bad Idea

Of the people who say the seasonal rate structure is a bad idea, most of them report that it would not account for a number of water-use related factors, including land conditions, lot size, and family size.

- “[The seasonal rate structure] does not reward good conservation efforts which recognize property sizes. It only penalizes certain water needs. Why would Denver Water penalize outdoor use more than wasteful indoor use?”
- “[The seasonal rate structure] fails to consider the size of a person's property. A person could live on a large property and use a lot of water for irrigation, and may do so in a very efficient manner, but still will pay an arm and a leg for water. Inefficient water users who live on small lots are really not penalized for being wasteful.”

Other respondents indicate that the seasonal rate structure is a bad idea because it would make water too expensive.

- “Once again [Denver Water is] raising the rates. I'm sick and tired of everyone taking it out on the working man.”
- “[The seasonal rate structure] is like a tax on a poor person who cannot afford to move to a home with a smaller lot or xeriscape at present.”

## **Do Not Understand the Seasonal Rate Structure**

The majority of people reporting that they do not understand the seasonal rate structure say that it is too complicated and confusing.

- “This rate structure seems a lot fairer. However, it's pretty complicated so I'm not completely sure I understand it. “
- “Are you kidding? Do you think that the average person will understand this garbage? A flat – if slightly high fee – per gallon for all users, residential or commercial. Stop making it so complicated – it looks like you are trying to hide something.”

## **Other Comments**

Below are some other comments that respondents provide about the seasonal rate structure.

- “[The seasonal rate structure] doesn't encourage people to conserve indoors, as the previous plan would. People could waste as much as they want in the winter on this plan, knowing that whatever they used would be at the lower rate. Still, it would encourage conservation in summer.”
- “[It] Seems like [the seasonal rate structure] would encourage further conservation for folks like me, but not really for folks who are not paying attention.”

Of the respondents who rated the water budget rate structure, 229 also provided comments. About one-fifth gave comments indicating that they think the water budget rate structure is a good idea, 46 percent indicate that it was a bad idea, and about one-quarter say that they do not understand the rate structure.

## Water Budget Rate Structure is a Good Idea

Most of the people who say that the water budget rate structure is a good idea note that it would address a number of water-use related factors, primarily related to lot size and family size.

- “[The rate structure] actually takes into account the reality that some taps have far more land to take care of than others ... If a person with a quarter acre lot has a leak or decides to overwater, then they should pay more than the person who has two acres and waters their land appropriately.”
- “[The water budget rate structure] addresses the issues that arise when determining how to deal with large lots versus small lots.”

Others like the idea but want more information about how Denver Water would set the water budget.

- “[The water budget rate structure] seems very fair, but again it cannot be fairly analyzed by me because you are not open about how you would set the monthly budgeted amount.”
- “Seems to be a fairer approach, although the factors used to determine the "monthly budget" would need to be reviewed in detail in order to comment further.”

## Water Budget Rate Structure is a Bad Idea

Of the people who indicate the seasonal rate structure is a bad idea, the majority say that they do not like the details of the plan, particularly giving more water to people who own larger lots.

- “Given current economic times, customers should be encouraged to own smaller properties so their consumption (water, utilities, etc.) is smaller. [This] rate structure seems to give permission to individuals who choose to own larger properties to use more water.”
- “I have a relatively small irrigated area, so it would work well for me. But if the idea is to conserve water, then I think that water is water and should be paid for equally. To have a bigger lot ... is a personal decision that [individuals] should have to pay for. If I decide to buy an SUV that gets 10 mpg and my neighbor has a moped that gets 75 mpg, it isn't up to the gas station to structure what I pay per gallon based on the fact that my choice in cars gets poor mileage. We're ... individuals making personal choices and should pay for those choices.”
- “It sounds like these budgets would reward people whose long-term choices (large yard, large family, etc.) require high water while relatively penalizing people whose long-term choices (small yard, smaller family) lead to lower water use.”

## Do Not Understand the Water Budget Rate Structure

People who indicate that they do not understand the water budget rate structure report that it is too complicated and confusing.

- “How is the budget actually determined? How will it accommodate changes like changes in number of residents and changes to landscaping? Does a lot with landscaping start with the same budget as grass or swimming pools?”
- “[The water budget rate structure] looks more complicated to implement and for the public to understand. In my case, how would Denver Water know how much of my lot is taken up by my garage, paths, patio, etc.? I don't understand how you would know what my irrigable area is.”

## Other Comments

Below are some other comments that respondents provide about the water budget rate structure.

- “I already do much to conserve water and am angry that I keep having to pay higher rates. How about becoming more efficient and laying off employees?”
- “I have observed that much water is wasted in the summer. Runoff in the gutters is very high for many commercial sites and areas around these sites. And ... the tree lawn areas along Speer Blvd. ... seem to receive much more water ... than the areas actually use. More monitoring is needed.

## Respondents' Preferences for a Water Rate Structure

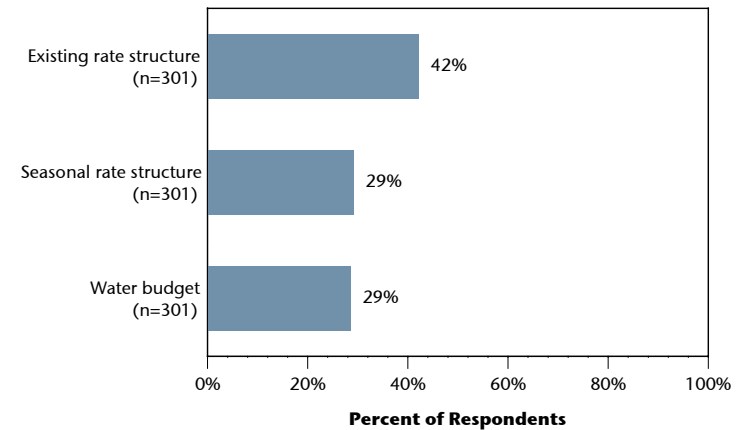
At the end of the survey, participants were asked to rate which rate structure suits their needs the best.

As shown in Figure III-3, 42 percent of participants report that Denver Water's existing rate structure suits their needs the best, a larger proportion than for the seasonal (29%) and water budget (29%) rate structures.

Comments participants made justifying their rate structure selections were also examined. Respondent comments are very consistent with the comments participants made immediately following each of their rate structure ratings.

(Note that although those comments are not discussed any further in the present report, they are included in the report that FiSite Research presented to Denver Water.

**Figure III-3.**  
**Rate structure that suits my needs the best**



Source: BBC Research & Consulting from FiSite Research on-line survey report to Denver Water, 2008.