

# This presentation premiered at WaterSmart Innovations

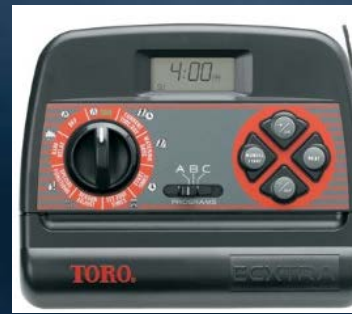
[watersmartinnovations.com](http://watersmartinnovations.com)



# “Take Control of Your Controller”: Using Regional Collaboration for Change

Carolyn Schaffer

Metropolitan Water District of Southern California

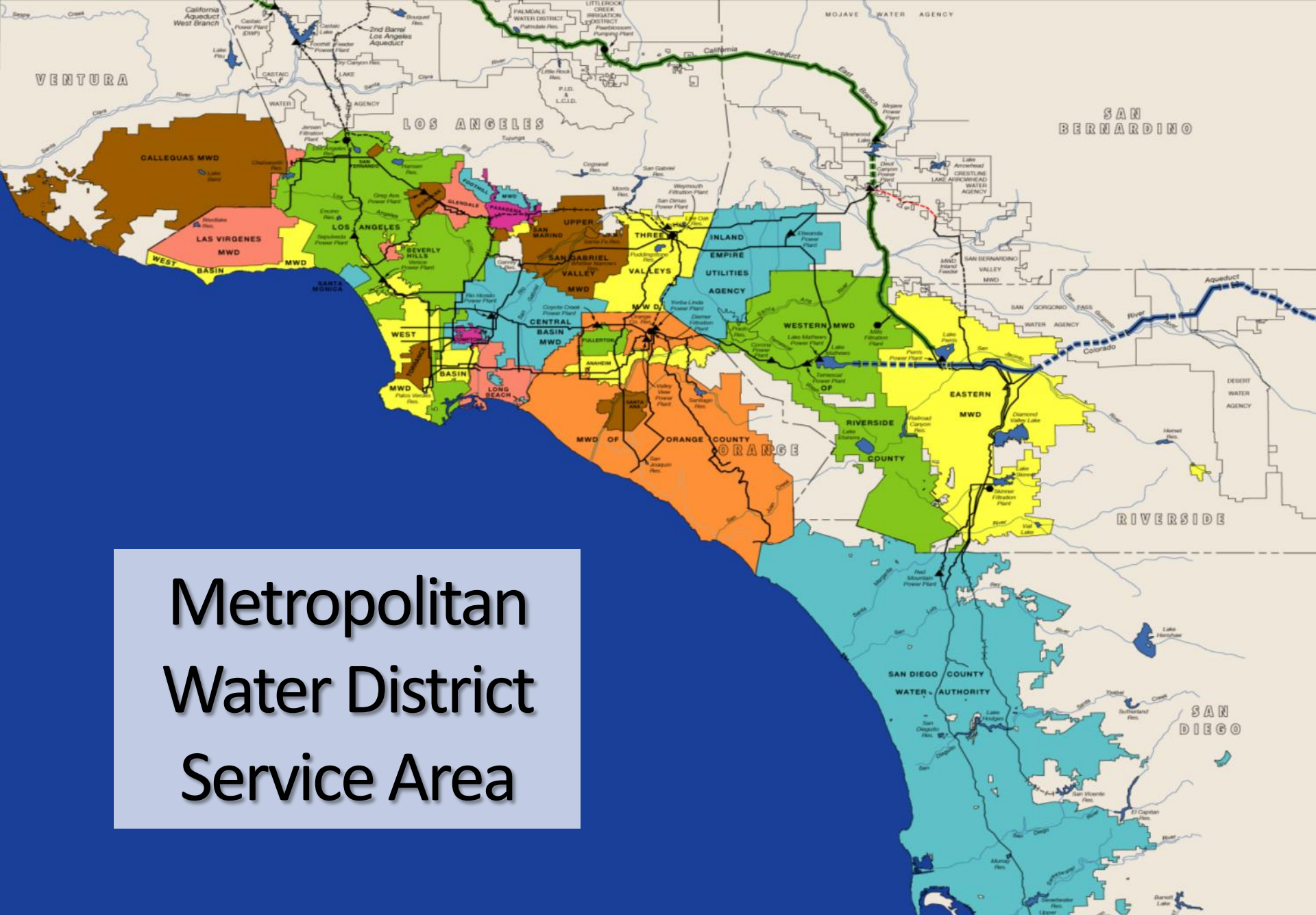


WaterSmart Innovations 2012

# Metropolitan Water District of Southern California



- Regional Water Wholesaler to 6 counties
  - 5,200 square miles
- 18 million residents
- Regional economy: \$1 trillion
- Imported water meets  $\frac{1}{2}$  of retail demands



# Metropolitan Water District Service Area

*Average Rainfall = 15 inches per year*



# Where Southern California Gets its Water

Water Banking / Exchanges  
Transfers & Storage

Local Supplies  
LA Aqueduct

Colorado River  
Aqueduct

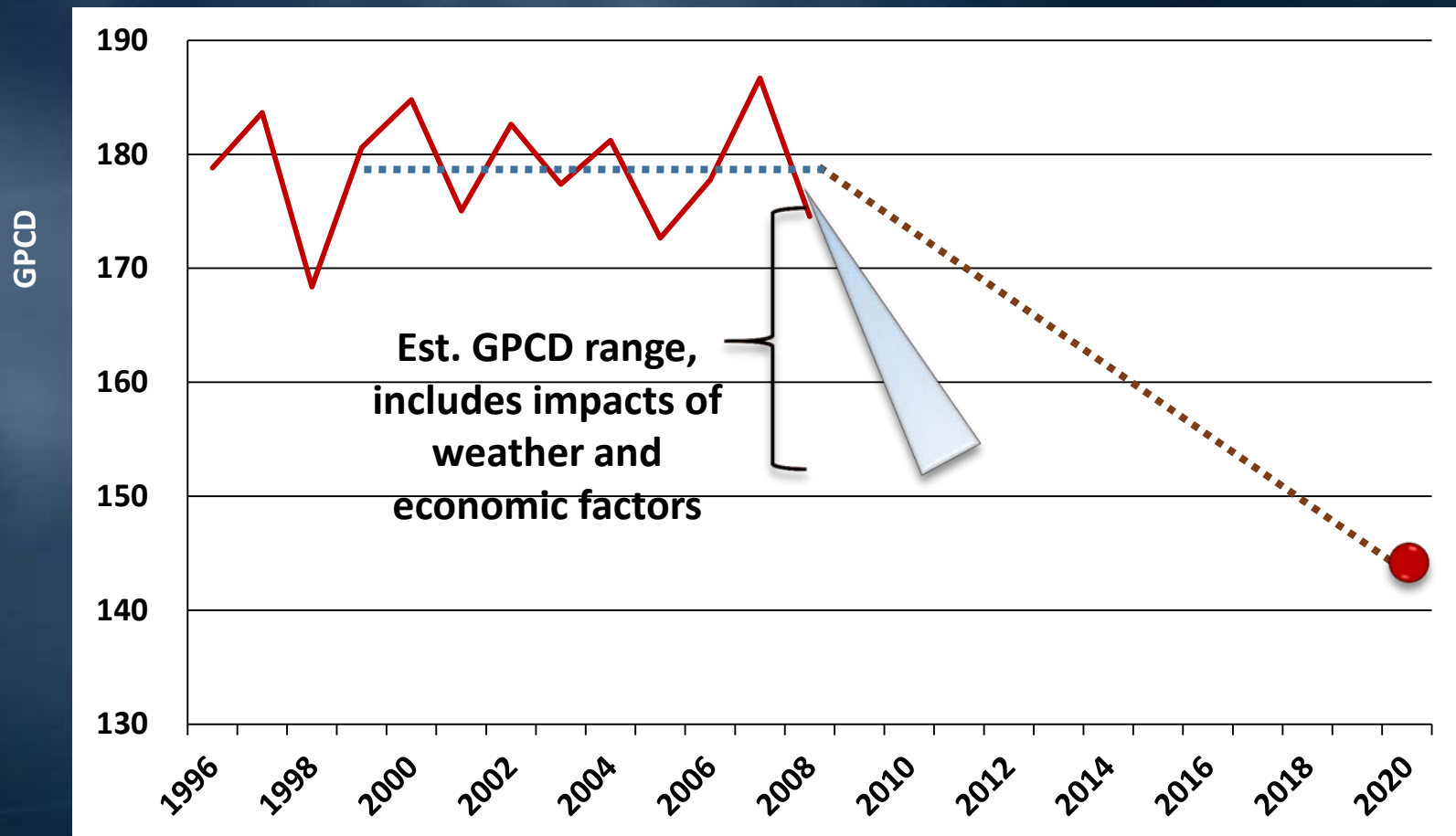
State  
Water  
Project

Conservation,  
Recycling,  
Groundwater



# Regional Water Supply Reliability

- 20% reduction in urban per capita water use by 2020

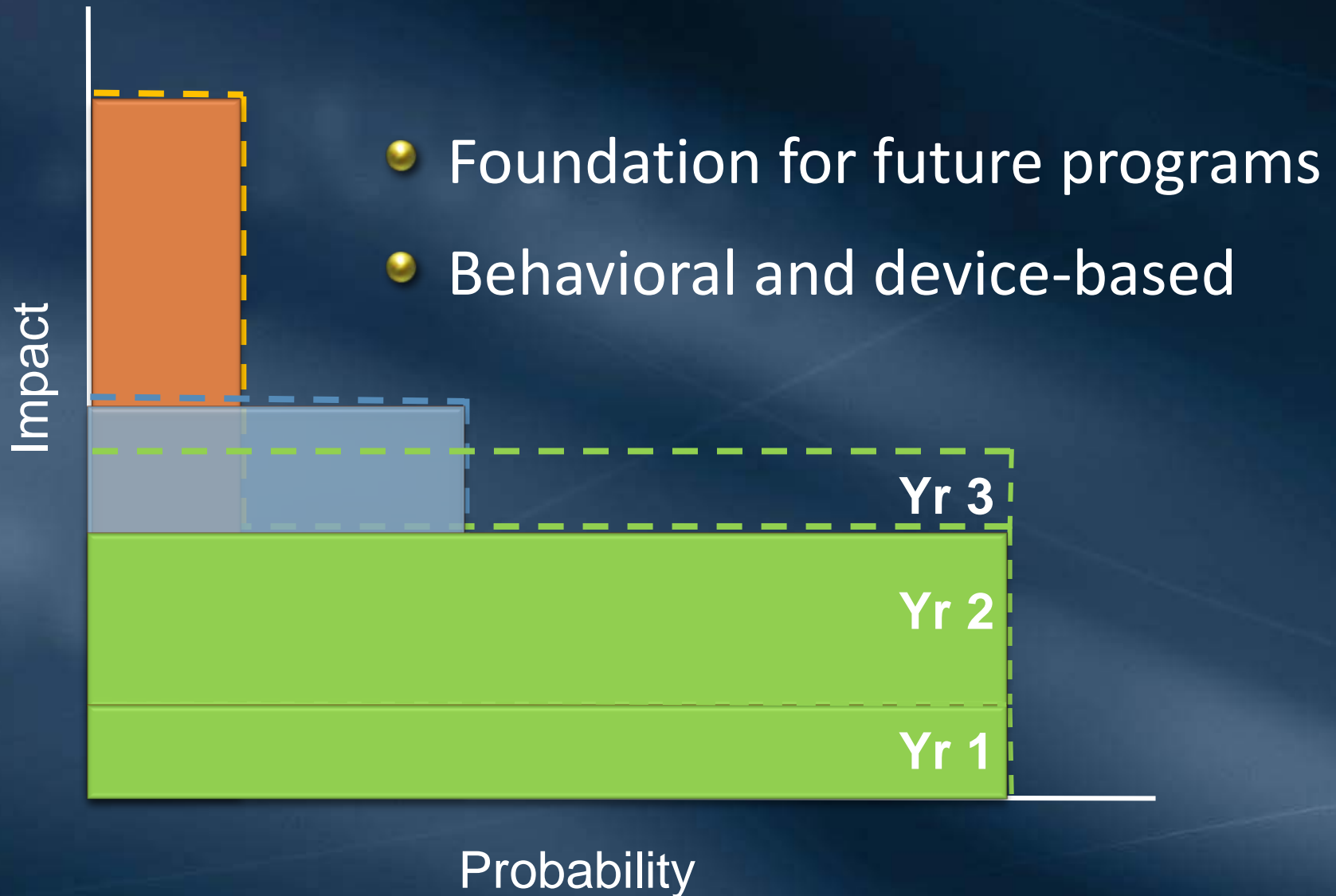


# Need for Market Transformation

- Lasting change in consumer preferences for water-efficient technologies and services
- Catalysts for change
  - Outreach and education
  - Strategic alliances
  - Technical knowledge transfer
  - Advancing standards
  - Incentives
- Collaboration increases level of success

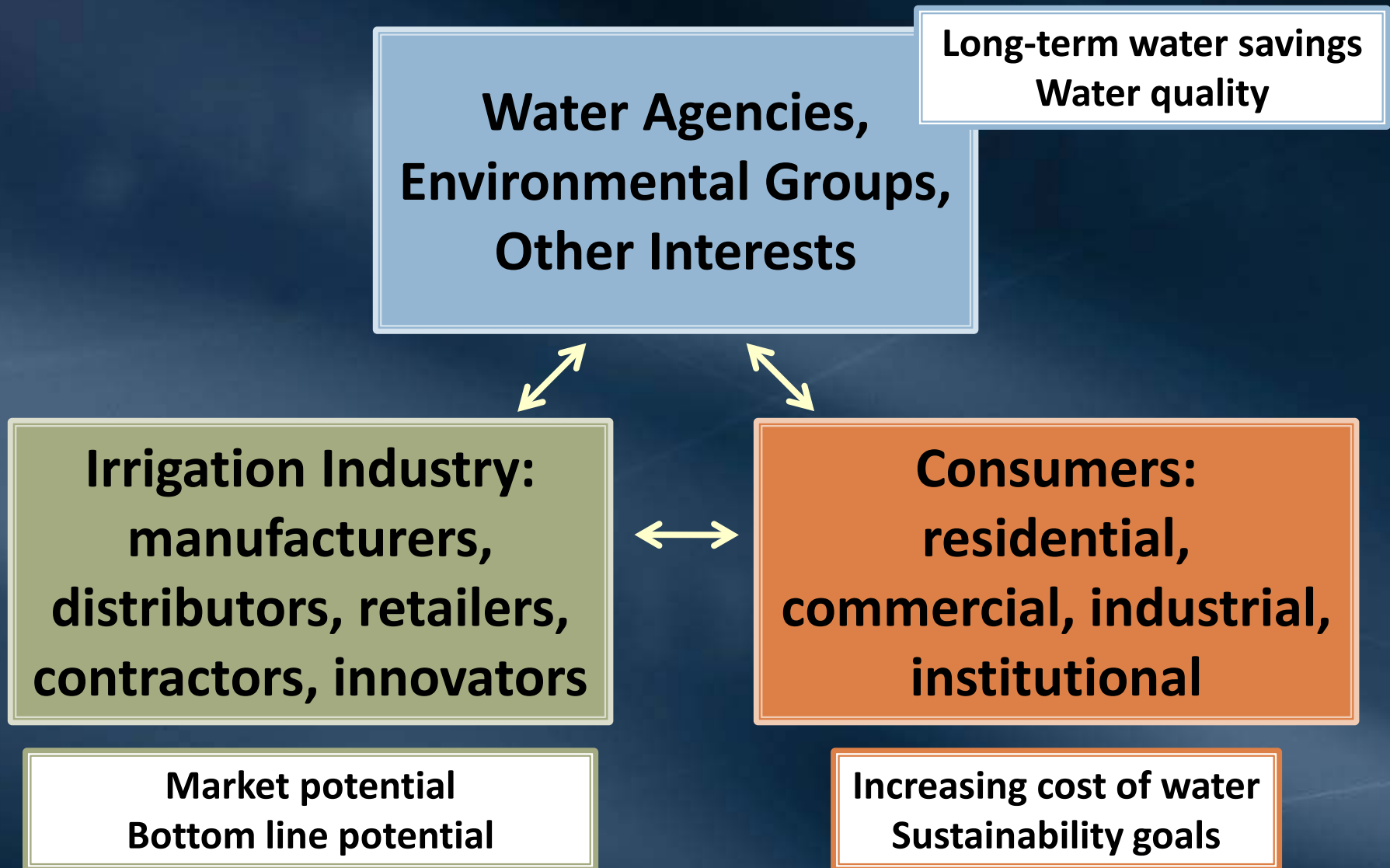


# Selecting the Focus





# Focus: Proper Irrigation Control




# The “PIC PAC”

- Proper Irrigation Control Program Advisory Committee
  - Working group of member and retail agencies
- Regional collaboration with local implementation
  - Brainstorming
  - Action items with shared responsibilities
- Influence market actors
  - Supply side
  - Demand side



# Sharing Resources

- Online resource toolbox
  - Outreach Campaigns
  - Guides and Manuals
  - How-To Videos, Web Content
  - News Articles



**WATER WATCH**

## Take control of your controller!


**(Part 10)**

### RAIN = OFF!

- Most sprinkler timers have a setting for rain.
- Just turn the dial to "Rain", "Rain Off" or "Off".
- When rain is predicted, and after it rains, leave the controller on the "rain" setting.
- Most landscapes thrive on rainwater – a quarter inch of rain means you probably don't have to water for at least a week!
- Feel the soil and look at the plants before you turn the timer back on:  
... if soil is damp, you can wait a few more days.
- During winter months, schedule the timer for once a week or less.
- Save water, save money:  
... your water allocation reflects rain and the fact that plants need less water in the winter.

Visit [www.bewaterwise.com](http://www.bewaterwise.com) to create water-smart watering schedule.

For more water conservation tips, visit [www.sanjuancapistrano.org](http://www.sanjuancapistrano.org).



This is the tenth in a series on how to use and understand your irrigation controller "clock." More information: Follow the "water conservation" link at [www.sanjuancapistrano.org](http://www.sanjuancapistrano.org).

*Sign up for the City's Enews to stay apprised of the latest news and information at [www.sanjuancapistrano.org](http://www.sanjuancapistrano.org).*

# Outreach and Education



## WaterSmart Guide: How To Control Your Controller

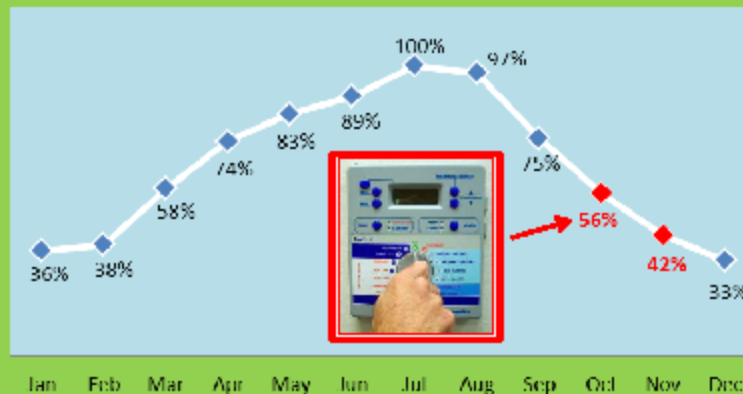
### 5 Steps

- 1) Make a map & label zones!
- 2) Look @ WaterSmart Watering Guide for watering times
- 3) Use multiple programs (e.g. grass is Prog. A, shrubs, Prog. B)
- 4) Use multiple start times to cycle/soak (ex. cut 8 min. into 2 cycles of 4 min.)
- 5) Fine tune & adjust for runoff!



## Take Control of Your Sprinkler Controller

### Plant Water Requirement



Fall is the time to reduce your sprinkler run times – and when Mother Nature waters for you turn your sprinklers off.

**WaterSmart Tip for Fall:** Reduce your sprinkler runtimes since your plants only need ½ the water they do in summer. For example, if you watered your lawn a total of 36 min./week in summer your plants will be happy with only 18 min./week this fall.



# Info Sheet and Bill Insert

## Save Water, Save Money

In California, landscape water use can account for up to half of commercial water use and up to 70 percent of residential water use.

According to U.S. EPA WaterSense®, nearly half of this water may be wasted through overwatering, runoff, and evaporation. With smart, simple choices about sprinklers, plants, and maintenance, you can reduce your water bill and have a healthier landscape.

## Quick Tips for a California Friendly® Garden:

### Choose plants that naturally thrive in Southern California's climate

- ☐ Select plants with moderate to low water needs
- ☐ Match your plants' sun and water needs within shrub and flower beds to avoid overwatering plants with low water needs
- ☐ Use your favorite high water need plants as accents in areas that are protected from heat and wind
- ☐ Encourage healthy roots with soil preparation and deep, less frequent watering

### Mow high and mulch deep

- ☐ Raise the lawnmower blade to mow higher and help the lawn grow deeper roots
- ☐ Keep a 2"-3" layer of mulch in planting beds to limit evaporation and help control weeds
- ☐ Direct rainwater from the roof into a rain barrel or shrub bed and away from the home's foundation

### Keep your sprinkler system up to date

- ☐ Create a custom watering schedule and regularly adjust your sprinkler timer
- ☐ Install a smart sprinkler timer that will automatically adjust to changing conditions
- ☐ Use rotating sprinkler nozzles for lawn and groundcovers
- ☐ Convert from spray watering to drip, bubblers, and microsprays for your shrub and flower beds
- ☐ Install a rain sensor to automatically shut off sprinklers
- ☐ Change or cap sprinkler heads in areas converted from lawn to shrub and flower beds
- ☐ Repair sprinkler leaks and adjust for blocked spray and runoff to avoid water waste



## Save Water, Save Money

In California, landscape water use can account for up to 70 percent of residential water use.

According to U.S. EPA WaterSense®, nearly half of this water may be wasted through overwatering, runoff, and evaporation. With smart, simple choices about sprinklers, plants, and maintenance, you can reduce your water bill and have a healthier landscape.

## Everyday savings – keep your sprinkler system up to date

Just like your car, your sprinkler system needs occasional maintenance to make sure everything is working properly. Mowers can bump or break sprinkler heads, leaks can set in over time, and your landscape may have changed since the sprinklers were first installed. The following actions can keep your sprinkler system in top condition!

- ☐ Create a custom watering schedule and regularly adjust your sprinkler timer
- ☐ Install a smart sprinkler timer that will automatically adjust to changing conditions
- ☐ Use rotating sprinkler nozzles for lawn and groundcovers
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# Building Strategic Alliances

- Irrigation Industry
  - Share information on trends
  - Understand market challenges
  - Identify opportunities
  - Provide input to manufacturers
  - Build relationships for local efforts
- Provide education and outreach
  - Contractor training
  - Community events, workshops
- Regional pilot programs

The logo for Rain Bird, featuring the words "RAIN" and "BIRD" in a green, sans-serif font, separated by a stylized green bird icon.The logo for Hunter, featuring the word "Hunter" in a large, white, serif font on a black background, with the tagline "THE IRRIGATION INNOVATORS" in a smaller, white, sans-serif font below it.The logo for Toro, featuring the word "TORO" in a white, serif font on a red, rounded square background.The logo for raindrip, featuring the word "raindrip" in a black, sans-serif font, with a stylized green leaf and blue water droplet icon to the right.The logo for Hydro-Scape, featuring a large blue "Hs" monogram on the left, and the words "HYDRO-SCAPE" in a bold, blue, sans-serif font, with "IRRIGATION & LANDSCAPE SUPPLIES" in a smaller, blue, sans-serif font below it.The logo for Ewing, featuring the word "EWING" in a green, sans-serif font, with a small blue water droplet icon above the letter "I".

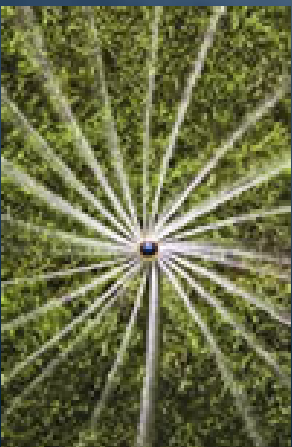
# Sharing Knowledge

- Forums for landscape contractors and water agencies
- Symposium on emerging landscape technologies
- On-site assistance with irrigation scheduling, controller programming
- QR codes on controllers, product packaging



# Incentives

- Strategic use of regional funding
  - Irrigation equipment rebates
  - Custom projects (pay for performance)
  - Large landscape audits
  - Landscape training
- Local landscape programs



# Translating Regional Focus to Local Conditions

- Responsible for local efforts
- Brainstorming with member retail agencies
- “Take Control of Your Controller” message
  - What type of messaging and when?
  - What information should be included?
  - How should it be presented?
  - What will the customer understand?



# TAKE CONTROL OF YOUR CONTROLLER

## PART 1

Don't let your sprinkler system run away with your water bill this Fall



- Do you own a sprinkler controller?
- Do you know where to find your controller?
- Do you know how and when to turn it off?
- How many days of the week does it come on and for how long?
- What time of day does it water?

### Summer is over!

Shorter days and cooler temperatures mean plants need less water. You can save up to 1,700 gallons of water per month by adjusting your sprinkler controller.

- ✓ Many controllers are mounted inside the garage or outside on an exterior wall.
- ✓ Turn the controller off when it is very windy or raining. The off switch is usually located on or near the dial.
- ✓ Set your controller to a Fall schedule using the Inland Empire Watering Guide. Start with 6 minutes per day, 3 days per week and adjust time if needed.
- ✓ Water before 7:00 am when the sun is low and there is usually little or no wind.

PUBLIC SERVICE  
ANNOUNCEMENT



For more information: [www.ieua.org](http://www.ieua.org) & [www.bewaterwise.com](http://www.bewaterwise.com)

Cities of Chino, Chino Hills, Ontario, and Upland; Cucamonga Valley Water District; Fontana Water Company; Monte Vista Water District; San Antonio Water Company; Chino Basin Water Conservation District; Chino Basin Watermaster; Inland Empire Utilities Agency

# TAKE CONTROL OF YOUR CONTROLLER

## PART 2

Does your gardener pay your water bill?

Probably not, so why not save water by adjusting your irrigation controller.



Adjust your controller by using the dial and/or buttons. Some controllers don't have a dial but you can still:

- Set the current time and date.
- Set the time, days, and number of minutes you want to water.
  - ▶ Water before 7:00am. Start with 6 minutes/day 3 days/week and adjust as needed depending on your soil type.
- Turn the controller off during rain and high winds.
- Check your controller after a power outage. Some will default and water more than needed.

SUN 12:00 AM

Display:

- Current dial setting



Display Buttons:

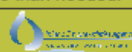
- Navigation
- Change Settings

## Consider replacing your existing controller with a Smart Controller.

Smart controllers save water by automatically adjusting to changes in the weather and the needs of your garden.

Smart controllers account for plant types, soil conditions, location, climate and other landscape conditions.

A smart controller can save up to 13,500 gallons of water per year.



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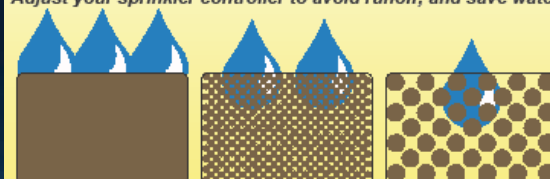
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# TAKE CONTROL OF YOUR CONTROLLER

## PART 3

Where is your water going?

Adjust your sprinkler controller to avoid runoff; and save water!



Clay

Absorbs water slowly and can cause runoff if watered too quickly especially when dry. Holds moisture for long periods.

Loam

Normally absorbs water and stores moisture well. Sand or clay based, loam varies in absorption and retention.

Sand

Moisture penetrates sand easily, but does not retain water well. Larger particles will feel coarse when wet or dry.

### Testing Your Soil:

Take a handful of moist soil and give it a firm squeeze. Open your hand and press it with your finger.

If it holds its shape in your hand and after you press it, you have clay soil.

If it holds its shape in your hand but breaks or crumbles when you press it, you have loam soil.

If it does not hold its shape in your hand or crumbles with a light press, you have sandy soil.

	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Clay		Water		Water		Water	
Loam		Water		Water		Water	
Sand	Water		Water		Water		Water

Clay soil requires fewer watering days per week, but multiple short watering times each morning you water.

Loamy soil requires fewer watering days at longer intervals, but only once for each morning that you water.

Sandy soil requires more watering days per week at medium durations, but only once each morning that you water.



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# TAKE CONTROL OF YOUR CONTROLLER

## PART 4

Five steps to a water smart garden



### 1) Choose appropriate plants

Consider CA natives and plants from mediterranean climates that can thrive in our dry climate (~13" in. of rain a year; Sunset Climate Zone 23). Limit grass to recreational areas only.

### 2) Group plants

- Site plants with similar water, soil, and light needs together. These are called hydrozones.

### 3) Irrigate efficiently

- Use drip irrigation or low-flow rotating nozzles (rebate available!) to deliver water directly to the root zone without the over-spray or runoff typical of conventional spray-head sprinklers. Use the watering index at [www.bewaterwise.com](http://www.bewaterwise.com).

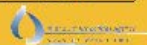
### 4) Water deeply

- Irrigate established plants thoroughly but infrequently to encourage roots to grow downward - shallow roots are susceptible to drought.

### 5) Mulch

- A thick layer of mulch (3") preserves soil moisture and slows weed growth. Use organic types, such as bark and mulch.

For up to 50% off Inland Empire Garden Friendly plants, visit The Home Depot on October 15, 2011



For more information: [www.ieua.org](http://www.ieua.org) & [www.bewaterwise.com](http://www.bewaterwise.com)

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# TAKE CONTROL OF YOUR CONTROLLER

## PART 5

How efficient are your sprinklers?

[Freesprinklernozzles.com](http://Freesprinklernozzles.com)

### Traditional



#### Spray head Sprinklers

These deliver more gallons per minute and are the most common type of irrigation. Much of the water applied onto the landscape evaporates or runs-off before it reaches the root zone.

### Water Efficient



#### Multi-Stream Sprinklers

These deliver less gallons per minute and spray water in streams. Most spray head sprinklers can easily be converted by replacing the head. This reduces evaporation and runoff.



#### Drip Irrigation Systems

Drip is an alternative to overhead sprinkler systems and is highly efficient because water is applied directly to root zones with flexible tubing (a). Ways to implement drip irrigation include:

- The use of drip tubing (b) with emitters already in the tubing and evenly spaced apart is common around trees and in vegetable beds.
- Microspray sprinklers (c) may be used to cover multiple plants in small areas.
- Shrubblers (d) may be adjusted to emit either small or large amounts of water for trees and shrubs.
- Emitters (e) are designed to release only small amounts of water for individual plants and are commonly used in vegetable beds.



For more information: [www.ieua.org](http://www.ieua.org) & [www.bewaterwise.com](http://www.bewaterwise.com)

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# TAKE CONTROL OF YOUR CONTROLLER

## PART 6

It's time to turn it down and shut it off.

Now that Fall is in full swing and Winter is approaching, consider the following:

- Turn your sprinklers off for a week after each full day it rains.
- Adjust your controller to a lower setting during the winter.
- Upgrade your landscape to low water use plants, sprinklers and smart controllers.



#### Locate your controller

- Turn it off on rainy and windy days.
- Cooler temperatures means changing to a fall schedule.



#### Get familiar with your controller

- Locate your manual and understand your controls.
- Visit [www.bewaterwise.com](http://www.bewaterwise.com) to find a copy of your manual.

## PART 1



#### Know when your soil is thirsty

- Test your soil to see if it's clay, loam, or sandy soil.
- Adjust your controller according to your soil type.

## PART 2



#### Know how to pick and place your plants

- Choose low water use plants for your landscape.
- To help choose plants, visit: [www.iegardenfriendly.com](http://www.iegardenfriendly.com).

## PART 3



#### Make your irrigation more efficient

- Consider replacing traditional sprinklers with efficient ones.
- To help improve water efficiency, visit: [www.freesprinklernozzles.com](http://www.freesprinklernozzles.com).

## PART 5



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You are here: [Home](#) > [Landscaping](#) > [Irrigation Controller](#)

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## Control your Controller

A large part of our household water use goes to watering our landscape and many households rely on automatic irrigation systems to accomplish this. One of the most important components of an automatic irrigation system is the irrigation controller (also called a timer or clock).

The controller turns the irrigation system on and off at the times you select. In other words, the controller controls the irrigation system and you control the controller. Having a controller with certain minimum performance capabilities is vital to efficient watering. The right controller, properly scheduled, can result in significant water savings and lower water bills.

- [Irrigation Controllers for the homeowner](#)
- [WaterSmart Guide: How to Control Your Controller](#)
- [Instructional Residential Controller Programming Videos](#)
- [Irrigation Scheduling Guidelines](#)
- [Five Easy Steps to Setting Your Irrigation Controller](#)
- [WaterWise Plants Guide](#)
- [Take Control of Your Controller - Part 1](#)
- [Take Control of Your Controller - Part 2](#)
- [Take Control of Your Controller - Part 3](#)
- [Take Control of Your Controller - Part 4](#)
- [Take Control of Your Controller - Part 5](#)
- [Take Control of Your Controller - Part 6](#)



## Controller Manufacturers

- [Acclima](#)
- [AccuRain](#)
- [AquaConserve](#)
- [CalSense](#)
- [Champion](#)
- [Hunter](#)
- [Irritrol](#)
- [Miscellaneous](#)
- [Rain Bird](#)
- [RainMaster](#)
- [Toro](#)
- [Weathermatic](#)







Free Weather Based Irrigation Controller Home About Us Workshops Programs Water Conservation Education

Our Garden Events

## Take Control of Your Controller

[Program Information](#) | [How to Program Your Controller](#) | [Controller Rebate Information](#) | [Watering Guide](#) | [How to Videos](#) | [Manuals](#) | [Landscape Evaluation Audit Program](#) | [Other Resources](#)

Chino Basin Water Conservation District is teaming up with Metropolitan Water District and several other water agencies to encourage people to "Take Control of Their Irrigation Controllers." The program is promoting efficient watering by simply learning how to adjust your irrigation system.

Autumn is approaching, and there is no better time than now to become familiar with your irrigation controller. The first step is finding it—usually the irrigation timer is located in the garage or hanging on an outside wall.



Once you know where your irrigation controller is—now you are ready to learn what it can do! Don't be intimidated...

controllers can be confusing but once you learn the basics you will be ready to program your irrigation controller with confidence.

If you don't have your manual, you can find most of them online. Visit the manufacturer's website and search for your controller model—then just download the manual. You can also watch step by step videos on websites such as YouTube.

**Did you know....**  
Approximately 60% of all residential water use is used outdoors

**On average most landscapes are over watered by 30 – 300%**

**Where do you stand?**

### Featured Programs

[FREE Weather Based Irrigation Controller](#)  
[July is Smart Irrigation Month](#)  
[Landscape Evaluation Program](#)  
[Take Control of Your Controller](#)  
[Upcoming Workshops](#)

### Image Gallery



### Calendar

# Lessons We are Learning

- Different perspectives challenge process but improve outcome
  - “80% consensus = 100% commitment”
- Messaging challenges should not stop the process
- Irrigation industry is a strong ally
- Requires long-term commitment
  - Difficult to quantify results but look for evidence of change
  - Partnerships need certainty, consistency



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