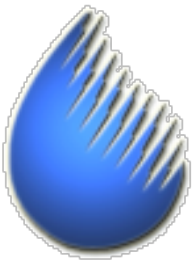


This presentation premiered at WaterSmart Innovations

watersmartinnovations.com



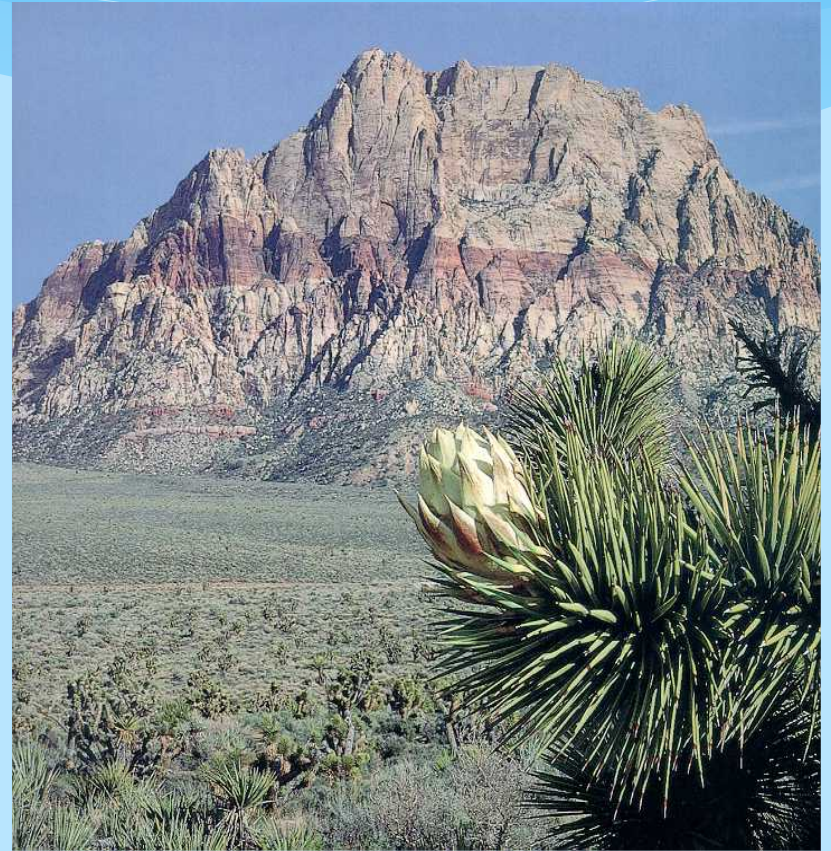
After the Initial Romance, do we still love our Smart Controllers?



Dennis Gegen – SNWA Conservation
Sean Ainsworth – SNWA Conservation

Las Vegas, a City of the Mojave Desert

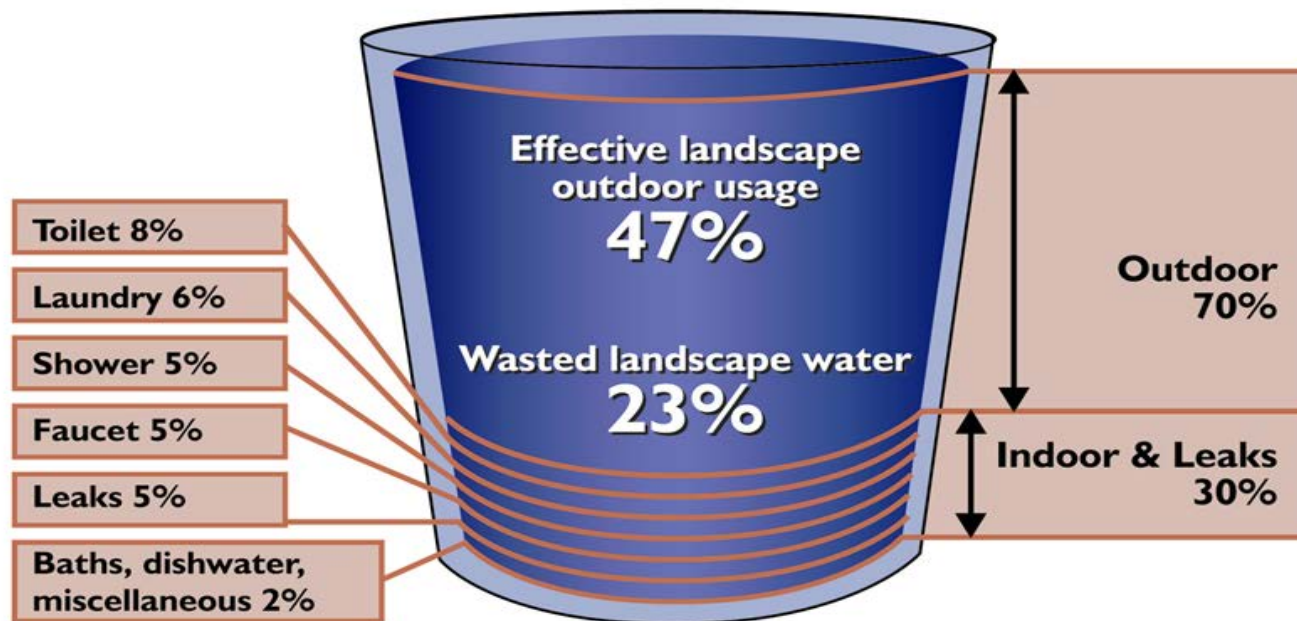
- 54,000 square miles
- Low precipitation: 4 inches/year (2014 to date 1.52)
- Temperatures range: 15 - 115° F
- Low humidity: 7% - 20%
- High winds
- Bright sunshine, few clouds
- High ET Rate



Where our Water Goes

Total Residential Water Use

Most of our water is used outdoors



Current Reservoir Conditions



September 1998
1215'



March 2014
1106'

Lake Mead
Wash and Marina

Reservoir Conditions



Current Elevation – 1081'

Discussion Points

- Intentions of study not to look at smart controller water savings
- Were smart controllers being used as intended?
- Surveys conducted 2010 and 2014
- Coupon program – going forward

Smart Irrigation Controllers

Customize irrigation schedules based on microclimate, temperature and evapotranspiration rate

Water according to a plant needs rather than a preset seasonal watering schedule



Smart Controller Coupon Program

- Open to Single Family Residential customers only
- Customer prints coupon from SNWA.com
- One coupon per property address is allowed (must be a customer of SNWA member agency)
- Redeems coupon at approved participating retailer

Southern Nevada Water Authority

Smart Irrigation Controller Instant Rebate Coupon

Coupon Expires: 05/27/2007
Coupon Printed: 04/27/2007 0737
Coupon Number: 33962

Print Close

Customer Information	
Customer Name	Mei Hengen
Installation Address	1596 Camouste CT Boulder City, NV 89005
Customer Phone(s)	(702) 294 - 4278
Customer Email	mojavemei@aol.com

Product Information	Retailer Use Only
Purchase Date <u>5/25/07</u>	Retailer: Attach receipt or invoice
Manufacturer <u>Hunter</u>	
Pre-Tax Price	Model <u>ET-SYSTEM</u>
After all other Discounts applied \$ <u>471.90</u>	ET-MND
	Amount coupon redeemed for \$ <u>200.00</u>

Store Information
Store Name <u>Ewing</u>
Store Address <u>6330 ANNIE OAKLEY</u>

Residency or ownership verified by: ☒ Driver's license ☐ Utility Bill ☐ Other 17-01159826

Salesperson's printed name ARMANDO LUNA

Salesperson's signature [Signature]

Retailer: Redemption is subject to all conditions on this coupon and your program agreement with Southern Nevada Water Authority (Authority). **This coupon value is \$200 or 50 percent of the device cost, whichever is less.** This coupon must be submitted to the Authority within 60 days. Coupons should be sent monthly to: SNWA Conservation Instant Rebate, Mail Stop 110, 1001 S. Valley View Blvd., Las Vegas, NV 89153.

Customer Use Only

By redeeming this coupon, I agree to the following terms: 1.) Offer limited to one coupon per single-family household. Pool cover coupons limited to one coupon per single-family household per 30 months; 2.) Coupon is valid only for new purchases at participating retailers. For a list of retailers, visit SNWA.com or call 258-SAVE. 3.) Proof of residency or ownership for the installation address required at redemption; 4.) Product must be installed at the participant's address within 90 days of purchase and maintained for at least one year; 5.) Participant agrees to reasonably accommodate the Authority if selected for a compliance inspection; 6.) Participant authorizes the Authority to contact them by any means for program research or compliance; 7.) Providing false information or violating the terms of the program may constitute fraud and/or require the participant to make restitution to the Authority and/or participating retailer.

Customer Signature [Signature] Date 5/25/07

http://www.snwa.com/cfm/coupon_program/get_coupon.cfm?id=337982E5-9B84-DD5B... 4/27/2007

Smart Controller Coupon Program

- Purchase from list of qualifying products
- Receives rebate at time of purchase
 - Up to \$200 or 50% of purchase price, whichever is lower



Smart Controller Coupon Program at a Glance

- Since 2006:
 - 162 coupons redeemed
 - Avg. rebate equals \$127
 - Total amount to date equals over \$21,000



2010 Smart Controller Coupon Survey

- 441 surveys ***emailed*** to coupon/voucher participants
- 47 returned
 - 22 participants signed up to save money on purchase of controller
 - 20 interested in smart controller technology
 - 5 had “other reasons for purchasing”
- 15 participants purchased an irrigation controller since printing coupon
 - 12 purchased a smart controller
 - 3 purchased rain sensors, soil moisture sensors

2010 Smart Controller Coupon Survey

Of the 47 Participants



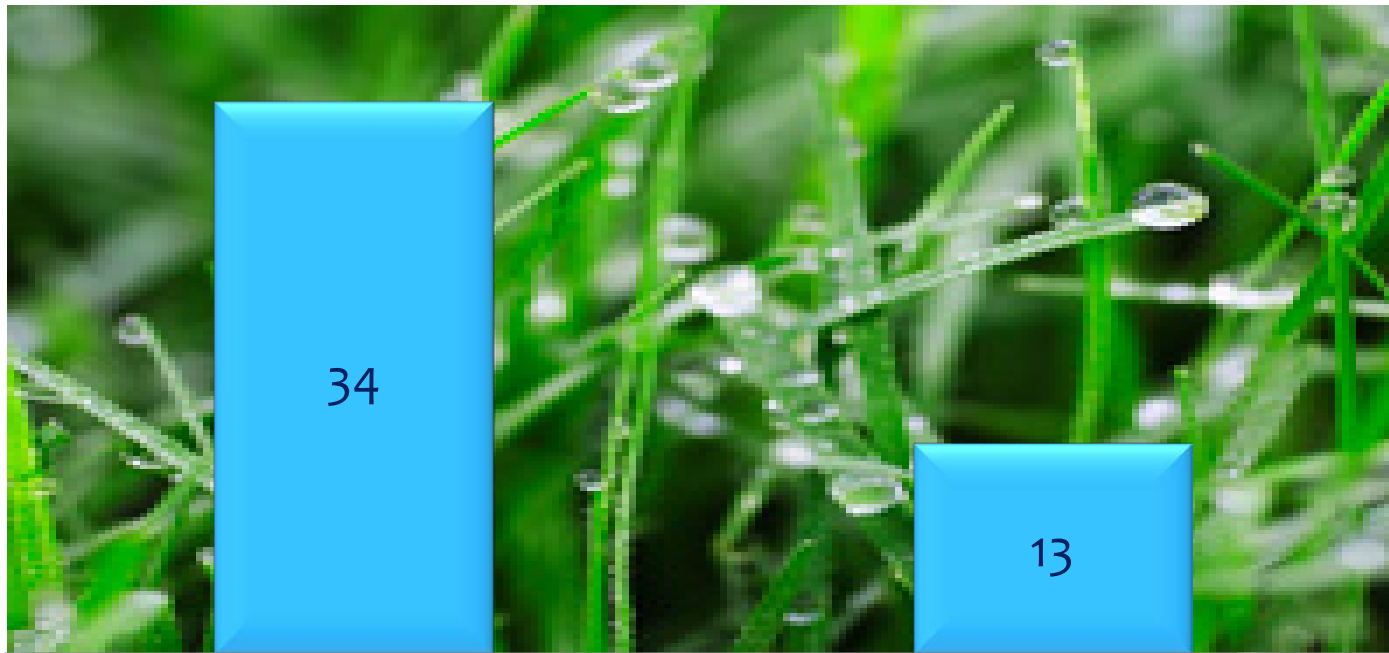
Turf/Xeric Combo

Xeric

Turf

2010 Smart Controller Coupon Survey

Respondents



■ Respondents

Maintained Own Landscape

Contractor Maintained

2010 Smart Controller Coupon Survey

Respondents



■ Respondents

Programmed Controller

Contractor Controlled

2014 Smart Controller Coupon Study

Primary Goals

- Find how these controllers were being operated after a period of at least six months
- Are they operating as intended?
 - Smart Controller (auto mode)
 - Standard Controller
- Receive customer feedback regarding:
 - Controllers
 - Coupon Program



2014 Smart Controller Coupon Study

Scheduling Visits

- 162 customers who redeemed coupons were contacted
 - Visits conducted between Fall 2013/Summer 2014
- Email was sent offering free site consultation
 - Non respondents were called
 - Contact was made regardless of ownership change

2014 Smart Controller Coupon Study

Field Visits

- Visits lasted 15-20 minutes
- Confirmed controller settings were either in Auto or Standard Mode
- Pictures were taken onsite
- Visual survey of landscape quality
- Customers filled out brief satisfaction survey



2014 Smart Controller Coupon Study

- 49 participated in follow-up study
- 30% RESPONSE RATE!!
- 32 Field Visits completed
- 17 Telephone interviews were completed



2014 Smart Controller Coupon Survey

Controllers



■ Controllers

Auto Mode

Standard Mode

2014 Smart Controller Coupon Survey

Auto Mode



■ Auto Mode

Homeowner Installed

Contractor Installed

2014 Smart Controller Coupon Survey

Standard Mode



■ Standard Mode

Homeowner Installed

Contractor Installed

Auto Mode

- Majority of respondents were still positive about the benefits of their controller
- Respondents seemed comfortable with the latest gadgets to improve their quality of life



Standard Mode

- Majority of respondents using clock in standard mode didn't "trust" controller
- Clock was not initially installed or programmed properly
- Controller or weather station had malfunctioned or lost signal
- Some didn't realize controller was not in Auto (Smart) mode



Customer Input

- All field visit participants expressed interest in a site visit by SNWA once the controller was installed by homeowner/contractor
 - At the time of this study, SNWA did not conduct program site visits
- Participants would like a chance to redeem another coupon if controller malfunctions or to upgrade as controllers with newer technology arrive on the market
- Majority of respondents purchased the controllers to save water/money (survey results)

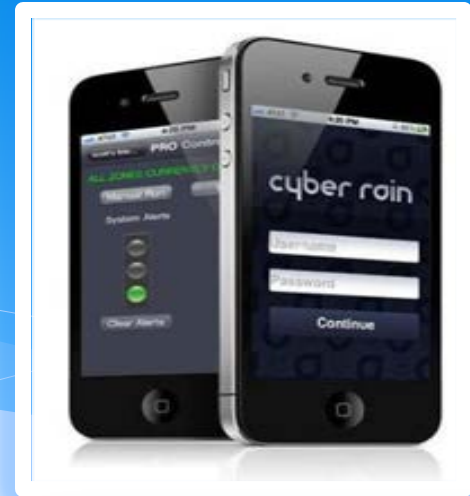
Moving Forward

- Having a Conservation professional conduct a site visit would help homeowners feel confident and validate they are using the controller as intended to maximize water savings and money savings
- A site visit would be beneficial to water purveyor to collect more data and allow for more correspondence between purveyor and customer for future studies/surveys
- Increase collaboration with landscape contractors to utilize coupon program

New Technologies

Smart Irrigation Controllers

- Smart Controllers are utilizing newer technologies
- App based irrigation products becoming more prevalent – user accessibility enhanced
- SNWA recognized this and expanded coupon program to allow purchase of these newer technologies



Questions ?

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sean.ainsworth@snwa.com

