How to Calculate How Much Water is Used by a Sprinkler System

Since landscape irrigation increases water use by 35 to 75% during the summer irrigation season, awareness of how much water an irrigation system uses will provide a base line to compare water use once landscape water conservation practices are adopted. Water conservation is the easiest and least expensive method to make water resources sustainable for future use.

### Water Saving from Landscape Water Conservation Practices

<table>
<thead>
<tr>
<th>Water Conserving Practice</th>
<th>Water Saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape with low water requiring plants</td>
<td>50 to 60%</td>
</tr>
<tr>
<td>Maintain 2 to 4 inches of mulch in planted areas</td>
<td>10%</td>
</tr>
<tr>
<td>Utilize irrigation evaluation/checkup to improve efficiency</td>
<td>10 to 30%</td>
</tr>
<tr>
<td>Convert spry irrigation to drip</td>
<td>50%</td>
</tr>
<tr>
<td>Harvest rainwater for irrigation</td>
<td>100%</td>
</tr>
<tr>
<td>Install/retrofit Smart Controller</td>
<td>20%</td>
</tr>
<tr>
<td>Install rain and freeze sensor</td>
<td>10%</td>
</tr>
<tr>
<td>Use ‘Cycle and Soak’ irrigation schedule</td>
<td>20%</td>
</tr>
</tbody>
</table>

As one or more of these practices is adopted, irrigation frequency and run times require adjustment to reflect the water savings otherwise there is no water savings.

### Water Bill Method

Do not go by the dollar amount of a water bill to determine if you have saved water by adapting a water conservation practice. Water bills have more charges than water on the bill. Some water bills include water, wastewater, sanitation/garbage, recycling, and stormwater.

The water meter measures water by gallons or by hundred cubic feet (ccf or hcf). One hundred cubic feet of water equals 748 gallons. The water bill will show how much water was used in a given period either in gallons or ccf. If ccf is used multiply the number on the bill by 748 to find gallons.

Compare your June, July and August water usage to December, January and February water usage. The difference is irrigation water. If you do not have the water bills to make the comparison, call your water provider’s customer service and ask for the information. Water providers are very interested landscape water conservation, so they will be glad to help you.
**Water Meter Method**

Calculate irrigation water used by irrigation system:

By entire irrigation system

1. Make sure no water is running in the house
2. Record meter reading (water meter is usually location in the ground in a box near the street)
3. Turn on your irrigation system by either pushing the manual start button or turn the dial to manual start (this method will not interfere with your programed irrigation schedule)
4. Record meter reading after irrigation finished
5. Subtract first reading from second reading. The answer is the amount of water used by the irrigation system.
6. If your meter reads in cubic feet multiply the answer by 748 to get gallons. If your meter reads in gallons, the answer is in gallons.

**Example Figure 1:**
Meter records ccf
First reading 0
Second reading 24
24 – 0 = 24
24 ccf X 748 = 17,952 gallons

By irrigation zone/station follow these directions for each irrigation zone/station:

1. Make sure no water is running in the house
2. Record meter reading
3. Run one irrigation zone/station using the manual button. Press the button until the zone you want to test shows in the LED screen. If manual run is done with a dial, turn dial to the zone/station you want to record and push start. (this will not interfere with your schedule)
4. Record meter reading after one zone/station runs.
5. Subtract first reading from second reading. The answer is the amount of water used by that irrigation zone/station.

This information can help you determine how much water is saved after you have adopted a landscape water conservation practice. The water savings will only show up on your water bill or meter reading if you actually reduce your irrigation runtime.
Figure 1: Meter Records ccf

Figure 2: Meter Records Gallons