

Help save our precious natural resource: Water

Wondering if you are over watering or under watering your lawn?

Concerned about the water shortage?

Here are some proven steps to calculate the correct amount of water your lawn needs.

The following is an exercise that will walk you through the process of “how to do a water audit.” Considerations to bear in mind are 1) it is based on your having only one station for a given area, 2) the area has similar soils throughout, 3) shade and sun areas have been separated for valves, and 3) irrigation schedules are being set for plant material that has been established. For the sake of this exercise, the example used is turf; however, other species can be used. Evapotranspiration rates for varying plant material will need to be adjusted as appropriate.

Items needed:

- Water auditing cups
- Paper & pencil (to draw a diagram of the area and marking water auditing results).
- Ruler or tape measurer (if water auditing cups do not have measurements on sides).
- CIMIS data table (see below)

Step 1: Place a catch can device (Grass Farm Water Auditing cup) by a sprinkler head and half way between the next sprinkler head.

Note: For hard soils, it's best to push from the inside of Grass Farm's water auditing cups so as not to break the bottom of plastic cup.

Step 2: Turn irrigation system on for fifteen minutes.

Step 3: Take measurements from each cup

Step 4: Make adjustments to sprinklers where needed. Water between catch cans should not be more that ¼” different. If results show greater differences sprinkler adjustments should be made. This may require changes in nozzles, head placement or in extreme cases complete overhaul of irrigations systems and their installations.

Step 5: Take measurements and find your average precipitation rate found in the catch cans and divide that value into the amount needed for the desired irrigation month. Typically, a watering schedule every third day is recommended. So you would divide the precipitation rate (found in the catch cans after your 15 minute run time) into

the amount of water needed for the month. For example if you had a ½” average of water after your run time and you wanted to set your irrigation system for the month of July in San Jose: $7.11 / 10 = .711$ per water application. If your system puts out ½” of water in a 15 minute period you would need to run approximately 21 minutes to apply 7 tenths of one inch. Ideally you would apply this in two applications to take advantage of low evaporation, winds and to avoid runoff. This also allows the applied water to soak into the ground before the sun comes up.

Note: when auditing your irrigation system mark down how much time it takes before you see runoff on sidewalks or other hard surface areas. This will be your maximum run time. This is best used to avoid “runoff” of irrigation waters into gutters and other areas which do not need water.

Step 6: Program run time into irrigation timer.

Historical CIMIS Data 2009

The following numbers indicate a historical Evapotranspiration rate for turf grass in San Jose, Woodside, Hollister and Morgan Hill. Additional area CIMIS numbers can be found at www.cimis.water.ca.gov.

	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Total
San Jose	1.35	1.87	3.45	5.03	5.93	6.71	7.11	6.29	4.84	3.61	1.80	1.36	49.35
Woodside	1.83	2.20	3.42	4.84	5.61	6.26	6.47	6.22	4.84	3.66	2.36	1.83	49.54
San Benito	1.15	1.62	3.08	4.64	5.58	6.37	6.88	6.47	4.78	3.68	1.66	1.24	47.15
Morgan hill	1.22	1.65	3.42	4.84	6.22	6.85	7.44	6.47	5.08	3.42	1.77	0.98	49.36

Information provided by Grass Farm located at 602 Palm Avenue, Morgan Hill, CA.
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