

December 2011

DROUGHT

Response Plan



- Restrict water use on less heavily used areas of parks where grass can go dormant before restricting use on formal and informal playing fields, where recreational activity would either kill the grass or have to be prohibited.

Minimize adverse financial effects.

- Be respectful of water-based businesses that will be financially affected by restrictions.
- Restrict seasonal commercial use, which is likely to be outdoors.
- Restrict nonessential uses of water in businesses before affecting fundamental business functions.
- Work with large-volume water users to reduce use in the least disruptive manner.
- Engage in ongoing dialogue with the green industry to obtain input and allow these businesses to plan for future months.

Eliminate waste.

- Enforce restrictions and permit limitations in an effective manner.
- Adopt restrictive criteria for exemptions from restrictions.
- Discourage or prohibit irrigation of medians.
- Prohibit installation of new landscaping if its survival next season is in doubt.
- Provide incentive programs to promote savings.
- Perform audits to identify water waste and recommend solutions.

Adopt extensive public information and media relations programs.

- Inform customers about the problems caused by drought and what they can do to help.
- Hold and attend public meetings as necessary to receive input.

Surcharges

When considering surcharges during drought conditions, Denver Water will consider several guiding principles in developing surcharges:

There is a relationship between price and demand. In theory, customers respond to an increase in price by reducing demand. But at what price level will customers reduce demand? The answer depends on a number of factors, especially uses of water. Indoor uses, such as bathing and drinking, are typically more essential than outdoor uses, such as lawn irrigation. Therefore, customers are more likely to reduce nonessential outdoor uses as the price increases than they are to reduce essential indoor uses.

Surcharges will be incorporated into an overall program to increase customer awareness of the drought's severity and the importance of saving water. A variety of actions, including surcharges, cause customers to reduce their water use. Surcharges play a role in creating an environment in which customers recognize the importance of reducing water use.

Surcharges may apply to current water demands, new taps or other demands on the water supply. Some people disapprove of issuing new taps when existing customers are subject to surcharges during a drought. Applying various forms of surcharges to different types of demands on the water supply provides an equitable method allowing all customers to share the burden of preserving the supply.

Surcharges are less effective by themselves. Industry studies and Denver Water's customer surveys indicate that surcharges are more effective at reducing water use when combined with other restrictions to create an atmosphere of saving water. Customer response to surcharges varies depending on several factors, such as affluence, billing frequency and the normal cost of water. Empirical data show that customers respond to temporary water pricing strategies as part of a water savings environment.

Surcharges are separate from rates. Denver Water is a nonprofit governmental agency that sets rates based on the cost of providing service to customers. Drought surcharges, on the other hand, are designed to send a price signal to customers to raise awareness of the value of water, reduce water use and penalize those who don't comply with drought restrictions. These goals are better accomplished when surcharges are implemented as a temporary measure.

Surcharges should match the severity of the drought. Because every drought is different, each one may require a different set of responses. Surcharges must be structured to help create an atmosphere of appropriate water savings. Surcharges may include one or more of the following components:

- Increasing the unit rates for each customer class while retaining the existing structure.
- Modifying the block thresholds for single family residential and multifamily customers.
- Increasing the number of tiers for single family and multifamily customer classes.
- Increasing the number of seasonal periods for nonresidential customer classes (e.g. low, medium and high seasons).
- Changing the price ratios for tiered or seasonal rate structures. This would include single-family residential, multifamily (less than five units), and nonresidential customer classes.
- Developing individualized structures for metered irrigation-only customers.

These surcharge price or structure changes would be applied uniformly across the affected customer class. For example, if the single-family residential block 1 rate increased by 100 percent, all single family customers both inside city and outside city would be increased by 100 percent.

Surcharges must be feasible for computer systems to handle. Denver Water must be able to respond to drought conditions quickly and efficiently. Any change in water use charges must be manageable with only moderate modifications to existing computer systems.

Surcharges should be tailored for different customer groups. Commercial and industrial customers use water differently from residential customers. Large-volume public use customers may need some accommodation. The surcharge structure must be flexible enough to promote water savings while still addressing diverse customer needs and supporting drought restrictions.

Surcharges should reflect overall drought response philosophies. Because all surcharge structures divide customers into groups, no surcharge structure is 100 percent fair. Some customers may pay a surcharge even if they comply with the other restrictions.

Surcharges may need to be seasonally adjusted. In Colorado, water use is greater in summer than in winter. Outdoor use is more discretionary than indoor use, and surcharges should be adjusted to reflect this. Because restrictions to reduce indoor use are difficult to design, adjusting surcharge thresholds can be more effective at monitoring and reducing indoor water demand in winter.

Public information is important in helping customers understand surcharges. When surcharges are designed and implemented, the public must receive adequate information to fully understand the surcharge program.

Surcharges are temporary measures. Denver Water must determine criteria for lifting the surcharges before implementing them. This way, customers understand that the surcharges are a temporary measure during a drought.

Equity issues related to removing the surcharge should be addressed in advance. Denver Water won't necessarily remove surcharges at the end of a billing period. Criteria for lifting the surcharge once the specified conditions occur should be considered ahead of time.

Enforcement

Denver Water has an enforcement program to help customers understand and obey water waste rules and drought restrictions. During a drought, monitors will patrol Denver Water's service area, looking for customers who are not complying with the rules. The primary mission of the drought monitors is to educate customers. Drought monitors will distribute educational materials, help customers reduce their water use and answer questions about the drought. Violators may receive written warnings and may be fined for repeat violations. Flow restrictors may be installed at properties with repeat violations.

Recruitment. Denver Water has been enforcing its water waste rules since 2008 and will use these seasonal employees to enforce drought restrictions. It may be necessary to press into service additional people from the Customer Service section.

Training. Drought monitors will undergo an intense training program to prepare them to enforce drought rules. Dispatchers and administrative staff will participate in the training program, which will address:

- Customer service standards
- Reading meters
- Understanding the drought restrictions
- Operating irrigation systems
- Knowing the boundaries of their patrol area
- Understanding the data entry equipment

Documentation. Drought monitors will utilize a system to track violations and enable him or her to issue the appropriate warning or ticket. Drought monitors also will track stops that were educational and did not result in a ticket or a written warning.

Appeals. Anyone fined for violating a drought restriction may appeal, but must pay the fine with the bill by the due date. If the Board grants the appeal, Denver Water will credit the disputed charge on the customer's next bill.