# This presentation premiered at WaterSmart Innovations

[watersmartinnovations.com](http://watersmartinnovations.com)
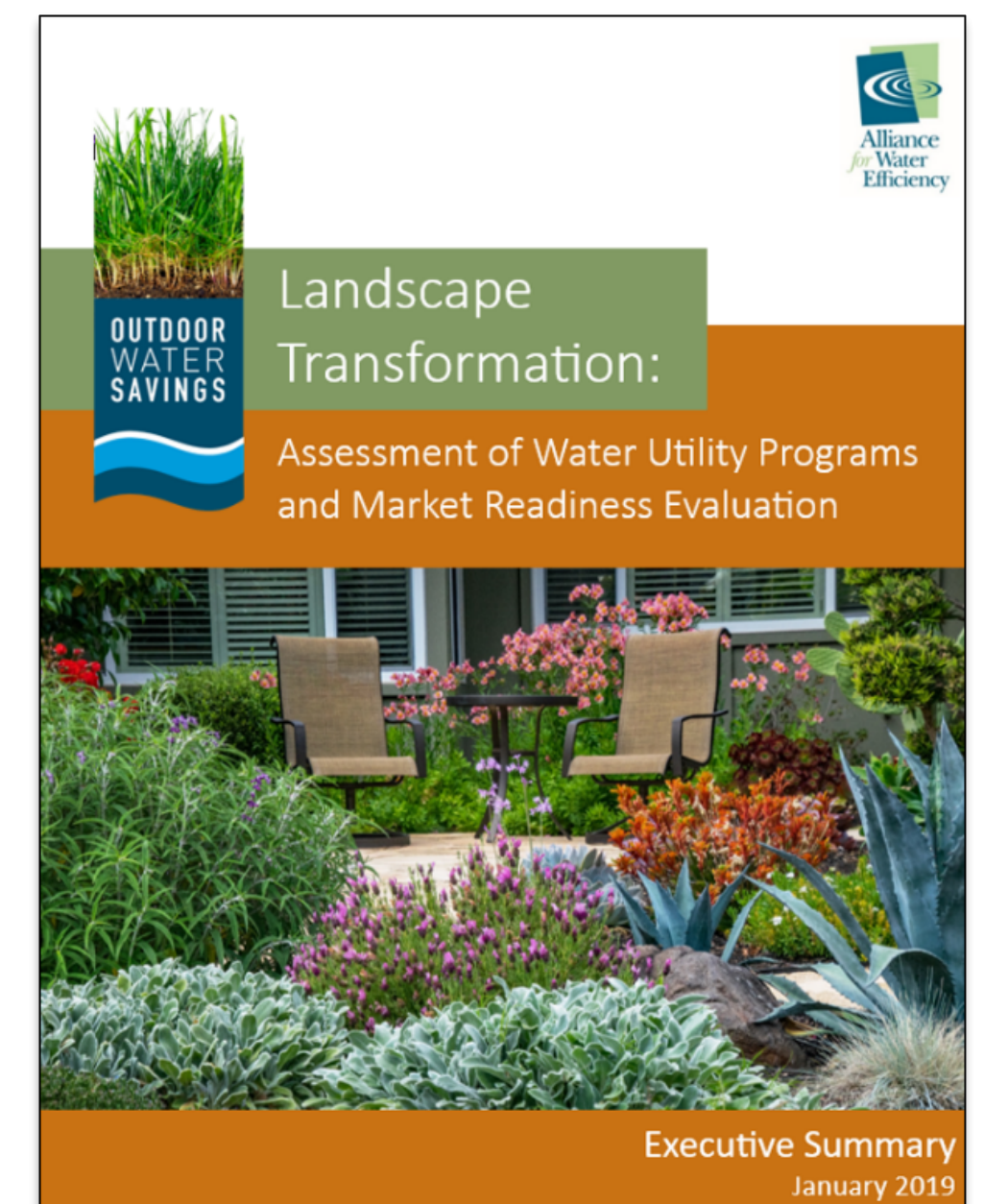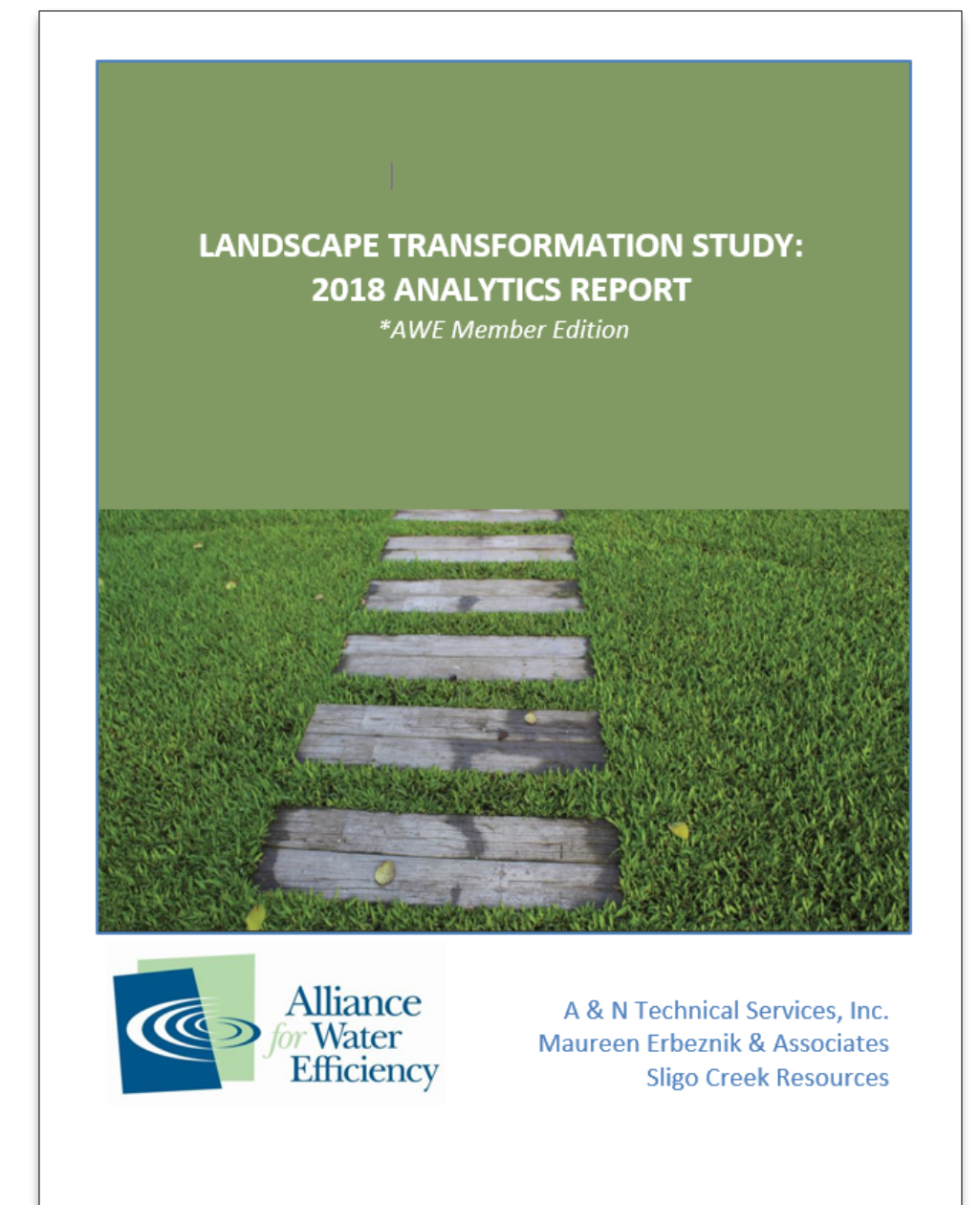
# Landscape Transformation Study

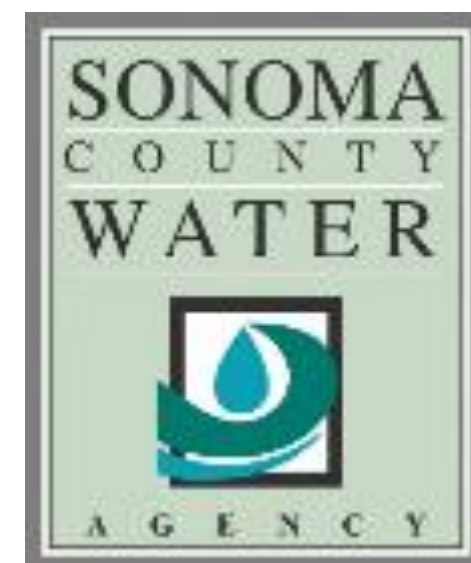Assessment of Water Utility Programs and Market Readiness Evaluation

# We Set Out to Answer

○ Do these programs save water?

○ What motivates people to change their landscape or irrigation practices?

○ How do they make landscape choices?

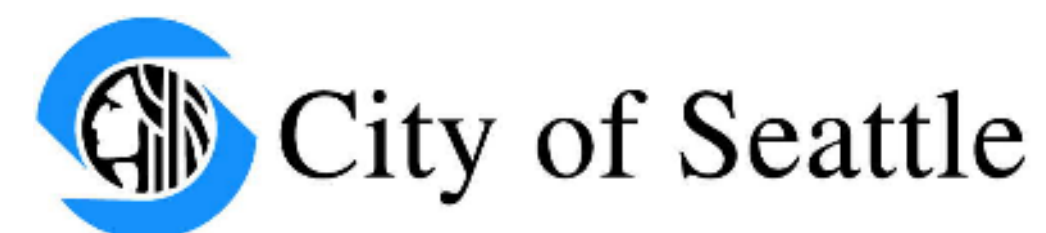○ What barriers exist to landscape transformation and to utility-sponsored programs?



LANDSCAPE TRANSFORMATION STUDY:
2018 ANALYTICS REPORT
*AWE Member Edition

Alliance for Water Efficiency

A & N Technical Services, Inc.
Maureen Erbeznik & Associates
Sligo Creek Resources



OUTDOOR WATER SAVINGS

Alliance for Water Efficiency

Landscape Transformation:
Assessment of Water Utility Programs and Market Readiness Evaluation

Executive Summary
January 2019

Alliance for Water Efficiency

# Partners and Participants

"A main conservation priority has to be reducing outdoor water use, which remains poorly understood, largely unregulated, and ripe for innovation at the consumer, manufacturer, supplier, and contractor levels."

# All Programs Achieve Savings



Average Participant Savings (gpd) vs. Participant Pre-intervention Mean Use (gpd)
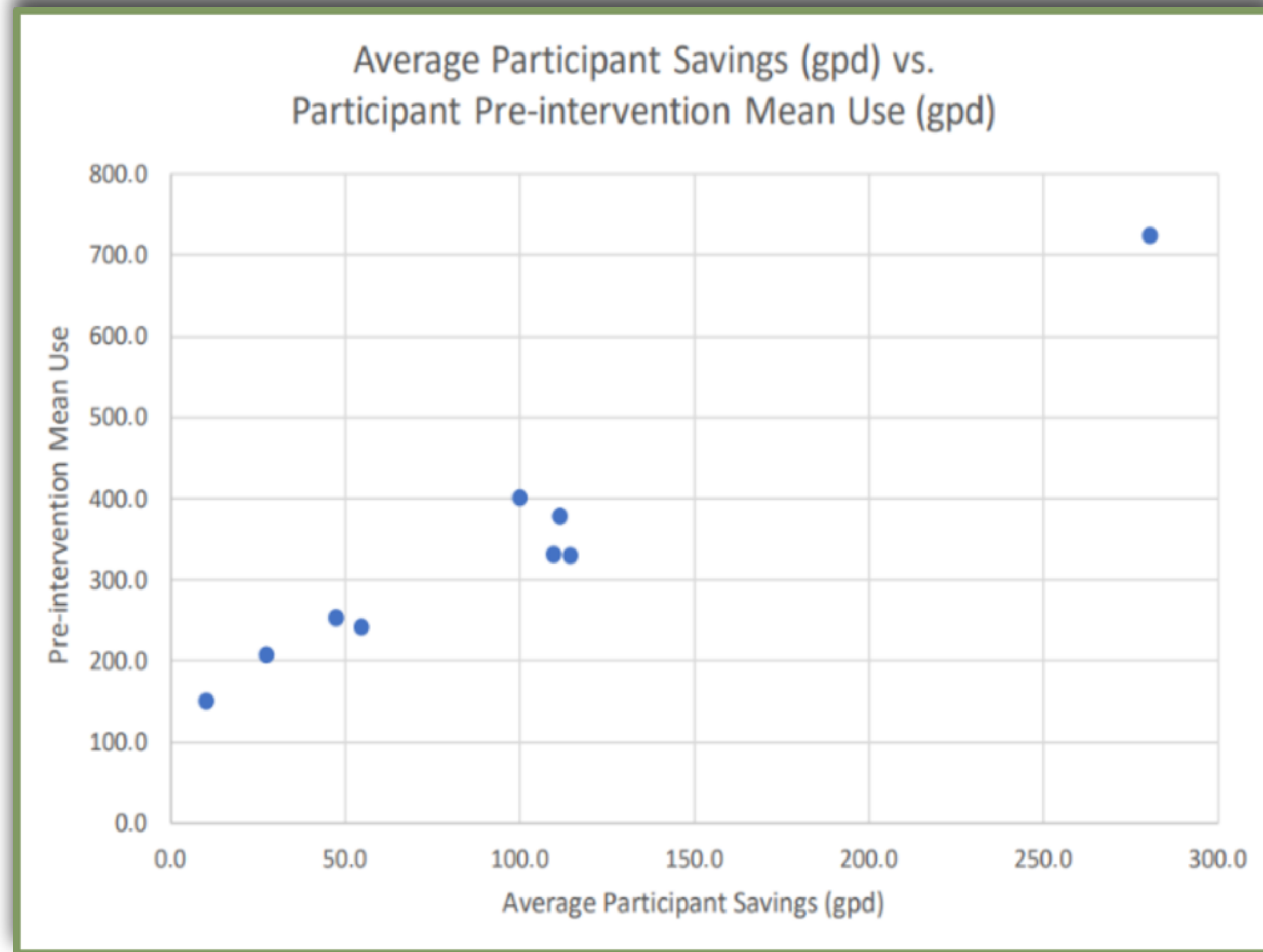
— Average savings ranged from **7%** (Outreach & Support) to **39%** (Cash for Grass)

— Higher pre-intervention water use was associated with higher savings

# Program Takeaways

| Utility | Program Name | Incentive Amt. | Start Year | Avg Yr. Activity | Total Activity |
|---|---|---|---|---|---|
| Austin Water | Waterwise Rainscape | $35/100 SF | 2009 | 31 | 255 |
| California American Water Company | Turf Removal | $1.50-$2.00 | 2013 | ** | ** |
| Fort Collins Utilities | Xeriscape Incentive | $0.75 | 2016 | 44 | 175 |
| City of Guelph | Healthy Landscape | NA | 2008 | 315 | 2,526 |
| Metropolitan Water District* | SoCal WaterSmart | $0.30 - $2.00 | 2008 | 6,026 | 54,239 |
| North Marin Water District | Cash for Grass | $0.10 - $1.00 | 1989 | 50 | 861 |
| Region of Peel | Fusion Landscaping | NA | 2009 | 1,000 | 11,329 |
| City of Petaluma | Mulch Madness | NA | 2009 | 350 | ** |
| City of Sacramento | River Friendly Landscape | $1.00 | 2012 | 29 | 86 |
| City of San Diego | Giveaway & Cash for Plants | $1.25 - $3.50 | 2011 | 65 | 392 |
| San Diego County Water Authority | Sustainable Landscapes | $1.75 | 2014 | 253 | 760 |
| City of Santa Rosa | Cash for Grass | $0.50 - $1.00 | 2007 | 257 | 1,805 |
| Seatlle Public Utilities | Irrigation Equipment | $100/controller | 2017 | NA | NA |
| Southern Nevada Water Authority | Water Smart Landscapes | $1.00-$2.00 | 1999 | 3,357 | 57,073 |

# Customers are Happy

Customers are content with the work they had to do, the money they had to spend, and the overall outcome of their landscape conversion.

## 90%

Of participants

Were satisfied with the program experience.

## 63%

Of participants

Would not do anything different.

## 85%

Of participants

Felt the new landscape was worth the investment.

# The Best Program

There's no silver bullet, but the highest water savings come from a combination of incentives, requirements and support.

| Incentives | Policies | Support |
|---|---|---|

Generous incentives to encourage lawn removal.

Strict requirements around water usage.

Substantial customer support services.

# There's Much Room for Improvement

Once we can find a balanced approach that water agencies can afford, we can unlock a tremendous opportunity.

— The drought significantly drove activity levels for programs.

— Programs have only impacted small percentages of properties.

— We think we've found a message that resonates with customers — beauty.

# Market Takeaways

# We Have a Long Way to Go

Sales of efficiency products are still under 20%.
There are three key areas that are holding us back.

## Product Availability

High efficiency products are hard to identify in stores. Plant availability is limited... impacting sales.

## Certifications

Limited testing, certifications, and labeling... impacting quality and customer acceptance.

## Promotions

No large-scale industry promotions....impacting customer awareness.

# Industry isn't Fully Engaged

We can't keep running away from this fact. It's not built to sell efficiency.
We can fix that.

— Gardeners are not skilled at conversion projects.

— Large landscape contractors don't serve the 1,000 sf market.

— The Landscape contractor business case is not clear, most can't justify the investment in training and sales.

# Customer Takeaways

# Beauty Comes First

Each customer desires to have a beautiful landscape, and they each have a different vision for what comprises beauty.

## 69 %

Of survey respondents

Believe that water efficient design can be beautiful.

## 55 %

Of survey respondents

Choose aesthetics as the reason for changing.

## 79 %

Of survey respondents

Are dissatisfied with their existing landscape.

# Aware, But No Action

Most customers have considered converting their lawn, but they need help.

## 55 %

Of survey respondents

Are interested in removing all or part of their lawn... most (39%) stated only part of their lawn.

## 73 %

Of survey respondents

Need help. Design is the **most important need** for customers.

## 69 %

Of survey respondents

Have considered making a change...but haven't.

# Not Enough Understanding

There are a number of misperceptions that disconnect the customer from their actual water usage.

**1** They believe that most water is used indoors.

**2** They think they already have efficient equipment.

**3** Saving water is the number one driver.

"There must be a compelling and personal reason to change."

# The Future with Big Data

# The Problem Will Continue

If nothing changes, we will struggle with achieving water savings.

## Emotional Issue

Customers have an emotional connection to their lawns and are concerned about making changes.

## Hard to Sell

Customers don't value making the changes. It's not easy and it can be expensive. The market is not assisting.

## Inefficient Targeting

We sell the program with the same message to everyone without understanding their wants and needs.

# Asking The Right Questions

We need to do better with segmentation (knowing who someone is) and targeting (delivering the right program and message to that person).

**1** Before we promote programs, we have to be educated. Who are our customers?

**2** Once we understand our customers better, what's the right program, what message will resonate?

**3** When we know our customers, the right message and the right program, how do we drive them to make changes?

# The Tech to Success

**Big data and deep learning are useful tools that organizations can use to better understand customers, predict preference, driving sales and advancing market transformation.**

In 2010, Amazon.com introduced shopping recommendations to customers using deep learning.  These recommendations now account for 35% of sales — $49.6 billion a year.

A recent Accenture study stated that 75% of customers are more likely to buy from a retailer that recognizes them by name; recommends options based upon customer interests and their purchase history.

# A Better Future with Prediction

Prediction is at the heart of making any decision. We can use technology like big data and deep learning to make better decisions.

— Our business is riddled with prediction decision issues. **Who to sell to? How to?**

— Prediction tools increase impact e.g. **better recommendations, more accurate targeting.**

— Better prediction creates opportunities for **new program structures and outreach strategies.**

# Use Analytics to Drive Response Rates

**Compile Multiple Data Sources**
→ Socio Demographics
→ Social Media
→ Agency Data
→ Purchasing Trends

**1**

**9** Track and Leverage Program Participation Data
→ Smart Controller and Other Device Rebates
→ Site Consultations
→ Free Device or Materials
→ Turf Removal

**8** Continually Update & Refine Customer Profile

**7** Customer Enrolls in Smart Controller Incentive Program

**6** Implement Recommended Outreach
→ E-Bill Promotion
→ Facebook Program Link
→ NextDoor

**5** Craft Best Messaging
1. Beauty
2. Eliminate Chemicals
3. Desire for New Technology
4. Fresh, New Look

**2** Create Customer Profile

**3** Apply Predictive Analytics

**4** Generate Customer Predictions

45% Likely to change controller
33% Likely to remove partial turf
17% Chance to remove all turf

# Learn More

Visit www.allianceforwaterefficiency.org

○ Executive Summary

○ Impact Analysis Report

○ Expanded Member Version

○ Process Evaluation Report

○ Fact Sheet & Info Graphic

This is no longer some far-off problem.

This is happening here.

This is happening now.

Let's make progress together.

# Questions

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