How much **Water** does your garden **Need?**

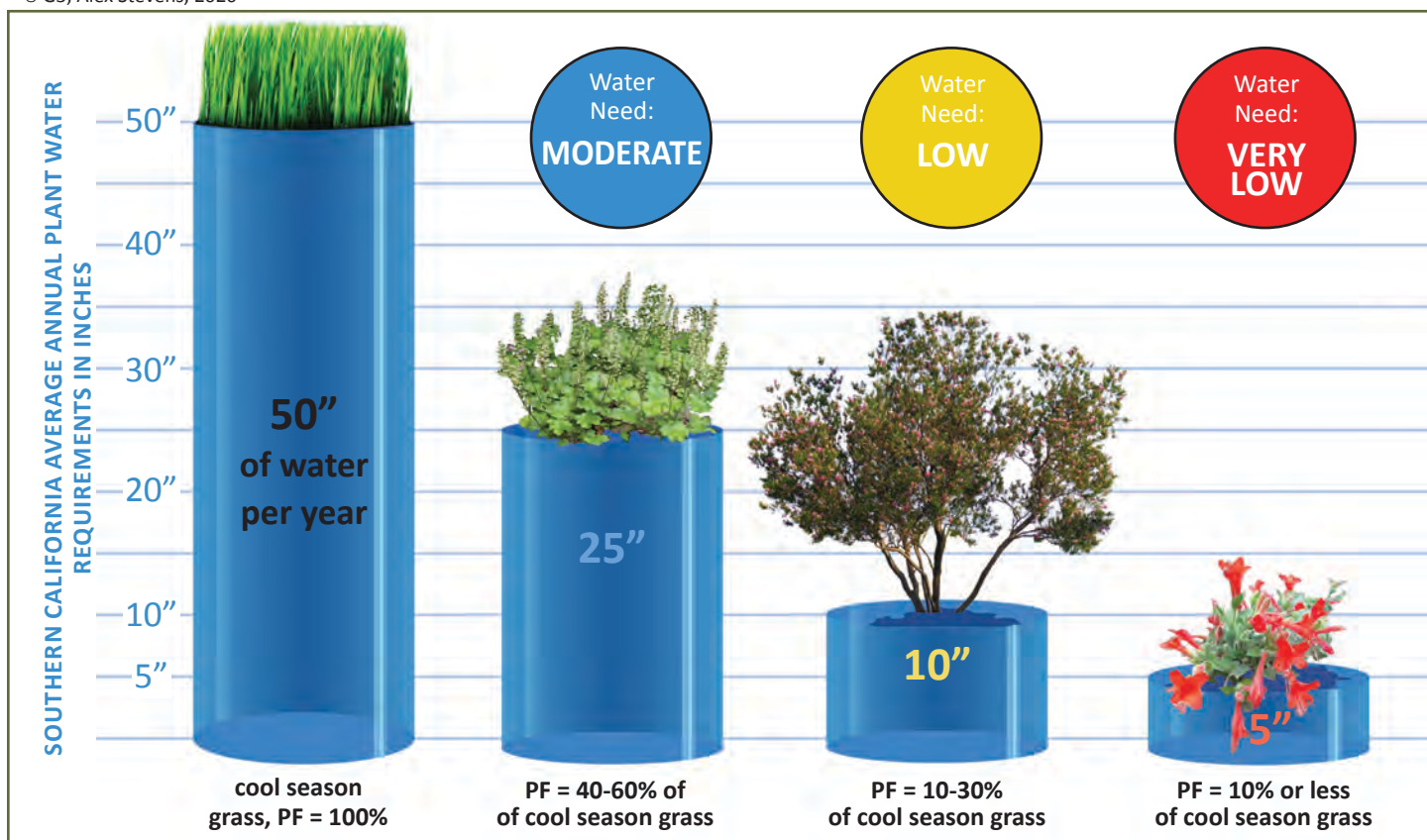## **Evapotranspiration (ET)** is the key to watering plants**.**

Evapotranspiration (ET) can be thought of as "reverse rain." ET measures the inches of water being transferred over some period of time from the land to the atmosphere by evaporation from the soil and other surfaces and by transpiration (sweat) from plants. ET is a quick way to explain environmental and climate conditions, especially solar radiation (sunshine or cloud cover). Many plants need more water in the summer, when the sun is high and days are long; winter days are shorter and often rainy or overcast, so many plants need less water.

ET therefore, explains how much water plants really need and when they need it; critical information for planning irrigation and managing the **Soil Moisture Account** (*see p. 65*).

Plant Factor (PF) describes the specific water need of each plant in your landscape. PF can be determined by gathering information about a plant and then comparing it to the amount of water needed by cool season grass growing in your climate zone. PF is expressed as a percentage of the water needed by cool season grass. Plant watering needs, include: **VERY LOW at 10%**, **LOW at 20%**, **MODERATE at 50%** and **HIGH at 100%** (cool season grass).

Landscape Water Need takes into consideration the effects of irrigation efficiency (IE Percentage) (*see p. 66*) and square feet of landscaped area (SF) to figure out how many gallons of water a particular landscape would require, given its climate zone (ET Inches) and plant selection (PF Percentage).

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SOUTHERN CALIFORNIA AVERAGE ANNUAL PLANT WATER REQUIREMENTS IN INCHES

50" of water per year — cool season grass, PF = 100%

25" — Water Need: **MODERATE** — PF = 40-60% of of cool season grass

10" — Water Need: **LOW** — PF = 10-30% of cool season grass

5" — Water Need: **VERY LOW** — PF = 10% or less of cool season grass

Reduce Landscape Water Need: Understand **ET**, **PF** and **IE**

Every plant choice gives us the opportunity to reduce the Landscape Water Need.

In our 875 SF Front Yard (*see p. 8*) replacing **HIGH Plant Factor** cool season grass with **VERY LOW Plant Factor**, climate-appropriate plants saves almost 32,000 gallons of water annually, before changing to drip irrigation for higher irrigation efficiency (IE) (*see p. 37*).

Converting to drip irrigation with a higher IE saves even more (up to 20%)!

875 SF Landscape Water Need By Plant Factor

Hundreds of Gallons

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

● High ● Moderate ● Low ● Very Low

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