

Calculating Your Irrigation Rate

The Water Wise Program has shown that about 65% of the water we use in Bentwater goes to irrigate our landscape. We have also demonstrated that much of this water is wasted through inefficient landscape watering practices. The amount of water required to keep your landscape healthy and green depends on many factors but experience in Bentwater shows that water consumption, in the summer months, exceeding about 18,000 gallons, or monthly water bills greater than \$60, probably means you are irrigating more than is needed.

The Water Wise pilots have demonstrated that **one inch per week** is all that is needed in the hot summer months to keep our grass healthy. Less is required in the Spring and Fall. For shrubs and flower beds, the water requirements are less. This level of watering will encourage the roots to dig deeper for water. As a guide, if you want to provide 1 inch per week irrigation to your landscape, you need to set your sprinkler system to deliver **0.62 gallons per square foot** of landscape for the week. You can determine this by measuring the quantity of irrigation water used in a week divided by your landscape area.

There are at least two ways to measure the area (square footage) of your landscape. The most accurate method is to take out the old tape measure and figure out the area of your landscape. You may find it a little less tedious to estimate your area by utilizing data provided on the Montgomery County Appraisal District (MCAD) website (www.mcad-tx.org) for your specific property. The MCAD provides the area of your lot, from which you can subtract the area of your home's footprint:

Landscape Area = Area of Lot – Footprint Area

Your home's footprint is determined by adding the following areas:

- First Floor of Home*
- Porches on Ground Floor* (exclude second floor balconies)
- Garage*
- Portochache*
- Wood decks
- Driveway
- Pools (include concrete decking) and/or ponds
- Other areas that do not get irrigated

*Data available on MCAD

Now that you have determined the area of your landscape, let's next determine the amount of irrigation water you are using in a week. First determine the amount of water that is delivered by your sprinkler system during one complete cycle of the system. Assuming you operate your system early in the morning, simply read your water meter at the street before you go to bed, and read it again the next morning following a complete cycle of the sprinkler system. The difference in meter readings tells you how many gallons of water are used during one complete cycle of your sprinkler system. Knowing this, you determine the quantity of water used in a week by multiplying the gallons for one cycle by the number of times you operate your sprinklers each week.

The table below can be used to determine your **irrigation rate** based on how many gallons of water you use in a week and the size (square footage) of your landscape.

Landscape Area vs Irrigation Requirements

Landscape Area SqFt	Weekly Water (Gallons) to provide Inches/wk				
	0.5"	0.75"	1.00"	1.25"	1.50"
2000	623	935	1247	1558	1870
2500	779	1169	1558	1948	2338
3000	935	1403	1870	2338	2805
3500	1091	1636	2182	2727	3273
4000	1247	1870	2494	3117	3740
4500	1403	2104	2805	3507	4208
5000	1558	2338	3117	3896	4675
5500	1714	2571	3429	4286	5143
6000	1870	2805	3740	4675	5610
6500	2026	3039	4052	5065	6078
7000	2182	3273	4364	5455	6545
7500	2338	3507	4675	5844	7013
8000	2494	3740	4987	6234	7481
8500	2649	3974	5299	6623	7948
9000	2805	4208	5610	7013	8416
9500	2961	4442	5922	7403	8883
10000	3117	4675	6234	7792	9351