WaterSense-AWE Webinar Series

- Outdoor topics for water utility and irrigation professional audiences
- Recent topics covered include:
  - Efficient Irrigation Practices for Medians and Park Strips
  - Demonstrating the Nexus Between Water Efficiency and Stormwater
  - Accelerating the Landscape Transformation

Recordings of past webinars and registration for future webinars at [www.epa.gov/watersense/webinars](http://www.epa.gov/watersense/webinars)
Housekeeping

• All attendees will be muted upon entering the webinar to minimize background noise.

• Please type questions into the chat box on the lower right-hand side of your screen. We will have a dedicated time for Q&A and open discussion at the end of the presentation.

• A recording of this presentation will be available on the WaterSense website (www.epa.gov/watersense) and the Alliance for Water Efficiency’s YouTube channel (www.youtube.com/user/A4WE/feed).
WaterSense-AWE Webinars
Landscape Transformation Case Studies

Christopher Charles
Austin Water, Texas

Toby Bickmore
Southern Nevada Water Authority

Katie Collins
Fort Collins Utilities, Colorado

Kathy Nguyen
Cobb County, Georgia
LANDSCAPE TRANSFORMATION STUDY
1. **Impact Analysis: Landscape Program Water Savings**
   - What range of water savings can be expected from reducing landscape water requirements?

   - What motivates people to change their landscape and irrigation practices to reduce the overall water requirement and usage?
   - What are the reasons and rationale for their landscape choices?
   - What barriers exist to landscape transformation and to utility-sponsored programs?
HOW TO ACCESS THE INFORMATION

• Executive Summary available for free download
• Summary Analytics and Market Analysis Reports available for free download
• Infographic available for free download on “Sustainable Landscapes: Can Our Lawns Solve Our Water Challenges?”
• Full study materials with case studies available for AWE members
• Visit the AWE website at www.allianceforwaterefficiency.org/impact/our-work/landscape-transformation-assessment-water-utility-programs-and-market-readiness
• Landscape transformation study found that customers want help from their utilities, so this guide is targeted to utilities just getting started or those enhancing existing programs

• Organized into two sections:
  1. General considerations
  2. Considerations for specific types of outdoor landscape programs

• Features program examples with lessons learned
WaterSense Partners in Action

Austin Water Conservation Division

WaterWise Landscape Rebate Program: Listening to the Public
- What was not working
- What is working
- Steps forward

Christopher Charles
Conservation Program Specialist
Austin Water Water Conservation Department
The WaterWise Landscape Rebate Program

Program requirements since 2018

- $35 for every 100 square feet converted from turf grass to a WaterWise landscape

- Conversion area must:
  - Originally been at least 75 percent healthy turf grass
  - Cap-off automatic irrigation system or change spray heads to drip
  - Be comprised of 50 percent or more plant cover (at maturity)
  - Incorporate one inch of compost tilled into six inches of existing soil

- No more gravel unless it is a walking path (three feet max)

- Landscape fabric no longer required in plant beds, only hardscape areas (walkways, mulch rings, etc.)
WaterSense® Partner Austin Water

The WaterWise Landscape Rebate Program

Listening to the public—what was not working

- Landscape fabric
- Compost
  - Cost
  - Thin soil
- People adding automatic irrigation to their new landscape
- Gravel yards (up to 25 percent denials)
- Artificial turf requests

Changes made:

- No more landscape fabric and compost requirements
- No more new automatic irrigation to their new landscape
The WaterWise Landscape Rebate Program

Listening to the public—what is working

• Ability to do sections at a time (DIY people)
• Capping irrigation heads
• Decreased water use
  • Understanding water needs
  • Water conservation messaging
  • Rates and watering restrictions?
Steps forward:

• Participation down
  • “Free riders” back to acceptable level
  • Market stability
  • Lake levels high
  • Permanent watering restrictions

• City requests for not incentivizing
  • Gravel yards still continue
  • Artificial turf on the rise

• In-depth analysis for this program (Fall 2020)
  • Try to better quantify water savings
  • Automatic irrigation versus “hose draggers”
More Information

Contact:

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Conservation Program Specialist
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Water Conservation Division
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Water Smart Landscapes Program
Southern Nevada Water Authority
Xeriscape Conversion Study

Annual Water Application
Lawn vs. Water Smart Landscape

- Lawns: 73 gallons per square foot annually
- Water Smart Landscape: 17 gallons per square foot annually
For Every Home
Converted between
1999 and 2003...

Twenty-eight New Homes were built.

Most of those with front lawns.

• No turf in front yards of single family residential since 2004
• No commercial property turf since 2004
• Ordinances originally had drought restrictions listed based on drought stage, such as watch, alert etc.
• Updated in 2007/2008 to make drought restrictions permanent
1. Customer application
2. Pre-conversion site inspection
3. One year maximum to complete the conversion
4. Post-conversion site inspection to verify requirements are met
5. Conservation easement required
Eligibility and Rebate Amounts

• All customers eligible including government, golf courses, HOAs
• $3.00 per square foot for the first 10,000
• Then, $1.50 per square foot up to $500,000
Conversion Requirements

• Plant Coverage
  • 50 percent living plant cover

• Irrigation System
  • Low-flow drip system
  • Pressure regulator and filter

• Mulch
  • Rock, bark, synthetic turf, un-grouted pavers, etc.
  • Plastic weed barriers not allowed
  • Concrete not rebated

• Minimum Conversion Size
  • 400 square feet minimum for partial conversions
Despite these accomplishments, more than 200 million square feet of non-functional turf are estimated eligible for replacement.
Non-Functional Turf

Potential annual water savings: 12.2 billion gallons (37,400 acre-feet)
NEW AND STRENGTHENED INITIATIVES

Reinforce efforts to eliminate useless turfgrass

- Medians
- Roundabouts
- Neighborhood entries
- So-called “pocket parks”
- Residential front yards

Non-functional turf is aesthetic only; only walked on by landscapers
Thank you

Toby Bickmore
Conservation Services Admin
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XERISCAPE INCENTIVE PROGRAM

XIP = “ZIP”
(or not)
Design Clinics 2010-2014

XDAP 2014-2015

XIP 2016-present
• Educational rebate program
• $0.75/square foot up to 1,000 square feet
• Managed in-house

• Pairs well with:
  • Sprinkler audits
  • Plant by number
  • Other City grant programs
Estimated Water Savings (The Why)

8,000 gallons per month before
1,500 gallons per month after
✓ Check eligibility
✓ Attend two-hour class
✓ Enroll in XIP
✓ Attend 1:1’s
✓ Submit design for approval
✓ Install landscape
✓ Submit final application
✓ Receive rebate
### The Numbers

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Actual Water Savings

- AMI data analysis
- Average 14 gallons per square foot savings
The Future

• Online platform
• Design workshops
• Commercial XIP
Questions?

Keep in touch:

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Cobb County Outdoor Water Use Program

Give Them an Inch…Grow a Yard

Grow a yard!
2006 per capita water use was up 20 percent over 2005 during irrigation season.

New rate structure sent a conservation signal to high outdoor water users—angry customers—heavy irrigators saw bills jump over 300 percent.

In our area, overwatering is the number one cause of plant mortality.

There was so much information and sources—our audience was confused.

Focus the audience—automatic irrigation.
Considerations

- Target audience: top 20 percent of water users—heavy outdoor irrigators
- Message: Your yard needs one inch of water per week
- Provide tools and information to assist customers in maintaining a beautiful, cost effective yard
- Recognizable logo and slogan—new spin on old saying
- Buy-in from civic leaders and irrigation/nursery industry
Program Components

- At-home irrigation audit—drafted in partnership with the Georgia Irrigation Association
- Traveling displays with outdoor materials (partner with Cobb libraries, senior centers, and government centers)
- Link to irrigation calculator on website
- Prepare instructional video for TV23 and stream live on website
- Focus on new high efficiency outdoor water use technology
- Distribution of outdoor water saving kits
Can’t Go It Alone

**Give Them an Inch…Grow a Yard! Partners:**

- Local businesses, particularly landscape and irrigation companies, can become partners by carrying our educational materials and distributing to customers
- Designated with window clings at their business or on vehicles

**Give Them an Inch…Grow a Yard! Communities:**

- Local HOAs can qualify by having Water System staff give a presentation to homeowners on efficient outdoor water use or by distributing our educational materials
- Designated with yard signs at subdivision entrances
Annual Per Capita Water Use and Rainfall
Goals and Results

➢ Wanted a two percent reduction in peak water use per year driving toward an overall reduction in peaking factor from 1.5 to 1.3
  • GPCD May – Oct average 143 pre-program to 127 first year post
  • Annual average from 2005-2019 121 GPCD
  • Current peaking factor after first year 1.28
  • Average peaking factor 2005-2019 1.23

➢ Prevent our wholesaler from violating their withdrawal permit—wholesaler has not exceeded withdrawal permit since 2008
Message Landing

- 22 irrigation and landscape partners—they carried our materials and gave them away to clients
- 18 communities labeled at Give Them an Inch...Grow a Yard—we utilized existing community beautification days
- Helped to have consistent and simple, actionable message: Water deeply once a week one inch of water including rainfall
Most Interesting Lessons

- Even after the sunset of the official program—our message worked—our wholesaler was updating our shared water model and it showed a consistent spike of water in the 4 a.m. -5:30 a.m. window after extended dry periods.

- Customers realized their yards were not going to die if they did not water everyday.

- More resilient—similar drought hit in 2011/12 and we were better able to meet demands while maintaining permitted withdrawals and minimal increases to the peak.

- It is challenging to keep the focus of industry professionals when it starts raining.

- The program may have ended, but we keep and update many of the program components and have used them to expand landscape program offering.
Cobb County Water System

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Cobb County...Expect the Best!
Questions and Discussion

Please type your questions into the chat box.

EPA’s WaterSense Program
www.epa.gov/watersense/outdoors/

The Alliance for Water Efficiency
www.allianceforwaterefficiency.org/
Partnering With WaterSense

WaterSense would not be successful without its nearly 2,000 partners.

- **Manufacturers** design and create products to meet WaterSense specifications
- **Retailers/distributors** get WaterSense labeled products onto shelves
- **Builders** construct water-efficient homes using WaterSense labeled products and to meet the WaterSense specification
- **Certification providers** inspect and label homes
- **Professional certifying organizations** train irrigation professionals to help homeowners water more efficiently
- **Promotional partners** spread the word
  - Water utilities, state and local governments, nonprofit organizations, and homebuilder associations
New Resources

Sprinkler Spruce-Up
Social Media Graphics

Inspect for broken or damaged sprinkler heads.

Connect hoses and pipes to reduce leaks.

Direct sprinklers to spray on landscapes.

Select a WaterSense labeled controller and water smarter.

Oklahoma City Makes Median Irrigation OK

Spray Sprinkler Body Mini-Report

Relieve Pressure and Reduce Water Waste From Spray Sprinklers

Spanish Sprinkler Spruce-Up Graphic

¡Es primavera!
Es hora de darle mantenimiento a su sistema de riego en cuatro simples pasos

INSPECCIONE
Las cabezales de expulsión, ¿has revisado su estado?

CONECTE
Las mangueras y tubos bien. Una fuga pequeña del tamaño de una pluma puede gastar 12,500 galones de agua mensuales.

DIRJA
El agua hacia el pasto, no hacia el pavimento.

SELECCIONE
Un control de riego de etiqueta WaterSense y ahorrará agua el regar.

Mulch Madness bill stuffers

Mulch—because wasting water is madness.
Before We Go

Help us identify topics for future webinars!

Visit us online

- www.epa.gov/watersense
- www.allianceforwaterefficiency.org

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