



December 17, 2014

Felicia Marcus
Chair
California Water Resources Control Board
1001 I Street
Sacramento, California 95814

RE: Urban Water Conservation Workshop

Dear Chairman Marcus:

Thank you for the opportunity to address the Board regarding potential measures to conserve water if the drought continues. As everyone is painfully aware, California has been in the grip of a devastating drought for a number of years. This drought threatens every Californian's health and economic well being. As such it is imperative that the State take actions to ensure an adequate water supply for all.

In 2008, after suffering through another, albeit less severe, drought, the State's Department of Water Resources adopted updates to the Urban Drought Guidebook. This guidebook represented the best technology and practices of that time for combating drought and conserving water supplies. But since that time much research and development has taken place. Some of the measures in the guidebook are now out of date or have proven to be less effective in practice than originally conceived in theory.

That does not mean that we should scrap the guidebook entirely and begin anew. For example, even though the mandate for low flow showerheads upon transfer of any residential property can be easily defeated by the new homeowner, the mandate still reduces water in a majority of instances. But some measures contained within the guidebook have become outdated due to recent technological advances.

The largest water use in the urban environment is for landscape irrigation. There are many obvious measures contained within the guide that will reduce water consumption. These would include such things as eliminating spray onto hard surfaces such as sidewalks, streets, etc. where any water would be wasted. The substitution of traditional spray irrigation with a drip system, wherever practical, will save a tremendous amount of water. But there are also measures contained within the guide that have not resulted in any significant reduction in water consumption and in fact may actually serve to increase water use in some instances.

The notion that restricting the days that irrigation can occur to three or even two specific days, will not reduce water consumption. In far too many instances, all this accomplishes is concentrating water use on those specific days with little or no reduction on monthly water consumption. In some cases, homeowners may even set their sprinklers to spray longer on these days resulting in an increase in water consumption.

Smart irrigation systems that can be tied to moisture sensors and weather information if not used properly become expensive timers. Gardeners faced with dry spots on a lawn may disconnect the input devices and setting them to dispense additional water rendering them expensive timers instead of simply rearranging the nozzles to more efficiently water the landscaping. And a timer, no matter how technologically advanced, generally does not sense a broken nozzle or blocked drip emitter. The result is either wasted water as in the case of the broken nozzle, or either a dead patch in the landscaping that is often "fixed" by setting the drip system to water longer.

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Yet these systems receive water agency rebates for their installation. And the property owner may not actually realize that their system is wasting water for a month or more, only discovering the problem when they get their monthly or bi-monthly water bill. This results in water waste and a waste of water agency conservation resources.

What is needed is a rebate or incentive system that establishes a conservation water budget for the property with incentives to the property owner to reach and maintain that budget. In this way, the homeowner becomes a partner with the water agency. Does it really matter if the 20% or 30% reduction comes from turf replacement, the establishment of a drip system, replacement of water thirsty plants with drought resistant plants, or the installation and maintenance of a smart irrigation system? No, the reduction in consumption is the key factor, not how it was achieved. Conversely, the installation of this equipment is in and of itself of little or no value unless it corresponds with a reduction in the property's monthly water use.

The installation of a smart water metering system, whether by the water agency or by the homeowner, that allows the homeowner the ability to view their water use in real time is now available. The Seco Sys Control Technologies Water Management system is one such system. This system accurately measures even minute water flows, distributes water on a volumetric basis instead of simply a timed distribution, detects leaks, provides text, email or voice alerts for pre-established events including leaks or unusual water use, offers the option of automatic or remote water shutoffs in the event of a leak, incorporates state of the art weather data, and provides analytic tools to measure water consumption against a water budget, etc.

Using the Seco Sys Water Metering and Management System, an HOA in Palm Desert was able to use the information to employ best irrigation practices, which in turn resulted in a 45% reduction in water consumption for irrigation. They did this without removing turf or changing their landscaping. Two years later, the HOA continues to meet their self-imposed water budget saving water in the water-starved Coachella Valley.

As new water saving technologies are developed and employed, a system which rewards successful water conservation would allow Californians the opportunity to access water saving innovations. It would reward companies that develop those innovations and encourage investors to finance water saving innovations by providing a market for the resulting products. And, perhaps equally as important, it would insure that California's precious financial resources dedicated to water conservation are used to actually reduce water use instead of rewarding "feel good" but not necessarily effective water conservation practices and technologies.

We cannot change the weather to bring an end to the drought. But we can take steps to conserve. By not rewarding potentially impotent conservation measures and instead rewarding conservation successes, California can allow our famous innovation economy to come to bear on the problem of water conservation. An incentive system that rewards success coupled with a more stringent tiered rate structure that penalizes excessive water use would compel Californians to conserve even in those areas that have traditionally underperformed.

One problem with such a system might be that it potentially rewards water users who in the past have not taken steps to conserve and fails to reward those that have. In order to ensure that the system is implemented fairly, the State Water Board should look at historical water use data for each district and property when establishing target water budgets for any incentives. This historical data should reach back at five years and pre-date the current drought. State law has set a target of 10% reduction in water use from 2010 levels by 2015 and 20% reduction by 2020. As such, 2010 water consumption rates would seem to be the most logical to be used to establish future target water budgets for both districts and individual properties. Any incentives offered should be for properties that exceed the mandated 20% conservation targets. These incentive budget targets can even be set for higher conservation levels of 30% or even 40%. The more a property owner reduces their water use from 2010 levels, the more incentives they should receive. The reverse would be true for a property owner that fails to conserve although

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any punitive rate structures should take into account individual property circumstances such as a change in use.

Again, Seco Sys appreciates the opportunity to address the Board regarding the all-important issue of water conservation. We look forward to working with the State to deploy a water management system that can empower property owners to take control of their water use in a similar manner as energy users have been empowered by smart meters to reduce their energy consumption.

Thank you.

Sincerely,



Jim Lantry
VP, Sales and Government Relations
Seco Sys Control Technologies

