# **Irrigation Controllers:**

### **Personal Climate Zones:**

Consider the different climate zones that exist around your landscaping area, such as turf in full sun verses turf in shady areas, buildings and pavement that reflect and heat generated by the sun, south facing slope verse a north facing slope may have different climates, maturing trees can change the watering schedule.

All these factors can have a dramatic effect on the amount of water needed to maintain a healthy landscape.

### Start Time / When to Water:

Resetting your timer to water just before sunrise or just before sunset, when the daytime temperature are less, cuts down on water loss due to evaporation and also because of less wind diffusion.

## Run Time / Amount of Water:

When watering, apply only enough water to rewet the root zone avoiding any standing water or run off.

Too much water in the landscape cuts off oxygen to the plant roots promotes fungus and rot and adversely impacts the health and appearance of the entire landscape. Excessive watering also leaches costly fertilizers and pesticides from the soil.

## Watering Days / How Often:

Allow the soil to dry out between watering times. Stress your plants a little by watering less often but increase your run time to accomplish a deeper soak.

Weather, humidity, sunlight, plant type, local climate, and other factors influence how much and how often it is necessary to properly irrigate a landscape. Depending on these factors, it may actually require less water than you think to achieve the same healthy, beautiful results!

## Multiple Programs (A, B, C):

When possible, use the multiple program capability of the timer (controller) to set up different watering schedules to meet the individual needs of each zone (Personal Climate Zone).

For example: Turf may require watering every other day which could run on program A, shrubs may require watering twice a week which could be run on program B, and trees may require watering once a week which could be on program C.

If all the zones are being run on the same schedule to meet the needs of the lawn, then water is being wasted on all the other zones.

## Multiple Start Times (1, 2, 3, and 4):

Multiple start times allows for shorter and more precise run times based on the individual needs of the plants. This enables the landscape or crops to better absorb water; reducing run-off and water waste. Run-off is a common water waste problem that occurs when water is applied faster than plants and soils can absorb it and the excess runs off unused.

For Example: If you need to water for 14 minutes but the water starts to run off or puddle after 7 minutes.

- a) Put this station (valve) on a separate program (program B, C, or D)
- b) Set the run time for 7 minutes on that individual station.
- c) Use multiple start time (7:00am and again at 8:00am)

# **Irrigation Controllers:**

### Cycle and Soak:

Hard, compacted soil takes considerably longer to absorb water than loose granular soil. In order to maximize water use and prevent runoff, use the cycle and soak method of irrigation.

Many irrigation controllers (Clocks) offer a cycle and soak setting that applies the water in several shorter cycles, allowing the water to soak in between cycles. This minimizes the amount of water lost due to run off.

If your controller does not have this function, you can accomplish this through the use of Multiple Start Times.

### Seasonal Adjust / Water Budget:

The seasonal-adjust setting available on most irrigation time clocks allows the user to increase or decrease all of the zone times easily as a percentage in one simple step. Increase percentage during dry periods and hot weather. Decrease percentage during periods of cool weather. For example, during the rainy season, a user can adjust his/her controller's "water budget" down to 15% of its peak setting to reduce water usage by 85%.

### **Smart Controllers**

The smart controller uses weather data to calculate the amount of water lost from the soil through evaporation and from the plants due to transpiration. These controllers adjust the zone run times automatically every day based on local environmental conditions such as humidity, wind, rainfall, and temperature.

On an average, smart controllers reduce water waste by 15 to 30 percent. Installing a smart controller might make you eligible for a rebate, further increasing your cost savings.

City of Redlands - Water Efficient Rebate Program - http://cityofredlands.org/water/conservation

For more information:

How to Converting Your Current Controller To A Weather Based Smart Controller

Visit us at www.gardenmasters.com/waterconservation.html