## This presentation premiered at WaterSmart Innovations

watersmartinnovations.com







## Measurable Conservation Gains through the power of Social Norms

#### Results from the City of Cotati WaterSmart Pilot

**Evaluation Sponsor** 







**Evaluation Partners** 

#### Who We Are

#### WaterSmart Software: Peter Yolles, CEO

- 30 years of water sector experience; founded in 2009
- Innovative: Winner, Imagine H2O prize; Artemis Top 50 Water Company
- Technically-focused: Silicon Valley-based
- Water Efficiency Partnerships
  - ✓ Alliance for Water Efficiency (AWE)
  - American Water Works Association (AWWA)
  - California Urban Water Conservation Council

#### City of Cotati: Damien O'Bid, Director of Public Works

- Located in Sonoma County, California
- Residential Service Area: 2,000 Single Family Households (7,500 people)
- Water Sources: Russian River water from Sonoma County Water Agency, groundwater







#### **The Challenges**



- Always Looking for Cost Effective Solutions
- Water Conservation Goals/Regulation
- Water Supply Limitations
- Poor Sustained Marketing And Uptake On Conservation Programs
- Reactive Customer Service
- Difficult To Track, Coordinate, Follow Up, And Report On Conservation Efforts
- Barriers For Customer Participation In Conservation Programs



## The Response: Implement WaterSmart Program

Objective	Metric
Reduce Water Demand	Measure difference in consumption between Pilot and Control
Increase Program Participation	Measure rates of program participation for Pilot and Control
Increase Customer Engagement	Measure online participation and observable difference in phone calls between Pilot and Control groups
Improve Water Awareness	Track survey responses before and after to evaluate longitudinal changes in awareness including knowledge of water consumption and ways to save water

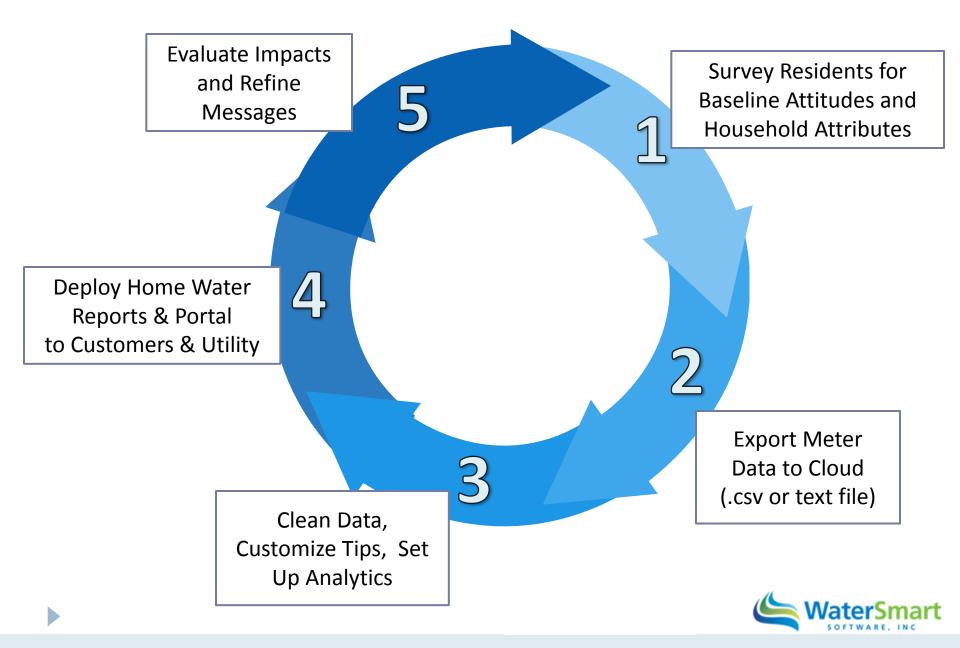


#### The Solution: WaterSmart Software—How It Works





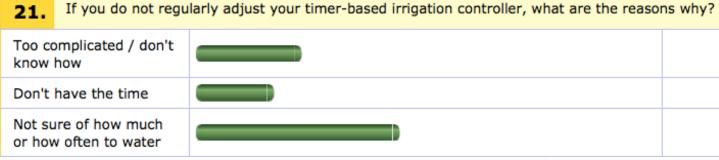
## **Iterative Customer Engagement Process**



#### **Survey Results: Guide Personalization**

- 30% Response Rate
- Individual Results → Personalized Recommendations
- Aggregate Results → Awareness, Saturation, Program Priorities

OUTDOOR INVESTMENTS	Replace sprinkler heads	Upgrade to a weather-based controller	Use Drip Irrigation for Shrubs	Replace Lawn with Drought- Tolerant plants
Definitely Would	23%	18%	16%	16%
Might Do It	30%	29%	28%	25%
Probably Would Not	10%	18%	18%	24%
Definitely Would Not	1%	4%	5%	8%
			18%	1/196





## **Program: What Residents Receive Automatically**



#### **Home Water Reports**

- Bi-Monthly
- Email or Print
- Water Consumption & Score
- Social Norm via "Neighbor" Comparisons
- Personalized
  - Recommendations
- Customized Messaging & Program Promotion



## **Program: What Residents Choose to Access**

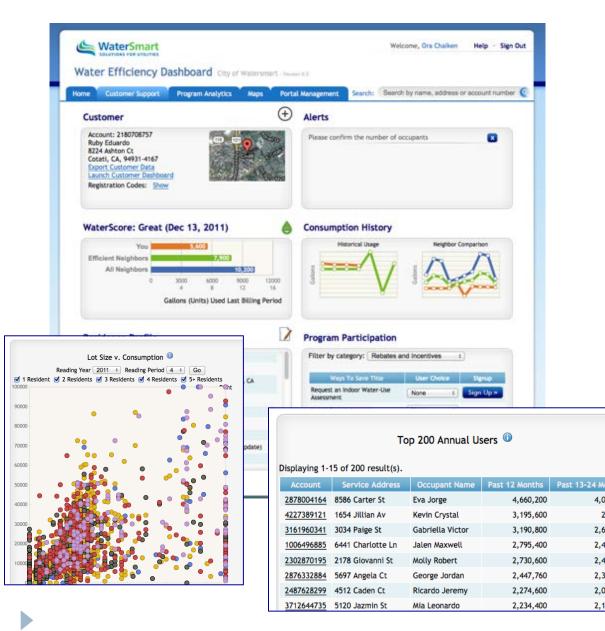


#### **Consumer Web Portal**

- Historic Trend Analysis
- Personalized
  Recommendations
- Indoor vs. Outdoor Use
- Estimated Indoor End Use
- Personalized
  Recommendations
- Email Alerts



## **Utility-Facing Water Efficiency Dashboard**



- Program Management
- Mapping / Data Visualization
- Water Use Analysis and Comparisons
- Feedback & Tracking

4,0

2

2,6

2,4

2,4

2,30

2,0

2,10

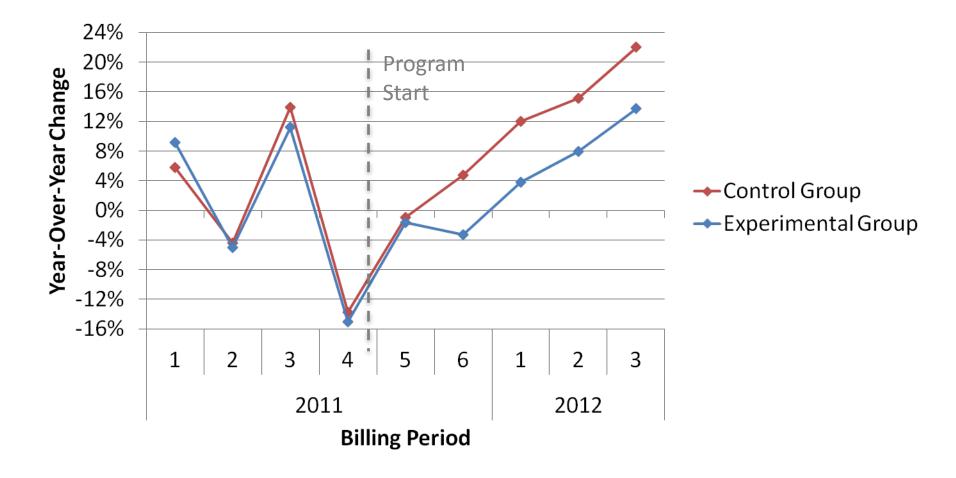
- Customer Call Logging
- Utility-Level and **User-Level Data**



## **The Results**



#### WaterSmart Reduced Demand 5% in Six Months and Sustained the Savings for the Year

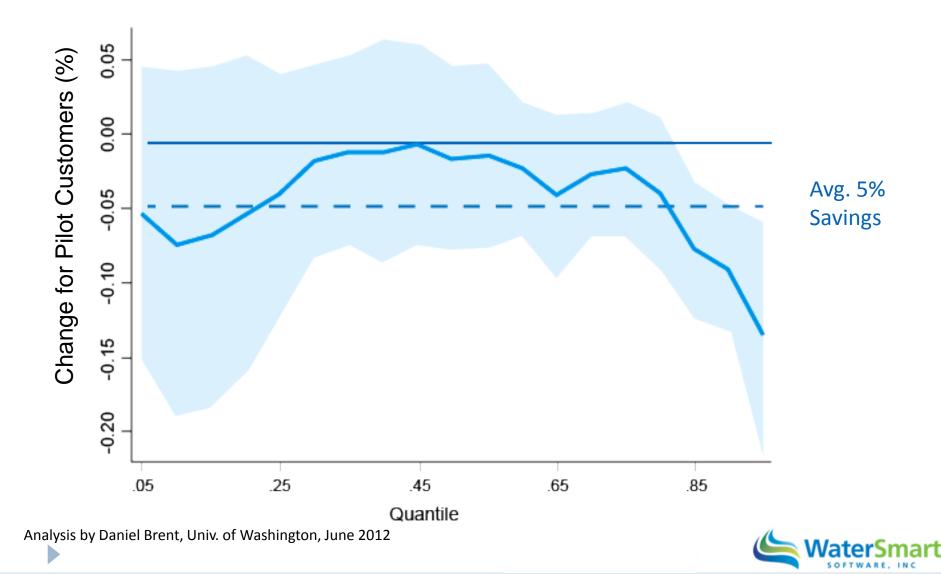


#### \*Statistical Significance Level = 99.5%

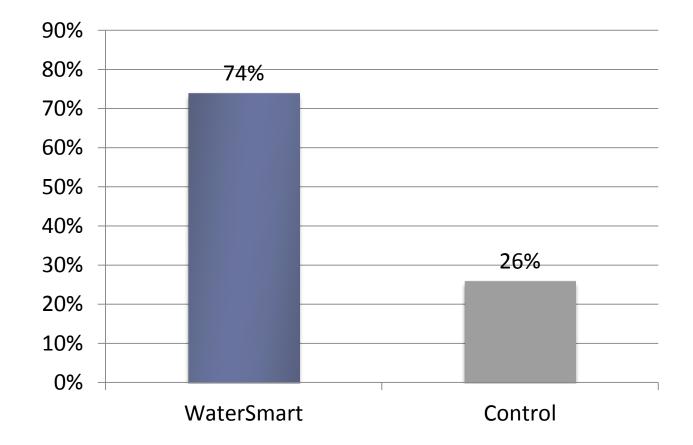
Analysis of Results in Sonoma County by Daniel Brent, Univ. of Washington, June 2012



#### 70% of Pilot Customers Reduced Their Consumption: Participation Rates are Broad-Based



# Three-fold increase in program participation as requests for on-site water surveys





## WaterSmart Software Solved Challenges

- Achieving Long Term Conservation Goals
- Effectively Managing Periodic Supply Limitations
- Deployed Powerful Customer Communication Platform
- Increased Program Uptake
- Customer Information Consolidated and Service Personalized
- Customer Relations Recorded and Data Analysis Simplified
- Personalized Water Use Comparisons Motivated Positive Actions



#### **Summary: Results Are Positive**

- 5% demand reduction in 6 months
- 3-fold increase in program participation
- 14% online participation
- Cost effective compared to other conservation programs
- Quantifiable water savings & public outreach impact

#### Next Steps:

- Planned full scale residential deployment in 2013
- Partner with WaterSmart on new program features





## Thank you and questions?

Thanks to Carrie Pollard and SCWA for funding the evaluation, measurement & verification

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