

## Item 8 Written Comments

Utah's 2021 drought has highlighted many of the complicated issues that contribute to water planning, including weather uncertainty, decreasing water availability, development trends, and fast-growing populations. As we strive to provide adequate supplies of water, a significant part in addressing these challenges is achieving additional water conservation results. This will require the proper mix of education, incentive programs and effective policy.

The following are a few of Jordan Valley Water's top priorities when it comes to encouraging water conservation and eliminating water waste.

### **Water Efficiency Standards:**

One of Jordan Valley Water's most urgent areas of concern is the adoption of outdoor and indoor water efficiency standards for new construction. Without integration of water use planning with land use planning, new development creates a perpetual commitment to deliver water for less efficient use. In addition, many water providers are now providing incentives to retrofit existing landscapes and plumbing fixtures to be more efficient, however new construction continues to incorporate inefficient technologies and practices. Sustained efforts are needed to expedite the adoption of water efficiency standards. This would significantly reduce water waste not only now, but in the future. In the past year, four of Jordan Valley Water's member agencies have adopted comprehensive outdoor efficiency standards including Herriman City, South Jordan City, West Jordan City, and Bluffdale. These communities provide an example of what could be accomplished on a wider scale.

We suggest a balanced approach in addressing the adoption of water efficiency standards between indoor and outdoor water uses. Significant water conservation results can also be achieved in Utah through the installation of water efficient plumbing fixtures as new construction takes place.

### **Rebates for Retrofitting Inefficient Landscapes and Fixtures:**

Incentive programs and rebates offered by the state and local water providers have been an effective tool for water conservation. With water efficiency standards in place, these programs become even more effective as funds can be focused on retrofitting existing properties rather than incentivizing new installations. Funding these landscape transformations is very costly and any incentives will need to be high enough to encourage the expenditure of time and money to achieve the desired outcome.

### **Water Rates:**

Effective rate structures will lead to more thoughtful use of water. We suggest that the design of water rates include three major considerations: 1) the cost of service, 2) fairness and equity among all user classes, and 3) incentivizing efficient use.

Thank you for the opportunity to provide these comments.

Bart A. Forsyth, P.E.

Nathan

From our perspective, a few thoughts.

Thanks

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Water users need to have an understanding of the increasingly competitive environment in which this finite resource is being asked to compete. Population growth, a changing climate, shifting public interests and increasing costs associated with the upkeep and development of new water sources all impact the future of our water supply and consequently our economy, and quality of life. We all need to understand that past practices and expectations related to our landscapes and economical uses of our water supply will need to shift and adapt. Just as our predecessors planned for and sacrificed for our benefit through the construction of large water projects we will be required to make similar sacrifices through the adoption of more efficient and sustainable practices related to our water use. We will be asked to do more with less, but certainly not go without.

- Policy Measures – Policy has the ability to affect large numbers of users at once, resulting in widespread accelerated implementation of critical conservation measures.
  - **Landscape Ordinances**
  - Secondary Metering
  - Tiered Water Rates with drought condition tiers
- Education – By educating the public regarding the need for conservation and making them aware of programs and ways they can conserve, the backbone of all water conservation efforts is established.
  - Public and School Education programs
  - Landscape classes
  - Water Audits
  - Conservation Classes
  - Landscape water requirement calculator
- Incentives Measures – the adoption of water efficient practices can be targeted to high water users or low-income customers through the use of incentives. These incentives serve to accelerate the adoption and implementation of various conservation programs as well as equity amongst various users. As water becomes increasingly expensive incentives offsetting the adoption of conservation programs with user costs will need to be prevalent to ensure that tiered water rates, bill-by-usage or other “punitive” programs do not impact low-income communities more than others. By providing incentives communities can adopt sustainable landscapes while ensuring they’re not priced out of maintaining their landscapes.
  - Residential/Commercial Toilet Replacement Rebates
  - Residential/Commercial smart irrigation controllers
  - Showerhead and aerator incentives
  - Residential/commercial landscape conversion incentives
- Secondary Metering – Secondary metering can certainly be placed in the education category, but is also used to facilitate incentives and policies. Secondary meters allow for accountability to the end users, user specific education as well as the adoption of additional conservation programs such as bill-by-usage, etc. The educational component of secondary meters has demonstrated water savings of 20-30%. Preliminary data also suggests that bill-by-usage results in an additional 10% savings.

## Education

Education provides the backbone for any conservation program. Public awareness and knowledge of how to conserve water can drive widespread action with minimal effort. While effectiveness of many education programs is difficult to directly measure, education increases awareness, and ensures effectiveness with incentive programs.

## Incentives

Incentives offer financial encouragement to adopt efficient fixtures, appliances, landscaping, etc. Incentives can be targeted at high water users or at low-income customers and can help speed up adoption of water saving practices. Typically, the costs and effects of incentives are quantifiable (for example, \$100 rebate for a toilet nets a 60% reduction in gallons per flush).

## Policies

Policies have significant impact on conservation by affecting large numbers of customers at once. For example, water-efficient landscaping standards reduce water use significantly, so policies requiring efficient landscaping for new homes can have a large impact on water use associated with growth. The effect of some policies, such as a water-banking program, are difficult to measure.

## Metering

Secondary metering doesn't fit neatly into any of the previous categories and requires enough effort to warrant its own category. Measuring how much secondary water is being used is one of the first steps to reducing usage in this area. The UDWR goals rely on metering all secondary connections by 2040.

Nathan,

Here are a few thoughts I received from our conservation folks at CUWCD. These are very brief but I believe are the best areas of focus.

To encourage water conservation we need to focus on outdoor water use/waste and what landscapes that save water look like and how they can be implemented. We should include the need for landscape ordinances that reduce turf in new development for both commercial and residential. Coordination between land use and water use planning at a local level would be very beneficial. The H2O Collective (a joint effort with Prep60 districts and ULCT) is making head way in this arena.

There also needs to be a discussion around water loss and system efficiencies to include metering of both secondary water and unmetered municipal connections (parks, cemeteries, schools, etc.). A focus on effective billing strategies to curtail waste should also be considered. This should incorporate lot size allocations so that users know how much should be applied with significant tiers for over use.

In addition to ordinances and education we should continue to invest in incentive programs to encourage conversion to water efficient devices. This could be replacement of outdated irrigation and landscape conversions. This should also include indoor fixtures but to a much lesser extent outside of commercial applications.

- Secondary metering
- Landscape ordinances for new development
- System water loss audits
- Utility billing strategies
- Incentive programs

Thanks Nathan for the chance to provide some comments and know we're happy to discuss further.  
Gene