

## DOCKETED

<b>Docket Number:</b>	15-WATER-01
<b>Project Title:</b>	Water Energy Technology (WET) Program
<b>TN #:</b>	205227
<b>Document Title:</b>	WaterSmart Comments on WET Program
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	WaterSmart/Peter Yolles
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	7/2/2015 1:40:14 PM
<b>Docketed Date:</b>	7/2/2015

*Comment Received From: Peter Yolles*

*Submitted On: 7/2/2015*

*Docket Number: 15-WATER-01*

## **WaterSmart Comments on WET Program**

*Additional submitted attachment is included below.*

July 2, 2015

California Energy Commission  
Water Energy Technology (WET) Program  
1516 9<sup>th</sup> Street  
Sacramento, CA 95814

Dear WET Program Staff,

We appreciate the opportunity to submit comments on the Water Energy Technology (WET) Program. We strongly support the creation of the WET Program and applaud its objectives to significantly reduce water, energy use and associated greenhouse gas emissions.

WaterSmart's technology provides a valuable drought tool that immediately and cost-effectively conserves water, helping to meet the average 25% water reduction mandate and achieve the state's aggressive greenhouse gas emission goals. WaterSmart is currently helping more than two dozen utilities in California educate their customers about how much water their households use, how this usage compares to that of other households, and how they can save water, energy, and money, all with the goal of motivating them to use significantly less water. The resulting benefits translate into significant system-wide water, energy, and cost savings for utilities in the form of avoided costs for water, energy, treatment, and future capital investments.

Innovative program technologies like WaterSmart's are essential to saving water, which in turn saves energy and reduces greenhouse gas emissions. Increasing public education and awareness with more precise and comparative information on water-use through monitoring software is proven through an independent evaluation to reduce water demand by 4.6% to 6.6%.<sup>1</sup> In addition, customers receiving social-norms based messaging are between two and six times as likely to participate in water conservation programs offered by the utility, such as appliance rebates, on-site water evaluations and landscape conversions, further reducing demand for imported water and energy.

Responding to the questions proposed, our specific comments include:

---

<sup>1</sup> California Water Foundation, 2013 [http://californiawaterfoundation.org/uploads/1389391749-Watersmart\\_evaluation\\_report\\_FINAL\\_12-12-13\(00238356\).pdf](http://californiawaterfoundation.org/uploads/1389391749-Watersmart_evaluation_report_FINAL_12-12-13(00238356).pdf)

**1. What emerging technologies should be considered that provide direct on-site energy, water, and greenhouse gas savings for each of the identified sectors?**

The Governor's Executive Order B-29-15 includes a list of new technologies to consider eligible in the WET program, including water-use monitoring software. We appreciate the inclusion of water-use monitoring software as an example of an eligible technology for Agriculture and suggest expanding the technology's eligibility to both the Industrial/Commercial and Residential area in order to realize the water and energy saving benefits in all water-use sectors. Water-use monitoring software is an emerging technology that facilitates strong behavioral changes to generate on-site energy, water, and greenhouse gas savings through reduced hot water consumption in residential, industrial, and commercial sectors.

**2. What are some of the main barriers preventing implementation of advanced water and energy saving projects?**

Water utilities are notoriously risk averse and may not be willing to try new technologies without significant support from the state or local agencies. Even when technologies have been proven, utilities may struggle to find funding sources for new technologies that have not previously been budgeted. State funding support and reinforcement will help create the strong spark needed to overcome the main barriers of upfront costs and program inertia, accelerating deployment of innovative drought technologies such as water-use monitoring software. In addition, further focus and direction from state agencies on how to address the water-energy nexus will help energy and water utilities allocate additional resources to this area.

**3. How can the WET Program best bring benefits to disadvantaged communities?**

We recommend the WET program prioritize projects that demonstrate benefits for disadvantaged communities and require projects to report on results for targeted groups. For instance, water-use monitoring software generates custom water reports tailored for individual homes and also provides information on available rebates and other programs to help consumers further reduce their water and energy usage. Using targeted messaging, disadvantaged communities can be the first to receive home water reports and have early or exclusive access to the available rebates, direct install programs, weatherization, efficiency programs, and other products and services offered by their water and energy utilities. In addition, by saving water and energy, communities will save money on their water and energy bills.

**4. What grant award amounts would be most appropriate for customized projects?**

For customized projects, we respectfully request a minimum grant award of \$100,000 and 50% cost-share to effectively accelerate deployment of water-use monitoring software to achieve significant water and energy savings.

**5. Are there any operational, regulatory, or other constraints that prevent installing projects quickly?**

Water-use monitoring software is a cost-effective technology that achieves immediate water conservation for utilities throughout California. The software can be implemented within 30 days, and water and energy savings can be realized within months. There are no operational or regulatory constraints that prevent the installation of this effective technology.

**6. What is the capability of obtaining utility data showing pre- and post-energy and water use? If utility data is not available, how will pre- and post-results be documented?**

WaterSmart routinely uses Randomized Control Trials (RCTs) to determine program effectiveness in each of our 40+ utility partnerships. By randomly assigning customers to either the project group or the control group, any observed effect is isolated to that one intervention with a high degree of confidence. In addition, utilizing smart meter data for both water and energy improves our granularity of data (although data can still be collected and utilized in areas that do not have smart meters.) To illustrate, WaterSmart is currently conducting such a program in the City of Burbank with the UC Davis Center for Water Energy Efficiency and Southern California Gas Company. The program will evaluate changes in water use and natural gas consumption with hourly interval data to determine the amount of natural gas saved from reductions in hot water consumption across Burbank's residential customers.

We encourage the California Energy Commission to utilize 5-10% of the WET program's funding for evaluation, measurement and verification of the various technologies to fully realize related energy and water saving benefits.

**7. To what extent is broadband or internet availability a factor that prevents implementation of water and energy saving projects, especially on farms and in rural areas?**

Water-use monitoring software is accessible from any internet-enable mobile device or computer. For those customers without broadband or internet access, paper home water reports are mailed to their residences.

Increasing digital communication is important for improving accessibility to water-use information and reducing water and energy use. Email and texts are key ways to communicate leak detection or other timely notices. Historically, water utilities have not requested email or cell phone information, but we highly recommend that utilities collect this data to help further water and energy savings.

**8. What changes to the draft guidelines are needed to ensure the purpose, instructions, and eligibility requirements are clear?**

We appreciate the release of the draft guidelines for agriculture and look forward to the release of the draft guidelines for industry, businesses and residents to provide comments.

Here are a few suggestions to clarify the instructions. Please consider:

- a. Including a list of co-benefits that will not yield points.
- b. Developing and providing an Excel-based spreadsheet with pre-programmed formulas. Such a spreadsheet may reduce or identify calculation errors by users.
- c. Specifying a font type and size for the application.

We thank you for the opportunity to submit comments on the WET Program and appreciate your support in accelerating the deployment of needed technologies that are proven to be cost-effective and immediately responsive to the state's historic drought.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter Yolles". The signature is fluid and cursive, with the first name "Peter" and last name "Yolles" clearly distinguishable.

Peter Yolles  
Founder