

## Watering Guide

Proper irrigation design and careful water management will help you use water more efficiently in the landscape.

Lawn sprinklers should be spaced so that water from each sprinkler reaches the sprinklers next to it. This is called *head-to-head coverage*. The goal is to apply water evenly without runoff or overspray.

Use separate valves (stations) for plants with different water needs and for different types of irrigation. This is called *hydrozoning*.

How much and when you need to water depends on how much water is already in the soil. This varies with seasonal rainfall and evaporation. Your watering schedule also depends on how fast your sprinklers apply water and the water needs of your plants.

The graph below shows the maximum water needs of lawn watered with spray head sprinklers that apply water at 1.7" per hour; most plants require less. Rotor sprinklers apply water at a lower rate and require more minutes per start.

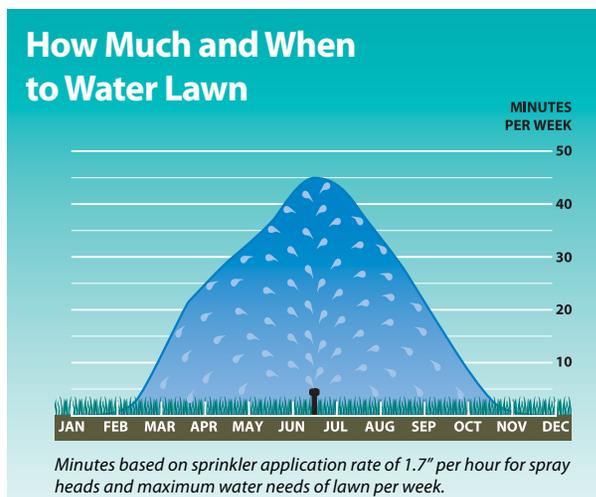
### Use your timer wisely

- Set sprinklers to come on before dawn to give water time to soak in before it evaporates in the heat of the sun.
- Write down your irrigation schedule and keep it handy for future reference.
- Don't water if it has just rained or if rain is expected.
- Fewer hours of sunlight reduces the water need of plants more than temperature. Plants need less water after July.
- If you are one of many who forgets to adjust your timer, consider a new self-adjusting controller.

EBMUD has many programs to help customers reduce water use. For information call 1-866-403-2683 or visit [www.ebmud.com/watersmart](http://www.ebmud.com/watersmart).

Change watering schedules seasonally by adjusting watering days (how often you water). Plants need half as much water in spring and fall as in mid-summer. Turn automatic systems off in rainy months or install a rain shut-off device to stop watering during the winter rainy season.

EBMUD offers a variety of conservation services and programs for residential and non-residential customers in our service area. For more information on these programs please visit [www.ebmud.com/watersmart](http://www.ebmud.com/watersmart).



## Watering Tips

- Water to the depth of plant roots—about 6" for lawns, 9" for ground-covers, 12" for shrubs and 18 to 24" for trees.
- Water shrubs about twice as long as you water a lawn. Shrubs have deeper roots than lawn, so it takes longer for water to reach them.
- Shrubs also use water more slowly than lawns, so water them one-third as often.



## Check your system

- Regularly inspect irrigation equipment in operation and repair leaks quickly.
- Adjust sprinklers for optimum coverage and to avoid overspray.
- Straighten leaning sprinkler heads.
- Trim plants and mow lawns to prevent interference with spray patterns.
- Check drip emitters to make sure they are working correctly and flush debris from lines twice a year.
- Read your water meter to check for possible leaks.



## Try Drip

A drip irrigation system is best for shrubs and trees without groundcover beneath them or for groundcover that spreads without rooting.

Unlike spray systems that broadcast irrigation water, drip systems bring water slowly and directly to plant roots, eliminating overspray and minimizing runoff.



## Choosing a controller:

- Conventional timers at a minimum should have features for multiple programs (calendar of watering days), multiple start times, and a 14-day calendar for drought-tolerant plants that require infrequent watering.
- Better yet, choose a self-adjusting irrigation controller that adjusts your water schedule daily based on actual plant needs and weather conditions.



**Watering Schedule** How much to water (minutes and starts per day) is a fixed setting determined by your soil, plant type and irrigation system. When to water (days per week) should be changed with seasonal weather patterns.

Station number	Plant type	Sprinkler type	Minutes and starts per day			Program code	Days per week **		
			Starts* per day	Minutes per start	Total min./day		Cool season	Warm season	Hot season
1	Lawn	Spray	3	5	15	A	1	2	3
2	Lawn	Rotor	3	13	39	A	1	2	3
3	Shrubs	Spray	3	8	24	B	0	.5	1
4	Shrubs	Rotor	3	20	60	B	0	.5	1
5	Shrubs	Drip	3	10	30	B	0	.5	1
6	Ivy	Spray	3	6	18	B	0	.5	1
7	Natives	Drip	2	20	40	C	0	0	.5
8	Trees	Drip	2	30	60	C	0	0	.5
9	Potted Plants	Drip	1	5	5	D	2	4	7

\* Program your starts one hour apart. The steeper the slope, the more starts you'll need. If more starts are used, reduce the minutes per start so that the total minutes per day stays approximately the same.

\*\* .5 days per week = 1 day every other week

## Irrigation Resources

*Best Practices, Certification, and Professional Services*

### Water Saving Tips

Please visit EBMUD's website for more water saving tips and to purchase our award winning book, *Plants and Landscapes for Summer-Dry Climates*  
www.ebmud.com

### Bay Friendly Landscaping and Gardening

Bay Friendly is a program that offers workshops, classes and resources for a sustainable approach to landscaping and gardening for residents, landscape professionals and public agencies.  
www.bayfriendly.org

### California Landscape Contractor Association

A non-profit trade organization of licensed landscape and landscape-related contractors.  
www.clca.org

### EPA's WaterSense®

A program of the U.S. Environmental Protection Agency that helps consumers choose water efficient appliances.  
www.epa.gov/WaterSense/

### Irrigation Association

A national organization providing updates on irrigation equipment, handbooks and tips for the consumer and landscape professionals.  
www.irrigation.org/smartwater/



## Water Conservation Office

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