

Drought Irrigation: A How-To Guide

This guide outlines proper watering techniques based on your irrigation system to keep landscapes green and growing, while adhering to Arcadia's Water Conservation Ordinance!

The Importance of Efficient Irrigation

Proper landscape irrigation in Southern California is essential when water use restrictions are enforced.

Most people apply too much water in their yards, wasting a valuable resource to runoff and evaporation. This easy-to-follow guide will keep both regular and drought-tolerant landscapes vibrant and green while saving millions of gallons of water. Even lawns can be kept green with only two days of watering, if done correctly!

Most importantly, when restrictions are no longer necessary, your weekly irrigation schedule does not need to change.

First, a few points to consider:

1. We live in a Mediterranean/desert climate with a rainy winter & spring and a hot, dry summer.
2. In this climate, plants that require regular watering need to be irrigated only **once a week**.
3. Irrigation should increase only during the summer months.
4. Different kinds of soils absorb water at different rates.
5. **Different kinds of irrigation** emitter heads **apply water at different rates**.



Further Suggestions

- ⇒ Retrofit Rainbird and Rotor spray heads with MP Rotators.
- ⇒ Choose low water plants such as California natives or plants from Mediterranean climate zones (SW Australia, central Chile, South Africa & the Mediterranean basin).
- ⇒ Install rain garden elements to capture stormwater runoff from your home.
- ⇒ Create hydrozones: group plants with similar water needs together to irrigate more efficiently.
- ⇒ Use mulches that have a high wood content to increase mycorrhizal fungi development and therefore enhance the health of soil and plant roots.

Maximize Water in Your Yard

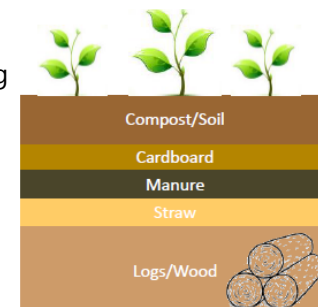
Rainwater

85% of rainfall is channeled away from yards and funneled straight into the ocean. Capturing water where it falls is our best option for saving water. Adding a few of these landscape elements can "harvest" hundreds of thousands of gallons of water that can be used to irrigate your yard well into summer.

- ⇒ Permeable hardscapes
- ⇒ Add swales in the yard to capture water
- ⇒ Build Hügélkultur mounds to add topography and interest — visit the Arboretum for a demo!
- ⇒ Mulch, mulch, mulch!

Soil

Soil is like a sponge. The top layers of most soils can only hold a small amount of water before reaching "maximum holding capacity," after which runoff and pooling occur. The best way to apply water to Southern California soils is large droplets over a long period. This method allows for absorption and infiltration. Clay soils need longer, slower application rates while sandy soils have fast infiltration.



Hügélkultur growing mound layer system

Green Irrigation Guide & Schedule

How to use this chart:

1. Determine which type of irrigation spray heads or emitters are in your yard.
2. Learn how to program your irrigation timer! Manuals available online.
3. Set Spray Duration time to match Irrigation Type.
4. Determine start time: multiply spray duration by the number of irrigation zones/stations in your yard to determine the length of one complete cycle.
5. You can apply more water by adding another start time or day of the week to the watering schedule.
6. Increase the number of start times first to gain good infiltration.
7. Walk the lines – make sure pipes and emitter heads are not broken or clogged.
8. Save lots of water!



Recommended: Hunter MP Rotator

Rebates Available at www.socalwatersmart.com

Irrigation Type	Spray Duration	# Of Start Times	# Of Days
November through May: Day length is short and temperatures are cool. Most rainfall in Southern California occurs during this season. You can turn your irrigation off completely during this time of year and water only when the ground feels or a moisture meter indicates it is dry. This is how the Los Angeles County Arboretum & Botanic Garden waters, irrigation timers are off and we only irrigate as needed, seven months a year . Water restrictions are two days per week (Tuesdays and Saturdays) in Arcadia. Ideal watering times are between 4:00 a.m. and 9:00 a.m. Never water at night during these months.			
Rainbird spray heads and nozzles	5 minutes per station	2	1 to 2 days per week
Rotors	20-30 minutes on a half rotation	1	1 to 2 days per week
	45-60 minutes on a full rotation		
	per station		
Hunter MP Rotators (recommended)	40 minutes per station	1	1 to 2 days per week
Drip Irrigation	60 minutes	1	1 to 2 days per week
June through October: Day length increases and temperatures warm up. Rainfall is infrequent and monsoonal. Irrigation timers can be turned back on for routine watering. Water restrictions are two days per week in Arcadia (Tuesday and Saturday). Ideal watering times are between 4:00 a.m. and 9:00 a.m. You can add another start time at night if your yard is really dry or your plants are flagging.			
Rainbird spray heads and nozzles	5 minutes per station	2 to 4	1 to 2 days per week
Rotors	20-30 minutes on a half rotation	1 to 2	1 to 2 days per week
	45-60 minutes on a full rotation		
	per station		
Hunter MP Rotators (recommended)	40 minutes per station	1 to 2	1 to 2 days per week
Drip Irrigation	60 minutes	1	1 to 2 days per week

Rainbird emitters: Apply a large amount of water in small droplets over a short period of time.

Rotors: Apply less water in larger droplets over a long amount of time.

MP Rotators: Best irrigation method for Southern California yards. Apply less water in larger droplets over a long period of time.

Drip: The maintenance on these systems is substantial and if clogged or hoses come unplugged, can waste a lot of water that never reaches the roots.

~If runoff occurs you are watering for too long~