

# This presentation premiered at WaterSmart Innovations

[watersmartinnovations.com](http://watersmartinnovations.com)



# Reaching Across the Meter



Jon Daniel

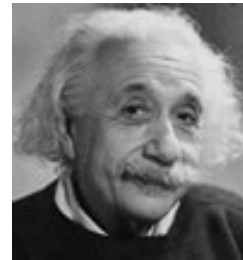
Tom Ash

# Case Studies



## Two Different Agencies With Different Issues Both Reaching Across the Meter

- Thinking Differently about Water Rates
- Communicate with customers
- Trade Technology for Labor
- Take Water Efficiency To Customers



*"Doing the same thing over and over again and expecting a different outcome, is the definition of insanity. Think differently."*

Albert Einstein

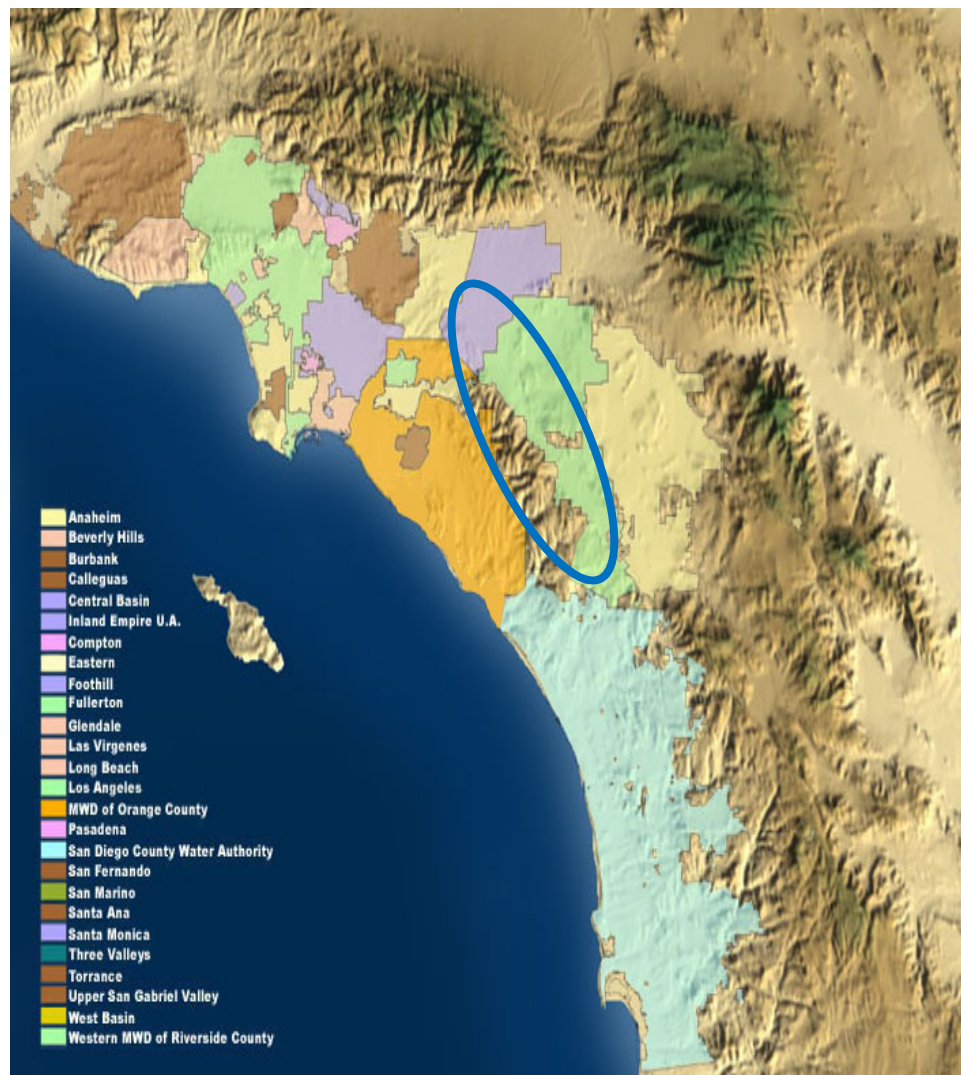
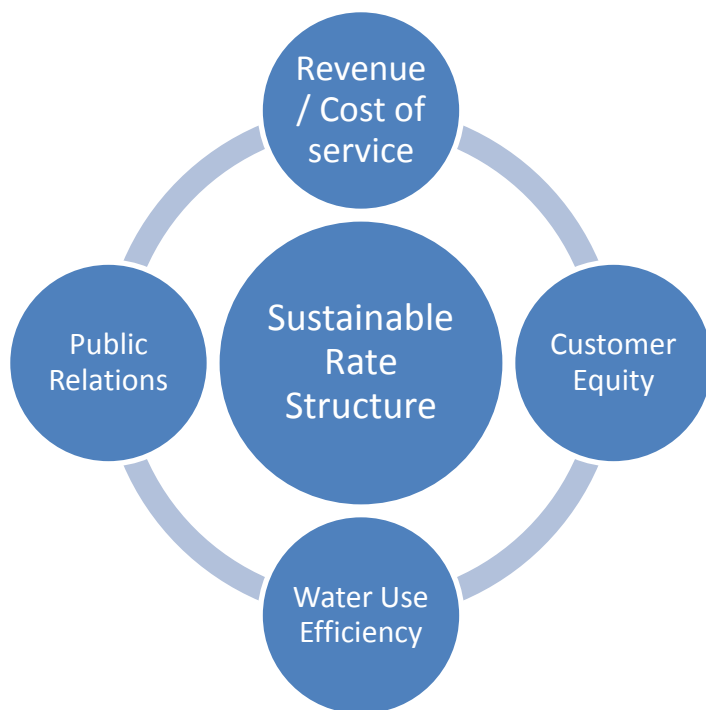
## 2008 WMWD:

**Lower water sales**

**Revenue loss**

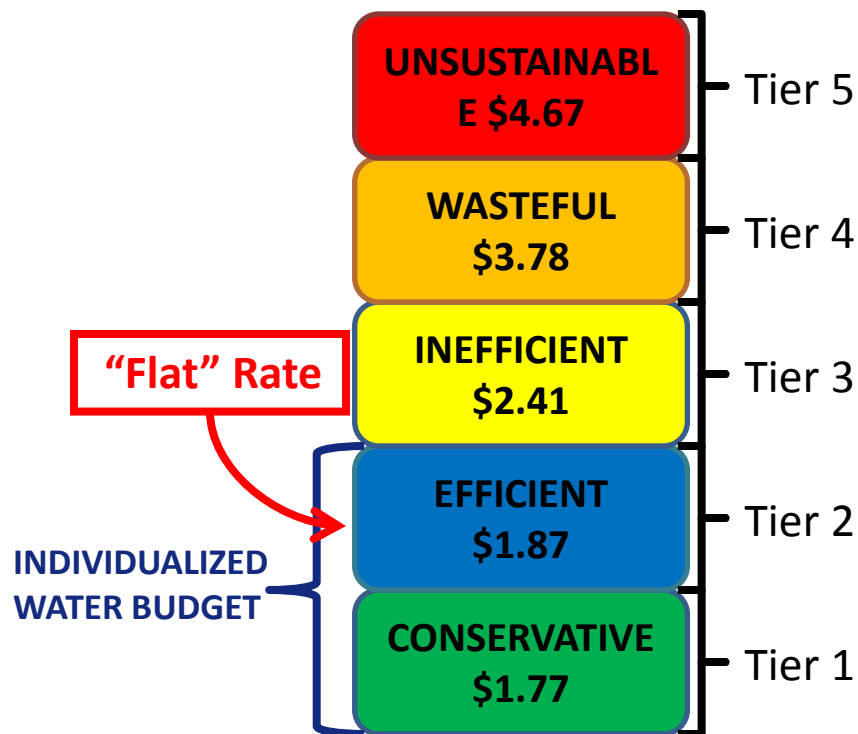
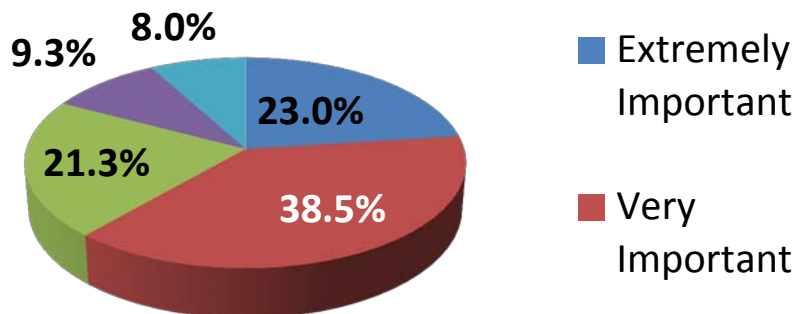
**Economic downturn**

**Drought/ Supply Restrictions**



- Educated the Board on the Issues
  - Revenue & Efficiency
- Approvals to Upgrade the Billing System
- Move to Efficiency-based Rate Design
- Reach out to Customers

How important is it to reward water use efficiency by homes and businesses and to penalize water waste (for example, with higher water rates for waste)?



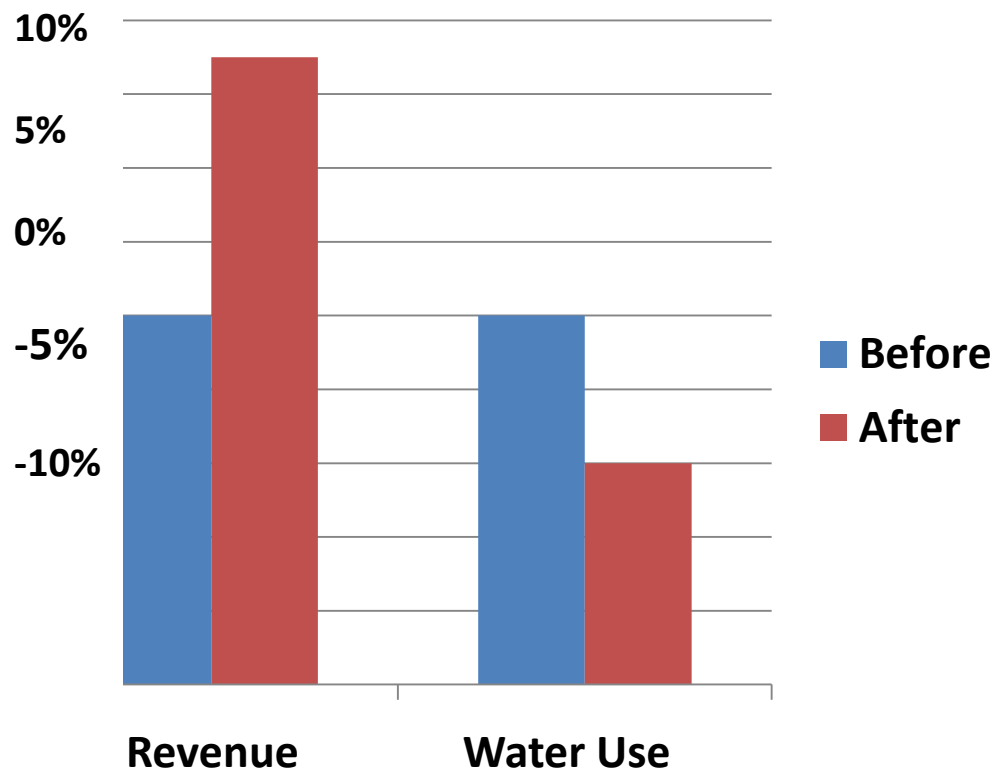
- **Staff training for the new “tool” of Efficiency-based rates**

- What and how Customer Services talks and works with customers

- **Using technology to work with customers**

- Driving customers to web programs

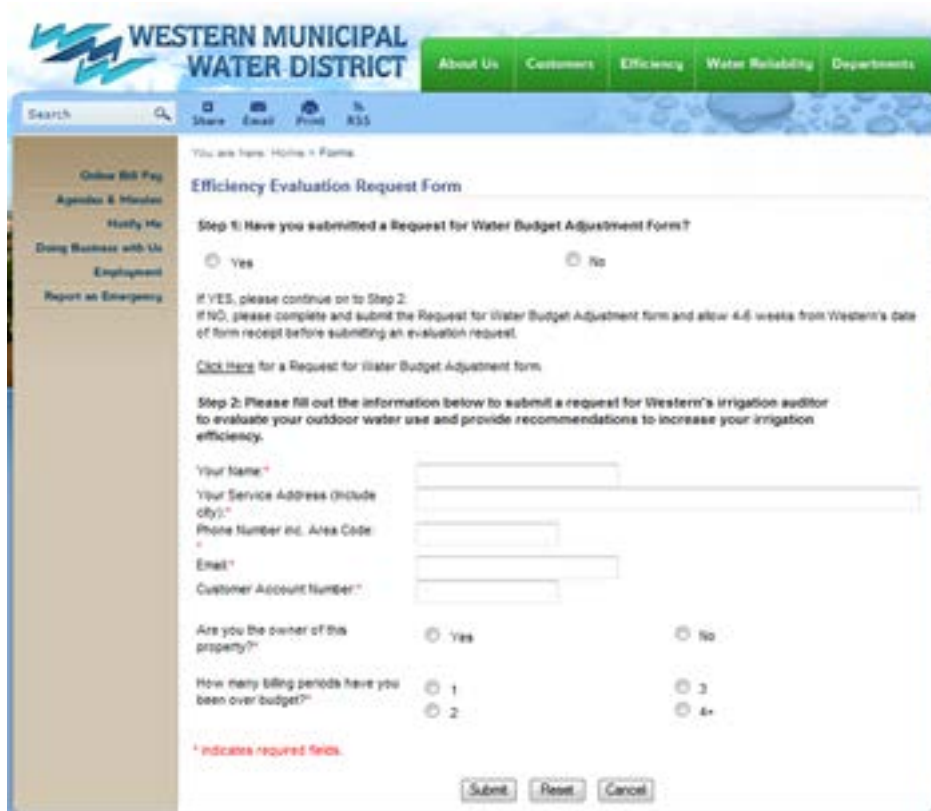
- **Conservation programs funded only by inefficient customers**



- **86%** of customers meet their billing period allocations
- **100%** of conservation programs funded
- **6 months** return on rate structure overhaul investment
- **4%** increase in conservation
- **0** mixed messages to the customer
- **0** Revenue shortfall if customers use less water



- Offer More Efficiency Programs (w/ no new staff)



**WESTERN MUNICIPAL WATER DISTRICT**

Search [ ] Share Email Print RSS

You are here: Home > Forms

**Efficiency Evaluation Request Form**

Step 1: Have you submitted a Request for Water Budget Adjustment form?

☐ Yes ☐ No

If YES, please continue on to Step 2.  
If NO, please complete and submit the Request for Water Budget Adjustment form and allow 4-6 weeks from Western's date of form receipt before submitting an evaluation request.

[Click here](#) for a Request for Water Budget Adjustment form.

Step 2: Please fill out the information below to submit a request for Western's irrigation auditor to evaluate your outdoor water use and provide recommendations to increase your irrigation efficiency.

Your Name\* [ ]

Your Service Address (include city):\* [ ]

Phone Number incl. Area Code [ ]

Email\* [ ]

Customer Account Number\* [ ]

Are you the owner of this property? ☐ Yes ☐ No

How many billing periods have you been over budget? ☐ 1 ☐ 2 ☐ 3 ☐ 4+

\* indicates required fields.

Submit Reset Cancel



**Western's Efficiency Evaluation Program**

How to Use this Report Water Budget Irrigation Schedule Recommendations Savings Estimate Tables & Programs

## How do you use this report?

Water supplies in California have become increasingly stretched by population growth, environmental restrictions and groundwater contamination, thereby driving up the cost to the consumer and increasing the need to improve water use efficiency.

In order to be environmentally friendly this report was developed in electronic form and is best viewed on screen. If you elect to print the report some of the images may not be as clear and the format may change.

This report will help you to effectively reduce excess water usage and manage your water bills over time.



WATER BUDGET	IRRIGATION SCHEDULE	IRRIGATION SCHEDULE	IRRIGATION SCHEDULE
<b>Water Budget</b> How much water does your property require? How much are you actually using? View your water usage per month and learn if you are above or below your water budget.	<b>Irrigation Schedules</b> View suggested watering schedules by season for all your controllers and stations.	<b>Recommendations</b> View recommendations for: <a href="#">Smart Controllers</a> <a href="#">Sprinkler Repairs</a> <a href="#">Efficient Nozzles</a> <a href="#">Mulch</a> <a href="#">Drip Irrigation</a>	<b>Savings Estimate</b> See how many gallons of water you will save by implementing the water savings recommendations shown in this report.

## Use Web-based Programs

- [www.smartyard.com](http://www.smartyard.com) (turn-key, vendor)
- [www.freesprinklernozzles.com](http://www.freesprinklernozzles.com) (turn-key, vendor)



**smartyard™**  
save blue = make green

SIGN UP NOW 1-888-799-6167

FAQs | SPONSORED BY WESTERN | SUPPORT | HOW IT WORKS

**Reduce your water bill**  
Protect your landscape health

- Save \$250 to \$1,500+ on your water bill
- \$600+ instant rebate
- No upfront costs. Zero money down!

**How Much Can You Save?**  
Enter your residential street address

Get a free estimate of how much \$ you can save. No home visit required for estimate.

**Go**

Smart Yard is a sustainable community water use efficiency program that will save 1 billion gallons of water and reduce water bills for you and your neighbors.

<p><b>Sponsored By</b></p>  <p>Program Funding</p>	<p><b>How It Works</b></p>  <p>Smart Controller</p>	<p><b>Testimonials</b></p> <p><i>"I chose Smart Yard™ because it allows me to do the right thing for my wallet and the environment."</i></p> <p>— Mr. Chris Lawrence Homeowner &amp; WMWD Smart Yard Customer</p> <p>Customers</p>	<p><b>Call Us Now</b></p> <p>1-888-799-6167 Se Habla Español</p>  <p>Questions?</p>
--	--	--	--



**FreeSprinklerNozzles.com**

FREE Toro® Precision® Series Spray Nozzles

Login  
Reprint Voucher  
Extend Voucher  
Contact  
Videos  
FAQ's  
Suppliers

**Welcome to FreeSprinklerNozzles.com**

To obtain your FREE nozzles, just watch the video below and get started, it's quick and it's easy. Once the video has completed a "Get Started" button will appear, just click the button to go to the map and get started! If you have already obtained a voucher you can simply [login](#) to your account to access your voucher information.



Download Video: [FreeSprinklerNozzles.com Introduction](#)

\* Projections of savings are based on Precision® Series Spray Nozzles and conventional spray nozzles using the same watering schedule. Actual savings from installing Precision Series Nozzles may vary based on site conditions, head spacing and other factors not under Toro's control.

\*\* This program is subject to fund availability. Nozzles will only be available while supplies last.

Site by Droplet Technologies

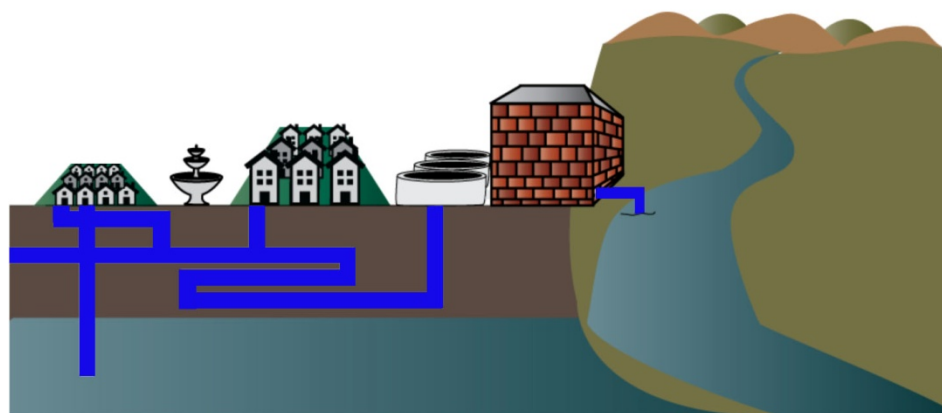


## Understanding the Actual Cost of Service & Water

Reliable, 24/7, safe, 621 miles of pipeline, 128 pumps, 38 reservoirs of 100 million gallons @ \$ .03 per gallon



**\$ 1.00  
per day**



1

Showing the customer their efficiency-based data



## Water Budget Factors

Under the Water Budget Rate Structure, every customer receives a personalized water budget designed to meet their specific indoor and outdoor water needs. ([Learn more](#))

This means that no matter the size of your household or yard, you should be able to remain within your water budget and pay the lowest available price. Residential water budgets are calculated based on the amount of landscaping and real-time localized weather data and an assumption of the number of residents in each home, among other factors. Residential water budgets vary from month to month based upon the weather.



### Persons Per Household

We want to make sure every customer has a fair water budget that provides enough water to meet their actual needs, based on 60 gallons per permanent resident per day. If the number of people living in your home increases, please let us know by submitting an adjustment form, and we will adjust your water budget accordingly.



### Irrigated Area

This is the square footage of the portion of your yard that needs irrigation



### Pool

Pools lose about as much water to evaporation as a lawn of the same size uses, so pools are accounted for as irrigated landscape in a customer's water budget. Completely filling or refilling a pool for maintenance purposes, however, may push your use above your water budget and result in higher charges. Customers can request an adjustment to their water budget if this occurs.



### In-home Care

If you have in home elder care, we ...



### Licensed Childcare

For licensed childcare facilities...



### Horses

The adjustment policy accounts for horses by providing 30 gallons per animal per day for consumption, which is based on veterinary studies. Through customer input and a local equine expert's guidance, the structure also accounts of horses' bathing and cool-down water needs by counting the stable and riding areas of your property as landscaping, which provides more than enough water to meet your horse's total water needs. Large dogs typically do not consume enough water to necessitate an increased water budget, as studies have found dogs of all sizes and activity levels typically drink less than one gallon of water per day.



### Medical Necessities

We allocate...

Your Microzone: 10910769



## Your Water Budget

- [▶ Current Budget](#)
- [▶ Previous Budgets](#)
- [▶ Projected Budgets](#)

## Your Budget Factors

- [▶ Persons Per Household: 3](#)
- [▶ Irrigated Area: 2,500 sq.ft.](#)
- [▶ Microzone: 10910769](#)
- [▶ Adjustment Form](#)

## Water Budget Information

- [▶ What are Factors](#)
- [▶ What is a ET](#)
- [▶ What is a Microzone](#)
- [▶ How are Water Budgets Calculated](#)

1

Showing the customer their efficiency-based data

2

Communicating the reality of the “fixed water services”

- 30,000 gals/1,000 sf of turf/yr.
- 300,000 gals/10,000 sf of turf/yr.
- 1,600,000 gals/1 acre of turf/yr.





1

Showing the customer their efficiency-based data

2

Communicating the reality of the “fixed water services”

3

AMI and a wealth of data for customers



## Your Current Water Budget

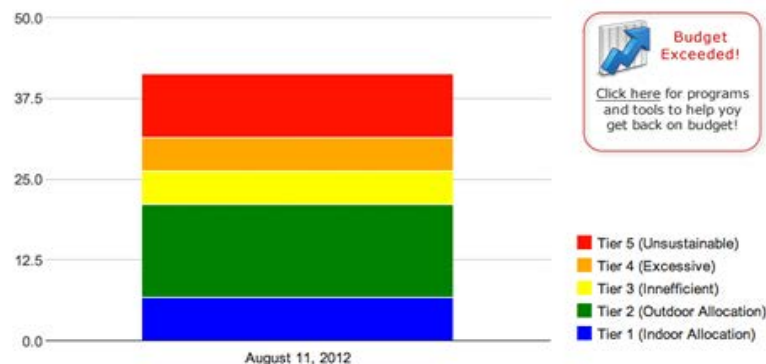
### Water Budget VS Consumption

The **Water Budget Rate Structure** is designed to provide you with a personalized water budget to help you better understand what an efficient level of water use is given your specific situation.

The information below uses your current water use and is intended to give you an idea of how your current use is billed.

Read Date: August 11, 2012	Conservation Tier (Indoor Allocation):	6.74 Billing Units
Days in Billing Cycle: 28	Efficient Tier (Outdoor Allocation):	14.26 Billing Units
<b>Your Total Water Budget:</b>		<b>21.93 Billing Units</b>

### Current Budget (Billing Units)



Read Date: August 11, 2012	Conservation Tier (Indoor Allocation):	6.74 Billing Units
Days in Billing Cycle: 28	Efficient Tier (Outdoor Allocation):	14.26 Billing Units
<b>Your Total Water Budget:</b>		<b>21.93 Billing Units</b>

### Current Water Charges

Tier	Usage (Billing Units*)	Per Unit	Fee
Tier 1 - Efficient Water Use (indoor allocation)	6.74	\$1.902	\$12.81
Tier 2 - Efficient Water Use (outdoor allocation)	14.26	\$2.035	\$20.02
Tier 3 - Inefficient Water Use	5.25	\$2.621	\$13.76
Tier 4 - Excessive Water Use	2.035	\$2.621	\$5.33
Tier 5 - Unsustainable Water Use	1.376	\$2.621	\$3.61

Your Microzone: 10910769



### Your Water Budget

- > Current Budget
- > Previous Budgets
- > Projected Budgets

### Your Budget Factors

- > Persons Per Household: 3
- > Irrigated Area: 2,500 sq.ft.
- > Microzone: 10910769
- > Adjustment Form

### Water Budget Information

- > What are Factors
- > What is a ET
- > What is a Microzone
- > How are Water Budgets Calculated

1

Showing the customer their efficiency-based data

2

Communicating the reality of the “fixed water services”

3

AMI and a wealth of data for customers



**WESTERN MUNICIPAL WATER DISTRICT**

## Current Programs and Rebates

**Active Rebate - Smart Controllers**

Western, in conjunction with Metropolitan Water District of Southern California is currently offering smart controller and high efficiency nozzle rebates through the [SoCal WaterSmart Program](#) for residential customers, or the [Save Water, Save a Buck Program](#) for commercial customers.

**Active Rebate - Smart Yard**

Smart Yard(TM) is a community water-use efficiency program designed to achieve more efficient landscape water use throughout Western's retail area. Participants will collectively save 1 billion gallons over 10 years. For more information, check out the [Western Smart Yard Program](#) or call 888.799.6167.

**Active Rebate - FreeSprinklerNozzles.com**

Western Municipal Water District is currently offering customers a voucher for free high efficiency nozzles called Toro Precision Series Spray nozzles. For more information visit [www.freesprinklernozzles.com](#).

**Active Rebate - Western Turf Replacement**

Western Municipal Water District, along with generous grants from the United States Bureau of Reclamation and the California Department of Water Resources, is offering a turf removal program within its retail service area to help customers offset the costs associated with converting turfgrass to a climate-appropriate landscape. For more information visit [www.westernturfreplacement.com](#).

**Your Microzone: 10910769**

**Your Water Budget**

- Current Budget
- Previous Budgets
- Projected Budgets

**Your Budget Factors**

- Persons Per Household: 3
- Irrigated Area: 2,500 sq.ft.
- Microzone: 10910769
- Adjustment Form

**Water Budget Information**

- What are Factors
- What is a ET
- What is a Microzone
- How are Water Budgets Calculated



1

Showing the customer their efficiency-based data

2

Communicating the reality of the “fixed water services”

3

AMI and a wealth of data for customers

4

Using technology to connect all the droplets...



1

As a wholesaler, CLWA administered many of the conservation programs in the service area



1

As a wholesaler, CLWA administered many of the conservation programs in the service area

2

Although programs were effective, they were expensive to run and difficult to scale because of the time require to administer them.



1

As a wholesaler, CLWA administered many of the conservation programs in the service area

2

Although programs were effective, they were expensive to run and difficult to scale because of the time require to administer them.

3

CLWA had little to no information on program participants (that information was held by the retailers and no direct connection with participants)



1

As a wholesaler, CLWA administered many of the conservation programs in the service area

2

Although programs were effective, they were expensive to run and difficult to scale because of the time require to administer them.

3

CLWA had little to no information on program participants (that information was held by the retailers and no direct connection with participants)

4

Following up and keeping in contact with customers was difficult and time consuming





1


## Trading Labor for Technology

**SCV H2O Programs**

Current SCV Family Programs | Helpful Tips & Support | Agency Information | User Discussion Forum

### Weather Based Irrigation Controller Online Class

Question 17 of 36




Your controller has two modes: Standard and Auto Adjust (with weather monitor or station). Auto adjust mode uses the weather monitor (station) to use on-site weather data to adjust watering. How can you tell if the weather monitor is communicating with the controller?

Choose one:

- ☐ Check the run times in Standard Mode.
- ☐ Check if there is an antenna icon on the main display.
- ☐ Check if it's raining and the controller is irrigating.

Back Next

clients (Family) is comprised of Castaic Lake County Waterworks District #30, Newhall Santa Water Division, Valencia Water is Clarita. Together, they work to promote fund programs to reduce the per capita



## 1 Trading Labor for Technology

## 2 Making program participation easy for customers and staff

### H2O Programs

Current SCV Family Programs ▾

Helpful Tips & Support ▾

Agency Information

Please provide the following information to receive your voucher.

#### Customer Information

First Name: \*

Ezra

Last Name: \*

Daniel

Phone: \*

555-555-5555

XXX-XXX-XXXX

☒ I would like to be notified of additional conservation/educational information.

#### Controller Information

Installation Address Street: \*

41148 Vincennes Court

Installation Address City: \*

Santa Clarita

Installation Postal Code: \*

91355

How many stations: \*

5-8

1

Trading Labor for Technology

2

Making program participation easy for customers and staff

3

Involving Customers in the process

## SCV H2O Programs

Current SCV Family Programs

Helpful Tips & Support

Agency Information

User Discussion Forum

### Weather Based Controller Online Class Study Guide

The following pages provide information that is covered in the online weather based irrigation controller class. It is included in the test itself, however this gives you the opportunity to study the information at your own pace.

Many of the participants in our class begin with the notion that the Weathermatic Smartline controller can fix all the irrigation problems in their systems. This is not correct. The Weathermatic Smartline 1000 is a great controller. It's very, highly rated in independent testing. But it is not a device with magical powers. If you have an area of grass where the heads are too far apart, your best bet is to add a head. If you have mismatched nozzles (different manufacturers and models), your best bet is to make them all consistent (so they put out the same amount of water per minute). If your heads are leaning (and they all eventually lean over time), the controller has no power to straighten the heads. If you see misting due to high pressure, your best bet is to add a pressure regulator.



The controller does an excellent job of irrigating according to what you program (soil type, plant types, slope) and the local weather conditions from the onsite weather monitor (station). This is what it does. But it can't fix your irrigation system. This is a job for you (or a landscape contractor). To understand your own irrigation problems, you need to perform a monthly [irrigation inspection](#).

The study guide sections are listed below:

- [Common Irrigation Challenges](#)
- [Plants for the Santa Clara Valley](#)
- [Soil Types in the Santa Clara Valley](#)

## Before

1

Registration done manually over the phone



## Before

1 Registration done manually over the phone

2 Limited verification





## Before

1 Registration done manually over the phone

2 Limited verification

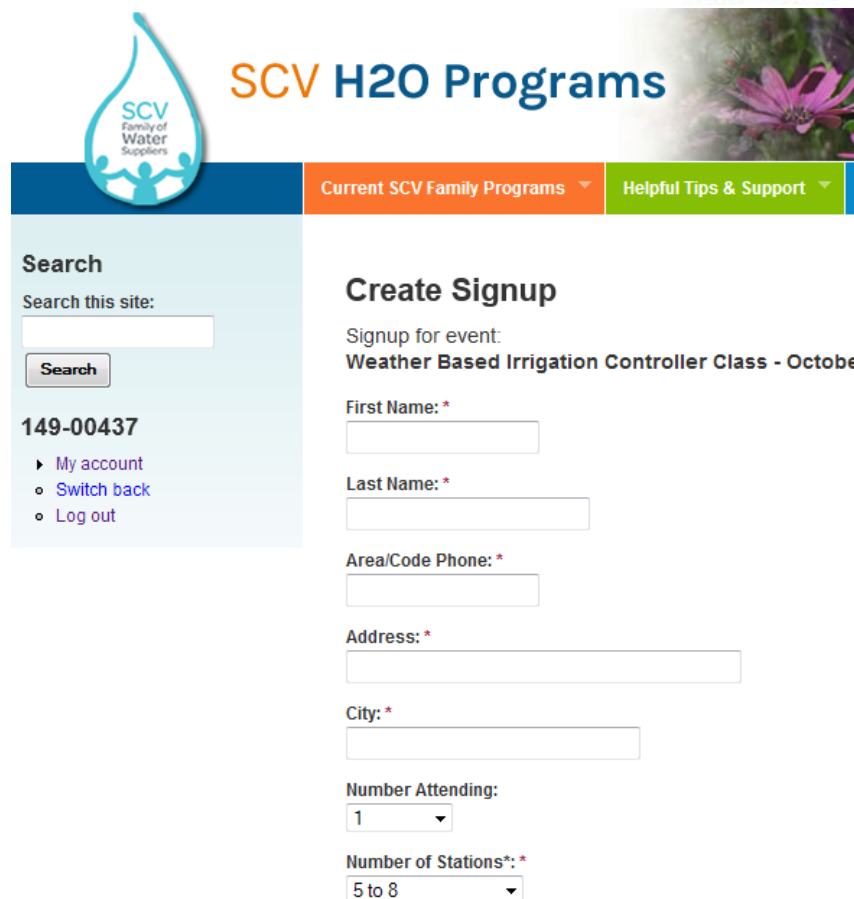
3 Heavy burden on staff



## After

1

Complete Online Registration



**SCV H2O Programs**

Current SCV Family Programs ▾ Helpful Tips & Support ▾

**Search**  
Search this site:

**149-00437**

- ▶ My account
- [Switch back](#)
- [Log out](#)

**Create Signup**  
Signup for event:  
**Weather Based Irrigation Controller Class - October**

First Name: \*

Last Name: \*

Area/Code Phone: \*

Address: \*

City: \*

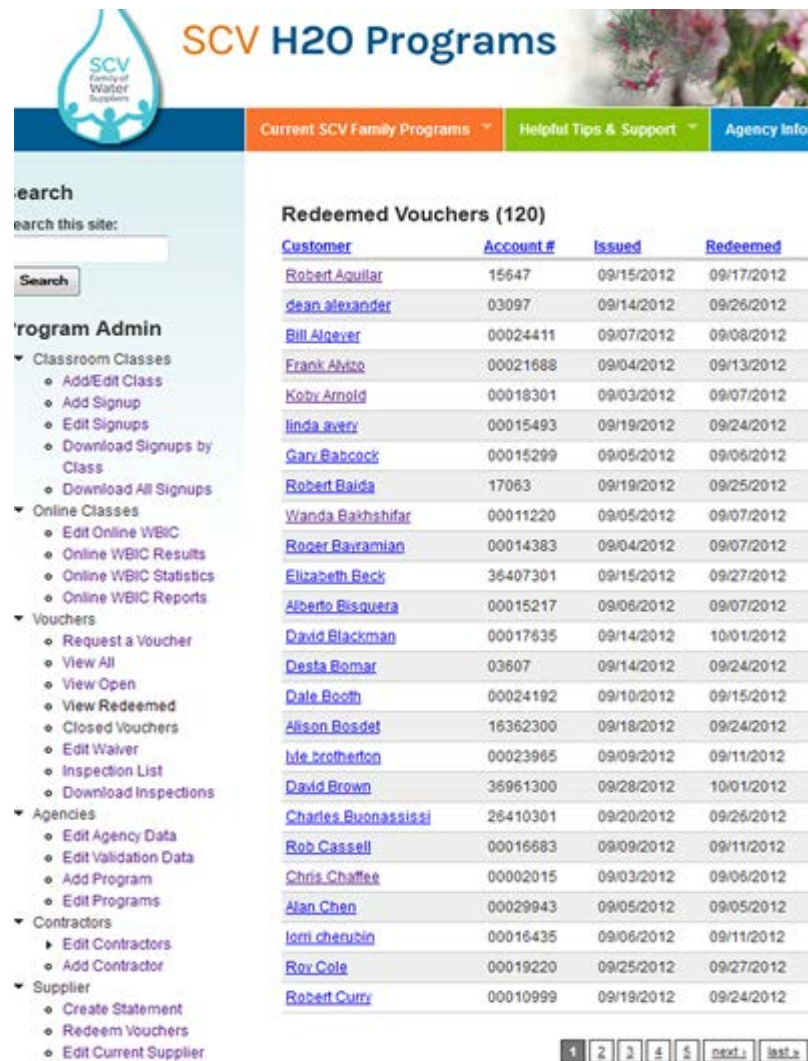
Number Attending:

Number of Stations\*: \*

## After

1 Complete online registration

2 Program Database providing eligibility and wealth of customer data



**SCV H2O Programs**

Current SCV Family Programs | Helpful Tips & Support | Agency Info

**Program Admin**

- Classroom Classes
  - Add/Edit Class
  - Add Signup
  - Edit Signups
  - Download Signups by Class
  - Download All Signups
- Online Classes
  - Edit Online WBIC
  - Online WBIC Results
  - Online WBIC Statistics
  - Online WBIC Reports
- Vouchers
  - Request a Voucher
  - View All
  - View Open
  - View Redeemed
  - Closed Vouchers
  - Edit Waiver
  - Inspection List
  - Download Inspections
- Agencies
  - Edit Agency Data
  - Edit Validation Data
  - Add Program
  - Edit Programs
- Contractors
  - Edit Contractors
  - Add Contractor
- Supplier
  - Create Statement
  - Redeem Vouchers
  - Edit Current Supplier

**Redeemed Vouchers (120)**

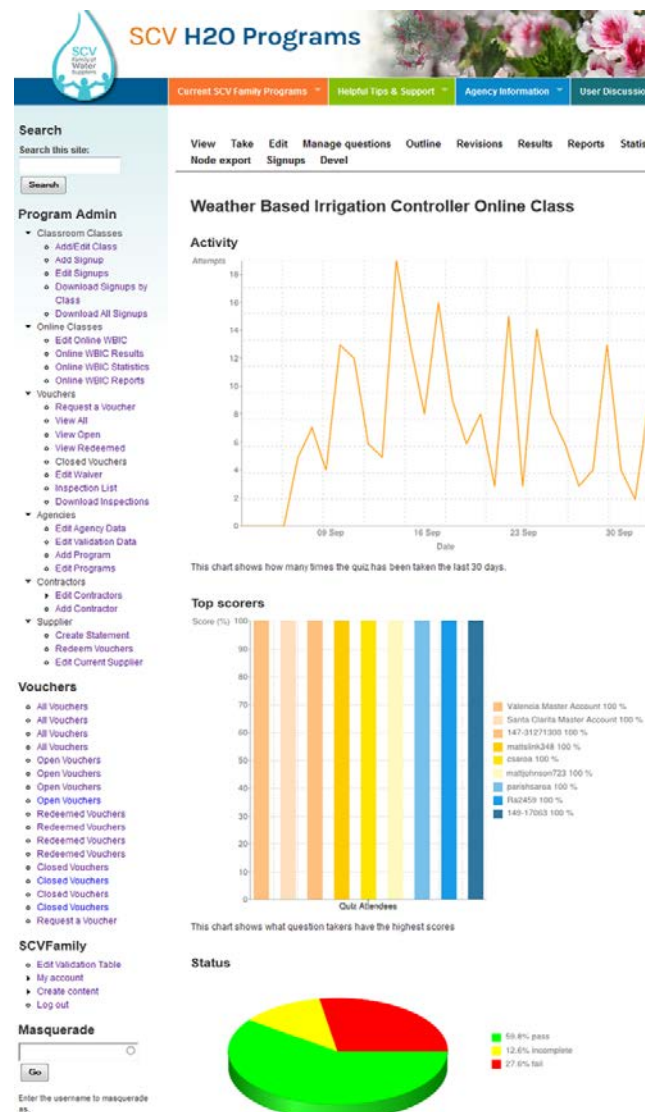
Customer	Account #	Issued	Redeemed
<a href="#">Robert Aguilar</a>	15647	09/15/2012	09/17/2012
<a href="#">dean alexander</a>	03097	09/14/2012	09/26/2012
<a href="#">Bill Algever</a>	00024411	09/07/2012	09/08/2012
<a href="#">Frank Alizo</a>	00021688	09/04/2012	09/13/2012
<a href="#">Koby Arnold</a>	00018301	09/03/2012	09/07/2012
<a href="#">linda avery</a>	00015493	09/19/2012	09/24/2012
<a href="#">Gary Babcock</a>	00015299	09/05/2012	09/06/2012
<a href="#">Robert Baida</a>	17063	09/19/2012	09/25/2012
<a href="#">Wanda Bakhshifar</a>	00011220	09/05/2012	09/07/2012
<a href="#">Roger Bayramian</a>	00014383	09/04/2012	09/07/2012
<a href="#">Elizabeth Beck</a>	36407301	09/15/2012	09/27/2012
<a href="#">Alberto Bisquera</a>	00015217	09/06/2012	09/07/2012
<a href="#">David Blackman</a>	00017635	09/14/2012	10/01/2012
<a href="#">Desta Bomar</a>	03607	09/14/2012	09/24/2012
<a href="#">Dale Booth</a>	00024192	09/10/2012	09/15/2012
<a href="#">Alison Bosdet</a>	16362300	09/18/2012	09/24/2012
<a href="#">Iyle brotherton</a>	00023965	09/09/2012	09/11/2012
<a href="#">David Brown</a>	36961300	09/28/2012	10/01/2012
<a href="#">Charles Buonassisi</a>	26410301	09/20/2012	09/26/2012
<a href="#">Rob Cassell</a>	00016683	09/09/2012	09/11/2012
<a href="#">Chris Chaffee</a>	00002015	09/03/2012	09/06/2012
<a href="#">Alan Chen</a>	00029943	09/05/2012	09/05/2012
<a href="#">lorri chenubin</a>	00016435	09/06/2012	09/11/2012
<a href="#">Roy Cole</a>	00019220	09/25/2012	09/27/2012
<a href="#">Robert Curry</a>	00010999	09/19/2012	09/24/2012

1 2 3 4 5 next last

## After

1 Complete online registration

2 Program Database providing eligibility and wealth of customer data



## After

1 Complete online registration

2 Program Database providing eligibility and wealth of customer data

3 Automated engagement

### H2O Programs

Current SCV Family Programs ▾ Helpful Tips & Support ▾ Agency Information ▾ User Discussion Forum

#### Weather Based Irrigation Controller Online Class

You got 37 of 39 possible points.

Your score was: 95 %

##### Question Results

Question:

Score 1 of 1

Many of the participants in our class begin with the notion that the Weathermatic Smartline controller can fix all the irrigation problems in their systems. This is not correct. The Weathermatic Smartline 1600 is a great controller. It's very, highly rated in independent testing. But it is not a device with magical powers. If you have an area of grass where the heads are too far apart, your best bet is to add a head. If you have mismatched nozzles (different manufacturers and models), your best bet is to make them all consistent (so they put out the same amount of water per minute). If your heads are leaning (and they all eventually lean over time), the controller has no power to straighten the heads. If you see misting due to high pressure, your best bet is to add a pressure regulator.



The controller does an excellent job of irrigating according to what you program (soil type, plant types, slope) and the local weather conditions from the onsite weather monitor (station). This is what it does. But it can't fix your irrigation system. This is a job for you (or a landscape contractor). To understand your own irrigation problems, you need to perform a [monthly irrigation inspection](#).

If a sprinkler head is tilted, how should it be fixed?

Response:

It should be replaced.

It should be adjusted to a straight position.



Feedback:

Correct! A tilted head should be straightened.

It should be cleaned.

Question:

Score 1 of 1

What does misting indicate?

Response:

Leaks

High pressure



Feedback:

Correct! Misting often indicates high pressure and can be corrected with a pressure regulator.



## Customers

- 1 24/7 Access to program information



- ## 2 Engaging step by step learning online



## Customers

1 24/7 Access to program information

2 Engaging step by step learning online

3 More than just a program. A resource



1

Securing commitment



1

Securing Commitment

2

Personalizing the experience





1

Securing Commitment

2

Personalizing the experience

3

Contributing to the community

## H2O Programs

Current SCV Family Programs ▾

Helpful Tips & Support ▾


Agency Information ▾

User Discussion Forum

### Weather Based Irrigation Controllers

 New Topic

Mark All Read

Topic	Replies	Created	Last reply ▾
 Sticky: <a href="#">Trouble shooting tips</a> updated	13 <a href="#">1 new</a>	by SCVFamily 08/13/2012 - 10:29pm	by Sanagnoson 1 hour 40 min ago
 Sticky: <a href="#">Discussion Forums Terms of Use (Please Read)</a> new	0	by SCVFamily 09/03/2012 - 2:55pm	n/a
 <a href="#">Reprint voucher for WBIC</a> updated	1 <a href="#">1 new</a>	by rbryanlanson 09/14/2012 - 2:40pm	by Sanagnoson 1 hour 41 min ago

 No New Posts
  Hot Thread (No New)
  Sticky Thread  
 New Posts
  Hot Thread (New)
  Locked Thread  


1

Securing Commitment

2

Personalizing the experience

3

Contributing to the community

4

Keeping in touch

## H2O Programs

Current SCV Family Programs ▾

Helpful Tips & Support ▾




Agency Information ▾

User Discussion Forum

### Weather Based Irrigation Controllers

 New Topic

Mark All Read

Topic	Replies	Created	Last reply ▾
 Sticky: <a href="#">Trouble shooting tips</a> updated	13 <a href="#">1 new</a>	by SCVFamily 08/13/2012 - 10:29pm	by Sanagnoson 1 hour 40 min ago
 Sticky: <a href="#">Discussion Forums Terms of Use (Please Read)</a> new	0	by SCVFamily 09/03/2012 - 2:55pm	n/a
 <a href="#">Reprint voucher for WBIC</a> updated	1 <a href="#">1 new</a>	by rbryanlarsen 09/14/2012 - 2:40pm	by Sanagnoson 1 hour 41 min ago

 No New Posts
  Hot Thread (No New)
  Sticky Thread  
 New Posts
  Hot Thread (New)
  Locked Thread  


1

**200** Pre program signups in the first two weeks



1

**200** Pre program signups in the first two weeks

2

**6 months** return on technology investment



1

**200** Pre program signups in the first two weeks

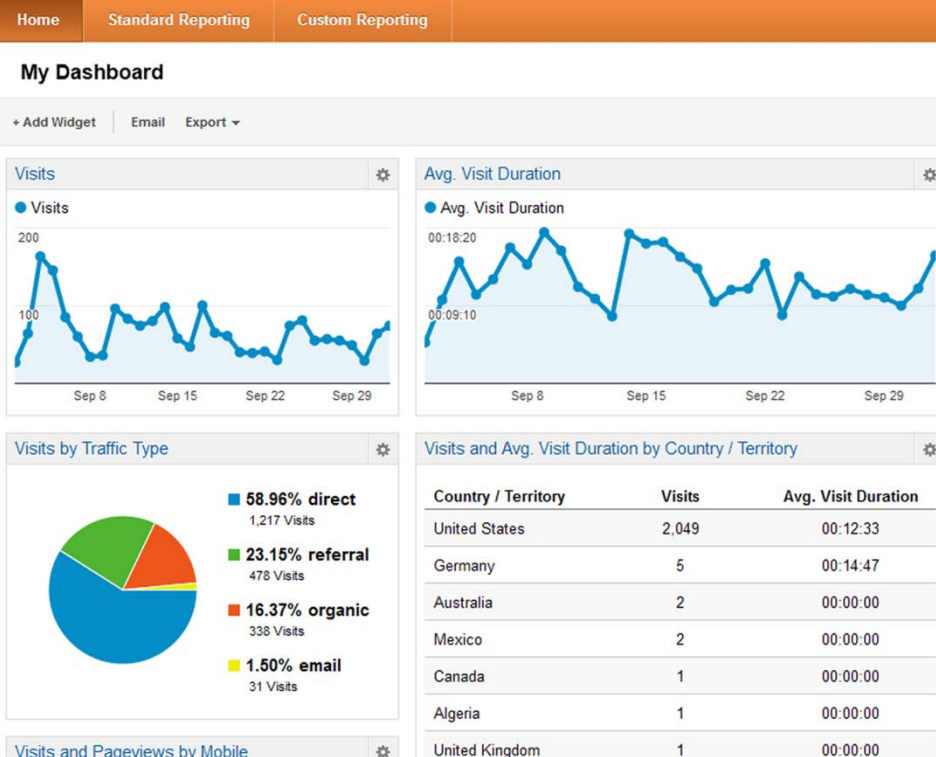
2

**6 months** return on technology investment

3

The ability to track the effectiveness of current and future programs

Google Analytics





# Questions - Comments

**Thank you for the opportunity to  
share our vision!**



**Jon Daniel**  
**(951) 970-8608**

**[jdaniel@droplettechnologies.com](mailto:jdaniel@droplettechnologies.com)**

**Tom Ash**  
**(949)922-9539**  
**[T-Ash@sbcglobal.net](mailto:T-Ash@sbcglobal.net)**