WELCOME

Introductions

- Name
- Organization
- Ocean or Mountains?
Agenda

• Welcome and Introductions
• September 2018 Meeting Notes
• Host Presentation-SSWD
• Lessons from Water Smart Innovations (WSI) Conference
• Program Updates
• Agency Announcements
• Lunch
• Adjournment
BE WATER SMART
Meeting Notes

• September 2018
• Approve and post online?
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Host Presentation

• Sacramento Suburban Water District
  Greg Bundesen, Water Conservation Supervisor
Lessons from WSI

- Garden in a Box-Colorado (William)
- AMI (Linda)
  - SFPUC
  - Alliance for Water Efficiency Interoperability Study
- Short and Sweet (Amy)
  - Random Control Trials, San Antonio Water System
  - Energy Savings from Drought, UC Davis
  - Regional Water Loss Hub, MWDOC
THE GRASS IS ALWAYS GREENER

using social marketing to motivate homeowners to remove turfgrass
GARDEN IN A BOX
beautiful landscapes made easy

- Water conservation via landscape change
- Pro-designed xeric garden kits
- DIY kits include:
  - 15 to 30 starter plants
  - Plant and care guide
  - 1-3 plant by number maps
- Size: 60 to 100 sq. ft.
- Cost: $109.00 to $159.00
PROGRAM IMPACT

• Xeriscape uses up to **60% less water** than traditional turf

• In 2018, Resource Central sold **5,210 gardens**

• Through 2018, an estimated cumulative lifetime savings of **135 million gallons of water**

• Through 2018, **1.8 million sq. ft.** of landscape converted to water-wise gardens
CHALLENGES + OPPORTUNITIES

- **39% of customers** removed grass and replaced it with the help of Garden In A Box
  - Roughly double the percentage captured in 2017

- **Primary reasons for purchasing:**
  1. To make my yard more attractive
  2. To use less water on my landscape
  3. To attract pollinators and other beneficial wildlife AND it seemed like an easy way to garden

- **Word of Mouth** – one of the top 3 reasons people hear about the program
  - 15% of customers hear via “word of mouth”
Lessons from WSI

Advanced Metering Infrastructure (AMI)
- SFPUC Presentation
- Alliance for Water Efficiency Interoperability Study
Random Control Trials;
The Future of Testing New Conservation Ideas?

Karen Guz
Conservation Director
San Antonio Water System

WaterSmart Innovations Conference
October, 2018
Outdoor Conservation = Behavior Based Programs

Human decisions/values/ideas determine outdoor water usage....not science

- 70% of households watered less than “theoretical irrigation requirement” in REUS study
- A percentage of households will increase water use after changing to low-water landscape plant material
- Some households increase usage after drip irrigation retrofit
- Letters pointing out usage data results in measurable reduction in household use...but often denial of impact
Behavior-based Programs Are Usually Planned with “Deemed Savings”

Often Deemed Savings Estimates Have A Key Assumption…

People Are Rational and Will Behave in Logical Ways
“Say It Ain’t So Results” Do Happen
Program Results Are Not What We Always Expect

2016 Rain Barrel Incentive
- increased water usage
- decreased participation motivation
- nearly all participants were proud of their perceived savings
Behavioral Economics

The basic message of behavioral economics is that humans are hard wired to make judgment errors and they need a nudge to make decisions that are in their own best interest.

Conclusion: Deemed Savings Assumptions May be False. Behavior-Based Savings Must Be Tested “in the wild”
Impact of California’s Urban Water Conservation on Electricity Consumption and Greenhouse Gas Emissions

Frank Loge
Dept. of Civil and Environmental Engineering
Center for Water-Energy Efficiency
University of California, Davis
Statewide monthly water deliveries relative to 2013 baseline values
Estimated electricity savings from statewide water conservation (June 2015 – May 2016) vs. total electricity savings from IOU EE program savings (July 2015 – June 2016)
MWDOC Water Loss Control: Building a Regional Hub

Striving to Achieve an Economically Optimized Level of Water Loss

WaterSmart Innovations 2018
The MWDOC Water Loss Control Program

Started in 2016 to empower Orange County agencies to:

• Comply with state water loss regulations
• Achieve cost-justified distribution efficiency
• Develop fluency in water loss analysis and management

Technical Assistance       Work Group       Shared Services

*Agencies pick which technical assistance and shared services tasks they want to pursue*
Work Group Capacity Building

Bimonthly workgroup meetings to:
- Develop expertise across Orange County
- Promote peer learning and exchange

Well-received topics so far:

Sales meter management  Performance indicators
District metered areas  Cost-justified intervention
Leak Detection  AMI
Loss and theft recovery
Progress So Far

29 agencies have participated in technical assistance

3 years of water audits

8 agencies that tested customer meters through the MWDOC program

Acquisition of a USBR grant for regional leak detection equipment lending library

Pilot leakage savings research with MWDSC
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Program Updates

• 2018 Water Year Review and 2019 Water Year Preview
• Regional Water Supply Efforts
• Landscape Imagery Analysis Request for Proposals
• CalWEP
• Water/Energy Peak Use
• Winter Campaign
• QWEL

BeWaterSmart.info
Precipitation – Percent of Normal

October 1st, 2017 – September 30th, 2018

Redding
Sacramento

NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
National Weather Service - Sacramento
Data: (AHPS)
September 2018 Climate Summary
Interior Northern California

Redding
- Warmest Temp: 105°
- Average Temp: 52.4°
- Number of 100° Days: 7
- Average of 100° Days: 5

Sacramento
- Warmest Temp: 99°
- Average Temp: 89.5°
- Number of 100° Days: 0
- Average of 100° Days: 3

Chico*
- Warmest Temp: 106°
- Average Temp: 94.8°
- Number of 100° Days: 1
- Average of 100° Days: 2

Blue Canyon
- Warmest Temp: 105°
- Average Temp: 84.4°
- Number of 80° Days: 7
- Average of 80° Days: 8

Stockton
- Warmest Temp: 99°
- Average Temp: 80.5°
- Number of 100° Days: 0
- Average of 100° Days: 2

Fairfield
- Warmest Temp: 99°
- Average Temp: 66.2°
- Number of 100° Days: 0
- Average of 100° Days: 1

Modesto
- Warmest Temp: 97°
- Average Temp: 83.7°
- Number of 100° Days: 0
- Average of 100° Days: 3

August 2018 Climate Summary
Interior Northern California

Redding
- Warmest Temp: 109°
- Average Temp: 97°
- Number of 100° Days: 13
- Average of 100° Days: 12

Sacramento
- Warmest Temp: 106°
- Average Temp: 92.2°
- Number of 100° Days: 6
- Average of 100° Days: 6

Chico*
- Warmest Temp: 100°
- Average Temp: 91.7°
- Number of 100° Days: 3
- Average of 100° Days: 5

Blue Canyon
- Warmest Temp: 97°
- Average Temp: 84.3°
- Number of 80° Days: 17
- Average of 80° Days: 11

Stockton
- Warmest Temp: 106°
- Average Temp: 91.3°
- Number of 100° Days: 4
- Average of 100° Days: 5

Fairfield
- Warmest Temp: 99°
- Average Temp: 87.1°
- Number of 100° Days: 0
- Average of 100° Days: 2

Modesto
- Warmest Temp: 106°
- Average Temp: 82.8°
- Number of 100° Days: 5
- Average of 100° Days: 5
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2019 Water Preview

• El Nino is forecasted
  – 70% chance
  – Wet winter?
  – Worth all the hype?
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Regional Water Supply Efforts

- Water Quality Control Plan
  - Sacramento
  - San Joaquin

- Regional Reliability Plan

- Groundwater Bank/Water Transfers

- Integrated Regional Water Management (IRWM)
  - Water Efficiency Projects
    » Water Loss
    » Public outreach
    » Rebates/Direct Install
    » Joint Water Energy Programs
    » Research studies

BeWaterSmart.info
Landscape Imagery Analysis RFP

- Calculate irrigated and irrigable residential area
- Estimate residential landscape water budgets
- Estimate water agency targets for the legislation

- Executive Committee directed staff to release an RFQ/RFP
- December 2019 release
- January/February start

- Collectively funded through RWA
- Interested?

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CalWEP

- Chair transition
- AWE Board Appointment
- New Executive Director
- Focus on Member Benefits
  - Conservation Legislation

- What do you want to see from CalWEP?
  - Research
  - Public outreach materials
  - Etc.?
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Energy/Water Peak Use Coordination

• SMUD Time of Day Pricing in 2019
• Opportunity to partner?
  – Peak Energy Use = Peak Water Use
• PG&E?
• Joint programs?

Get to know our Time-of-Day Rates

Learn about our new residential rate and how it gives you more control.

SMUD phasing in new rate plan based on demand

Sacramento home energy users could be among the first in California to pay rates that rise or fall based on the time they consume energy, with summer peak time electricity prices possibly costing three times that of current base rates.

The new structure, called a “time of use” rate, seeks to shift demand for power away from times when energy is typically consumed the most - during summer weekdays from 4 p.m.
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Winter Campaign

• New campaign for set your clocks back, dial back controller concept
• Ideas:
  • Hibernate
  • Once Upon a Time
  • Winter is here
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QWEL

• Wrapped up first QWEL training series
• Thank you to SSWD for hosting!!!
• Regional specific manual printed
  – $30 each
  – Amazon Prime
• Working on setting dates for the spring 2019 training
  – What water agency staff are interested in attending?
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BWS Postcard

Water You Wondering?
Find what you’re looking for at BeWaterSmart.info

When can I water my yard?
Are there rebates to replace my older toilet?
Ideas for beautiful, low-water plants?
What are the best ways to save water at home?
How much water do my plants need?
**Tired of Your Thirsty Turfgrass?**

Outdoor water use in the Sacramento region accounts for more than half of a household’s total water use, which can be 250 gallons per day in the summer. About 30 percent of outdoor water use is wasted from evaporation and overwatering. Watering in the early morning hours and installing WaterSense-labeled irrigation timers can reduce this water waste.

Another option is to replace traditional cool season turfgrass with lower-water use plant options like turfgrass alternatives and turfgrass substitutes. These plants are more suited to the Sacramento region’s Mediterranean climate.

### Turfgrass Alternatives

Turfgrass alternatives are low-water use grasses that have the look and feel of turfgrass but require half the water to thrive.

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>WATER USE</th>
<th>SUN</th>
<th>FOOT TRAFFIC/WEAR</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bermuda</td>
<td>Intermediate</td>
<td>Full Sun</td>
<td>Turfhead Resilient</td>
<td>Warm-season turfgrass, best during the summer, dormant in winter. Straw-green color; drought tolerant; needs less water than traditional turfgrass.</td>
</tr>
<tr>
<td>KUYO Zoysia</td>
<td>Intermediate</td>
<td>Partial Sun</td>
<td>Turfhead Resilient</td>
<td>Warm-season turfgrass, best during the summer, dormant in winter. Straw-green color; drought tolerant; needs less water than traditional turfgrass.</td>
</tr>
<tr>
<td>Native Mix*</td>
<td>Low, 30% less water</td>
<td>Full Sun</td>
<td>Turfhead Resilient</td>
<td>Warm-season turfgrass, best during the summer, dormant in winter. Straw-green color; drought tolerant; needs less water than traditional turfgrass.</td>
</tr>
</tbody>
</table>

*Native Mix contains native bird’s-foot-trefoil, which can be maintained as a weed lawn or left unmowed for a popcorn-like appearance, provides winter color to the landscape.**
Practical Plumbing Handbook

Regional Order-in progress
• Indoor and Outdoor
• $2.50 each
• Order with Monica
Announcements & Events
Holiday Social

When: December 11th
Where: Old Spaghetti Factory in Rancho Cordova
Who: You and your staff
Why: To celebrate our hard work in 2018
Why: To eat spumoni?
How: RSVP to Monica
<table>
<thead>
<tr>
<th>Date</th>
<th>Host</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 8, 2019</td>
<td>Regional water Authority 5620 Birdcage St, STE 180 Citrus Heights, CA 95610</td>
</tr>
<tr>
<td>March 12, 2019</td>
<td></td>
</tr>
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</table>
| May 14, 2019      | Regional water Authority  
Soil Born Farms?                                                      |
| July 9, 2019      |                                                                      |
| September 10, 2019| Regional water Authority  
Sierra Health Foundation?                                               |
| November 12, 2019 |                                                                      |
| December 10, 2019 | Old Spaghetti Factory in Rancho Cordova                               |
| January 14, 2020  | Regional water Authority 5620 Birdcage St, STE 180 Citrus Heights, CA 95610 |
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Sunsetting the RWEPAC Tours

- Raley Field (March 2017)
- Soil Born Farms (May 2017/2018)
- PCWA Pump Station (July 2017)
- Golden One Center (November 2017)
- Gekkeikan Facility (July 2018)
- Sac Tree (September 2018)
Thank You!

..And please stay for lunch

rubio's COASTAL GRILL