

# How much **Water** can your new garden **Save?**

## Calculate your landscape watering need in Gallons.

### Our Front Yard Landscape Water Need:

Our front yard is 875 Square Feet (Landscape SF). In order to calculate the Landscape Water Need, we will keep climate zone (ET Inches) and irrigation efficiency (IE Percentage) constant, but change the plant selections (PF Percentage). See how much water could be saved every year by switching from cool season grass and replacing the area with climate-appropriate **MODERATE**, **LOW**, or **VERY LOW** water requirement plants.

**Landscape SF = 875   Annual ET Inches = 45"   Irrigation Efficiency % = 70%**  
**Landscape SF x ET Inches x Plant Factor % ÷ Irrigation Efficiency % x 0.62 = Landscape Water Need in Gallons**

Grass  
Water Need:  
**HIGH**

**HIGH Water Need**  
Plant Factor = 100% = 1.0

875 SF x 45" x 1.0 ÷ 0.70 x 0.62 =  
**34,875 Gallons Annually**

New Front Yard  
Water Need:  
**MODERATE**

**MODERATE Water Need**  
Plant Factor = 50% = 0.50

875 SF x 45" x 0.50 ÷ 0.70 x 0.62 =  
**17,438 Gallons Annually**

In our 875 SF Front Yard, replacing cool season grass with **MODERATE** climate-appropriate plants saves 17,437 gallons of water annually, without changing irrigation efficiency.



**LOW Water Need Plant Factor = 20% = 0.20**

875 SF x 45" x 0.20 ÷ 0.70 x 0.62 =  
**6,975 Gallons Annually**

Replacing cool season grass with **LOW** Water Need plants saves 27,900 gallons of water annually, without changing irrigation. Change irrigation to drip with IE= 90% and save 29,450 gallons annually.

**VERY LOW Water Need Plant Factor = 10% = 0.10**

875 SF x 45" x 0.10 ÷ 0.70 x 0.62 =  
**3,488 Gallons Annually**

Replacing cool season grass with **VERY LOW** Water Need plants saves 31,387 gallons of water annually, without changing irrigation. Change irrigation to drip with IE= 90% and save 32,162 gallons annually.

### Sleep in summer, Grow in winter: Mediterranean climate-appropriate plants

Since many climate-appropriate plants from Mediterranean climates have **MODERATE**, **LOW** or **VERY LOW** water needs, planting them saves water when compared to cool season grass. However, most of these plants don't want water in the summertime when they are dormant; they want water in the winter, when they can grow their roots in cool soil using rainwater. Irrigation needs can be reduced by directing rainwater to the garden from the roof and other surfaces in the winter months. But beware the dry winter -- these plants will need supplemental irrigation in winter if they are to survive the following summer.

**875 SF Landscape Water Need**

VERY LOW Water Need Mediterranean Plant

Precipitation

© G3, Alex Stevens, 2018