



# IRRIGATION GUIDE

This guide is intended to help Morongo Basin homeowners determine the approximate amount of water needed by different plant types each week. It was developed for established non-native plants grown in a sandy loam soil under local weather conditions using an historical evapotranspiration rate (ET) of 79.34 inches per year, and the efficiency of a drip irrigation system. Individual watering times may vary due to soil, microclimate, use of mulch and other conditions. If your soil is pure sand plants will require shorter, more frequent irrigation. Pure loam or clay soils will require less frequent watering. Plants are categorized as low, moderate, or high water use according to the WUCOLS guide available at: <http://www.water.ca.gov/wateruseefficiency/docs/wucols00.pdf>.

		Plant Water Requirement, Gallons per day					
Month	Irrigation Frequency	Shrubs and groundcovers (4 ft canopy)			Large shrubs and trees (20 ft canopy)		
		Low water use	Moderate water use	High water use	Low water use	Moderate water use	High water use
January	1 day/week	1.0	2.4	3.9	25.2	63.0	100.8
February	2 days/week	0.8	1.9	3.1	20.2	50.4	80.6
March	2 days/week	1.2	3.1	4.9	32.1	80.3	128.5
April	3 days/week	1.1	2.8	4.5	29.3	73.2	117.1
May	4 days/week	1.1	2.7	4.3	27.9	69.9	111.8
June	4 days/week	1.2	3.0	4.8	31.1	78.3	125.3
July	4 days/week	1.2	3.0	4.8	31.4	78.6	125.7
August	4 days/week	1.1	2.7	4.3	27.9	69.9	111.8
September	4 days/week	0.9	2.3	3.6	23.7	59.2	94.7
October	3 days/week	0.8	2.0	3.3	21.4	53.5	85.7
November	2 days/week	0.7	1.7	2.7	17.6	43.9	70.3
December	1 day/week	0.9	2.1	3.4	22.3	55.8	89.3

To calculate how long to water with a drip system, divide the gallon ratings of your emitters into the gallons per day from the table, then multiply by 60 minutes. For example, a 2 gallon emitter divided into 3 gallons per day, times 60 minutes equals 90 minutes per day required to apply 3 gallons to the plant ( $3 \div 2 \times 60 = 90$ ). Large shrubs and trees will require more emitters spaced around the plant canopy. To convert to cubic feet multiply the gallons by 7.48.

Note that new landscapes will require shorter, more frequent watering, while larger mature plants will need longer, less frequent watering. It will be important to develop your irrigation schedule and allow it to run for a few days, and then check the soil moisture in the root zone just before the next irrigation is scheduled. You should also observe if water begins to puddle during irrigation. If it does, divide the watering time into two cycles so that water does not run off.

