

Determining the Precipitation Rate (PR)

NOTE: This page deals with the type of overhead spray irrigation systems that are typically found in lawn areas. Micro-irrigation spray heads and drip emitters are not covered in this section.

When you know the rate at which your spray irrigation system applies water to your landscape (measured in inches per hour), you can determine how long to run each station on your controller based on the weekly evapotranspiration (ET_o).

Manufacturer's Specs

Manufacturers provide the precipitation rates for all their spray heads. You can call a local irrigation supply store and they should be able to look up the precipitation rate for your spray head, but you will need to provide them with the manufacturer and model number (The model number for most spray heads is located on the top of the nozzle). If you can't obtain the model number and manufacturer, you can perform a catch-can test.

Catch-Can Test

- Place 4 or 5 small containers of the same size and shape (coffee mugs work nicely) in the area being irrigated.
- Run your sprinkler system for 15 minutes (or for some other period of time that divides evenly into 60 minutes).
- Measure the depth of water in each container with a ruler, add them all together, then divide the total by the number of containers to get the average amount of water.
- Multiply the average amount of water by 4 (or by 6 if you ran the system for 10 minutes, etc.). This will give you the average amount of water the spray heads deliver in one hour.

For example, if the average amount of water in the measuring cups is one-half inch in 15 minutes, your system's precipitation rate is 2 inches per hour.

You should try this test in several areas of your yard to determine the overall average precipitation rate for your system.

If you have questions, please contact the Water Conservation Department at (415) 945-1520 or conservation@marinwater.org.