step 5

### H₂ÔVERHAUL



### Water-Wise Irrigation

# Water-Wise Irrigation

Watering your landscape efficiently is one of the biggest ways to save. That's why it's so important to use the right kind of irrigation in different areas of your water-wise landscape. Maximize watering efficiency and wave goodbye to waste by customizing your irrigation system to your soil, microclimates, slope and available water pressure.

Whether you're converting your existing irrigation system or installing a new one, use your landscaping plan to outline the best approach for your space before you begin.



# Turf Areas

**Create a zone of its own.** Turf areas should be separate from plant beds, with only one type of sprinkler head for matched precipitation. Never mix different types of sprinkler heads in the same zone.

**Be in control.** Install a weather-based smart irrigation controller to save water and dollars— you can get a rebate!

**Water with the weather.** Install a rain sensor that automatically shuts off your sprinkler system when it rains. Once installed, apply for a rebate at *ThorntonWater.com/rebates*.

**Cycle and Soak.** Divide watering time into shorter cycles, with an hour between each cycle, to prevent runoff, promote deeper root growth and maintain a lush, healthy lawn.

**Never water midday.** Program your controller to run between 6 p.m. and 10 a.m. to reduce water evaporation and enhance water absorption.

**Twice a week is enough.** Add a third day of watering when temperatures rise.

**Give your system a tune up.** Fix broken heads and leaks, correct head spacing, make sure heads have matched precipitation rates and minimize overspray.

**Adjust monthly.** Consult the Thornton Watering Guide to find out how much water your landscape really needs.













# Sprinkler Head Options

#### **Pop-Up Spray Heads**

Best suited for small- to moderate-sized lawn areas (7-10 feet wide up to 30-45 feet wide) and irregular or curvilinear areas.



Pop-up spray heads have a high water delivery

rate of 1-2 ½ inches per hour. At the typical rate of 1 ½ inches per hour, the zone would receive a half inch of water in just 20 minutes.

#### **Rotor Heads**

Mechanically rotate to distribute a spray of water. Impact and gear driven heads are most common.



Best suited for large lawn areas, generally 18-24 feet or larger.

Rotors are more uniform in water distribution than pop-up spray heads and take much longer to water, delivering water at a rate of one-fourth to three-fourths of an inch per hour. (At the typical rate of a half inch per hour, it would take 60 minutes to apply a half inch of water.)

### **Rotary Nozzles**

Multi-trajectory rotating streams provide unmatched water distribution uniformity for significant water savings.



They have a lower application rate, which reduces runoff from compacted clay soils and slopes.

Almost any type of sprinkler head can be retrofitted with a rotary nozzle, including spray heads and traditional rotors. Rotary nozzles can apply water to distances ranging from 4-30 feet.

# Thornton Watering Guide

For Watering Twice A Week



Sprinkler		Fixed Spray	Rotors	Rotary	Manual
Type		Nozzles		Nozzles	Sprinklers
Мау	0	*15 mins 3 cycles	33 mins 3 cycles	42 mins 3 cycles	23 mins 3 cycles
June	()	22 mins	48 mins	61 mins	34 mins
	()	3 cycles	3 cycles	3 cycles	3 cycles
July	0	24 mins 3 cycles	52 mins 3 cycles	65 mins 3 cycles	36 mins 3 cycles
Aug	()	20 mins	44 mins	55 mins	31 mins
	()	3 cycles	3 cycles	3 cycles	3 cycles
Sept	0	14 mins 3 cycles	31 mins 3 cycles	39 mins 3 cycles	22 mins 3 cycles

\*Total minutes per zone, per watering day. Reduce the minutes if adding a third watering day.

Text SAVEWATER to 97000 to receive monthly watering reminders.

# Plant Beds

Group plants according to water and sunlight requirements.



### **Drip Irrigation**

Drip emitters slowly release water directly to the base of plants, allowing it to soak in slowly while cutting back on runoff, evaporation or wind exposure.

#### How To Install It

Use a drip manifold or convert high volume spray heads using a Rainbird 1800-RETRO Spray Kit or Drip Retrofit Kit that will decrease water pressure to the zone. Lay down a half inch poly tubing around the plant bed area. Punch the emitters directly into the lateral dripline next to plant. If your plants aren't close to the mainline, attach a quarter inch micro tubing to the emitter and extend tubing to the base of the plant.

### Micro-Spray Irrigation

Micro-spray systems slowly emit large droplets or fine streams of water just above the ground, allowing it to cover several plants and soak in with less runoff, evaporation or wind exposure than traditional sprinklers.

#### How To Install It

Use a drip manifold or convert high volume spray heads using a Rainbird 1800-RETRO Spray Kit or Drip Retrofit Kit that will decrease water pressure to the zone. Lay down a half inch poly tubing around the plant bed area. Punch a barbed connector directly into the lateral dripline every 5 to 6 feet. Attach a quarter inch micro tubing to the connector and extend tubing to the micro sprinkler. Insert a drip steak into the ground with micro sprinkler 7 to 9 inches above ground.





### **Soaker Hose Irrigation**

Soaker hoses have perforations or holes that slowly deliver a higher water-to-soil flow rate, allowing it to soak deep, establishing root systems with minimal waste.

#### How To Install It

Place your soaker hose on top of the soil. Put mulch over the soil and hose to deter evaporation.

### **Don't forget!** Newly-planted flowers may need water more often for the first two

planting date.

### **Manual Watering**

Use a hose-end sprinkler that sprays close to the ground and emits larger droplets to minimize loss due to wind and evaporation.

#### How To Install It

Install a timer between the spigot and your hose to make manual watering more efficient.

### Trees And Shrubs

Trees and shrubs located in turf areas do well with normal lawn irrigation, but they will need one to three additional deep watering sessions when the weather heats up in July and August.

You'll want to water newly-planted trees and shrubs frequently, until root systems are established.

Drip irrigation is an efficient way to water isolated shrubs and smaller trees (less than 4 inches trunk diameter), but it's not appropriate for larger trees. Adjust the number of drip emitters used for each plant and the flow rate for each emitter based on the size of the plant. The goal is to adequately water the root zone (not the trunk) without wasting water. **Did you know?** In our drier climate residential outdoor water use can be 50 percent of your water bill.

# Money-Wise Tip:

Changing watering systems can be spendy. Save water and dough by converting an already existing zone using a low-pressure drip conversion kit. Pick one up at your local garden center, or ask an irrigation specialist about water-efficient options that work swimmingly with your existing system.

Need some help? Call in the experts. Visit the Associated Landscape Contractors of Colorado at alcc.com or The Irrigation Association at Irrigation.org

Sometimes, being water-wise is criticized. I just shrub it off. Use a rain barrel to collect rainfall and runoff from downspouts. Use it to water container plants and gardens. Fit it tightly with a screen or cover to keep mosquito larvae at bay.

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## Additional Resources

Visit **ThorntonWater.com/H2Overhaul** for additional ideas to help you plan.

You'll find links to resources such as instructions for converting existing sprinkler systems, videos about how rotator nozzles work and setting up your own drip line.

> Water you waiting for? Let's keep going!





ThorntonWater.com/H2Overhaul