

This presentation premiered at WaterSmart Innovations

watersmartinnovations.com



Enabling Customers to Buy and Sell Conserved Water

Valley of the Moon Water District

Daniel Muelrath
General Manager



VOMWD

- * Sonoma, CA
- * 6,900 connections
- * 23,000 people
- * 92 miles of mainline
- * 90%+ residential water use



Before You Get Started

- * Go slow
- * Be patient
- * Don't rush deployment
- * Make sure you know your customers



WHEN THINGS DON'T HAPPEN
RIGHT AWAY JUST REMEMBER,
IT TAKES 6 MONTHS
TO BUILD A ROLLS-ROYCE
AND 13 HOURS TO BUILD A TOYOTA.

Conservation Conundrum

Results of uninformed and non-empowered customers:

“I saved water and now you are going to charge me more”

“Why should I conserve if you’re going to allow new development”

“I already conserved... there is nothing more I can do”

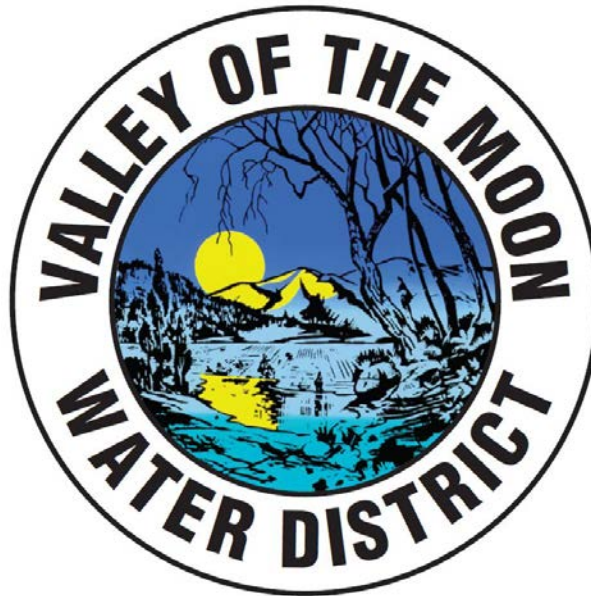
“Your toilets you gave do not work and you need to compensate me...”

What IF...

- * We thought without barriers
- * There was a true monetary or society value for conserved water
- * A water market existed to buy and sell conserved water



Grant Partners and Participants



Two Parts to Our Project

Advanced
Metering
Infrastructure

Creation of
Water Market

Prior to Deployment

- * Find a project champion
- * Align with a senior manager (if not already the project champion)
- * Slowly gain acceptance with other division in agency
- * Identify funding sources
- * Develop and robust RFP with specific requests/needs
- * Pilot the project before full deployment

Deploy a Reliable AMI Solution



Warning!!!

AMI is an IT centric project upfront.



Reliability & Testing

- * 12 months before customers are able to access their usage data
- * Issues to overcome:
 - * IT, IT, IT
 - * Network coverage
 - * Testing of databases



First Twelve Month of Deployment



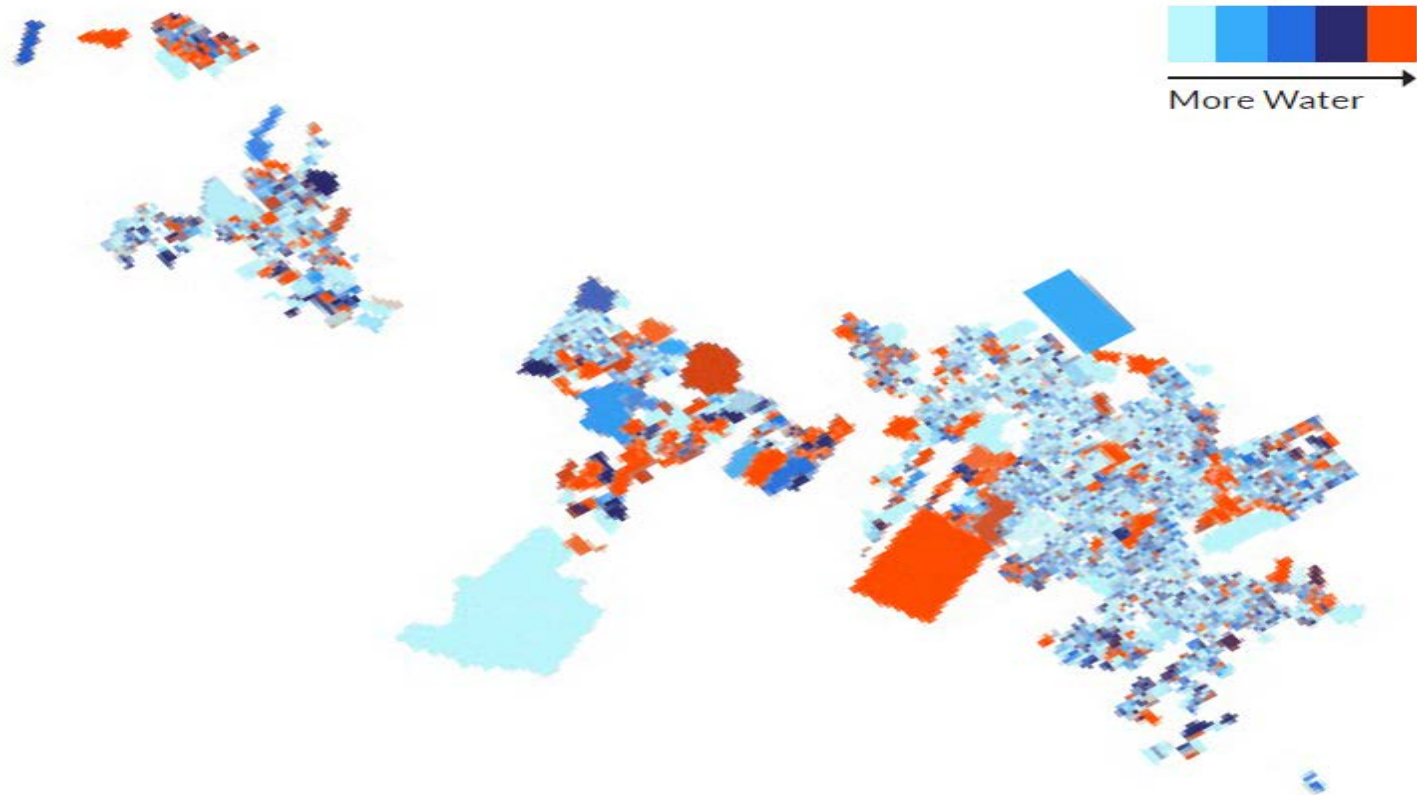
One Year in AMI Results

- * Tested and reliable AMI meters and backhaul
- * Integration of multiple databases
- * Moving towards system wide deployment

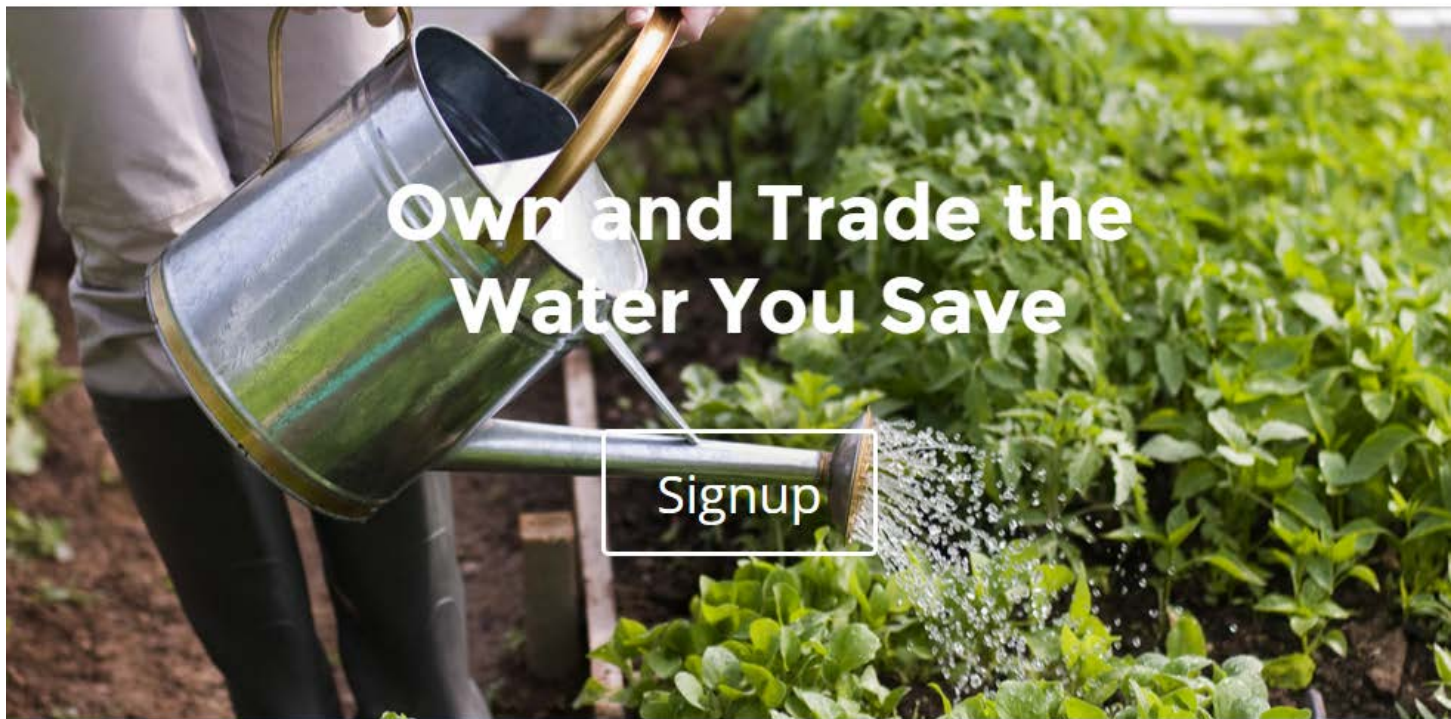
Creating a Market for Conserved Water



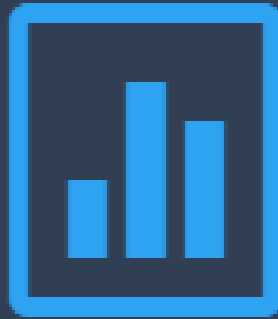
Service Area Profile



Water Market Platform



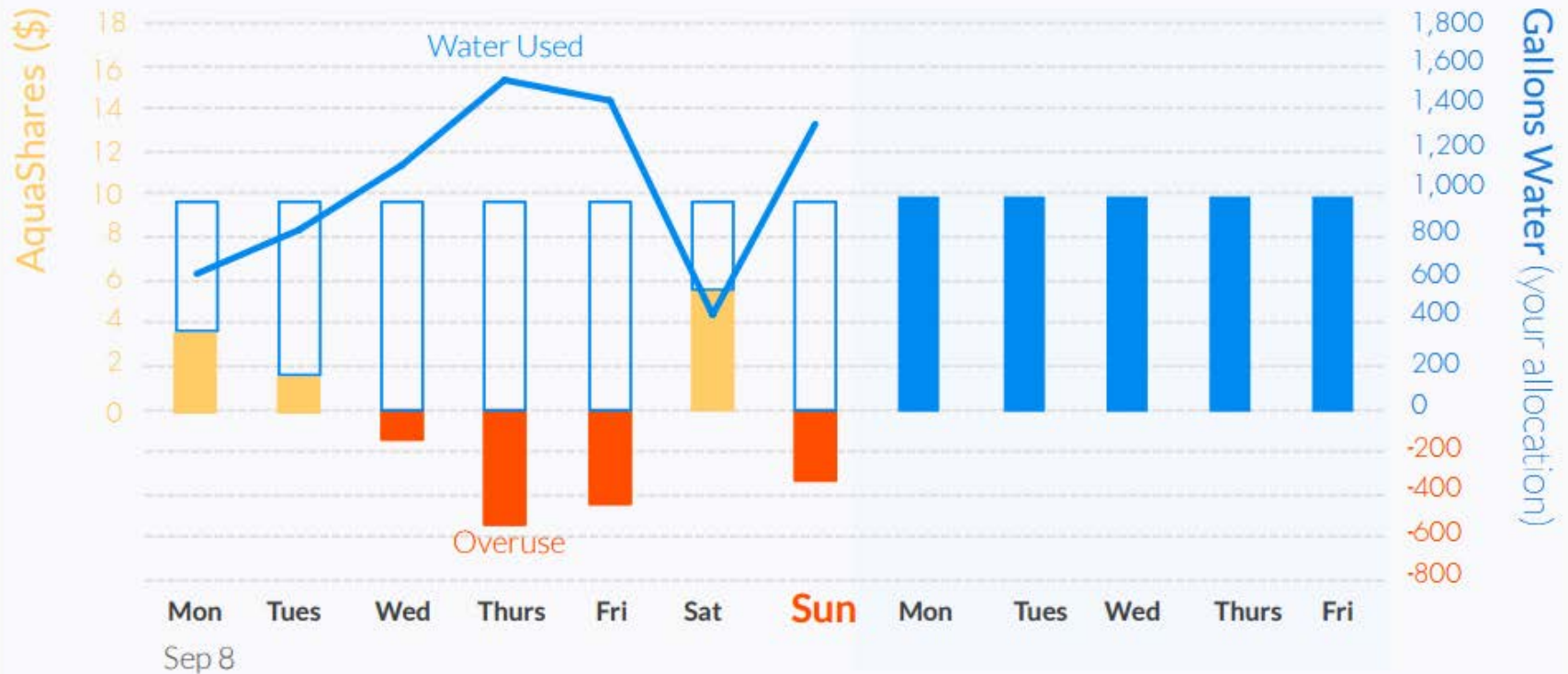
Consumer Engagement Portal



Track Your Savings

Track your water consumption, updated daily. See how you compare to neighbors.

Consumer Engagement Portal (cont.)



Consumer Engagement Portal (cont.)

Your Community Leaderboard

Rank	Customer	% Change		
1	Jorje	% 70		savings
2	Jane	% 50		
3	Maya	% 21		
4	Lance	% 14		
5	Dolores	% 10		
6	You	% 6		
7	Maven	% 0		
8	Harry	% -5		
9	Leanard	% -15		overuse
10	Monionica	% -18		

AquaShares Earned

Total (since
Sept 01,
2015):

26

Earned last
week:

9

Earned Credits Can Be Sold

- * Business that want to be water neutral
- * New development
- * NGO's that want water to remain in lakes
- * Community activists

Questions

Daniel Muelrath

General Manager

Valley of the Moon Water District

dmuelrath@vomwd.com