

IMPORTANT DROUGHT INFORMATION (DENVER STUDY)

Ponds Conserve Water Versus Grass

There are certain assumptions that must be made before this comparison can be made. For example, we will use an 11'x16' pond with a 10' stream (the average installation size). The evaporation rate in Denver, which actually has similar aridity to Phoenix, is approximately 1/4" per day, on average. The irrigation efficiency is 50% (i.e., you will use 1" of water to effectively cover the turf area with 1/2" of water).

The area of turf removed in order to install an 11'x16' pond is typically three times that of the actual pond size, because homeowners generally create additional planting beds that can then be drip irrigated (a much more efficient system than sprays for turf areas).

Gallons of water used for turf:

1 inch of water per 3 days

x 1 foot per 12 inches

x 396 square feet

x 7.5 gallons per cubic foot

= 247.5 gallons every 3 days

Gallons of water used for a pond:

3/4 inches of water per 3 days

x 1 foot per 12 inches

x 132 square feet

x 7.5 gallons per cubic foot

= 61.9 gallons every 3 days

That's an amazing 75% water savings!!!

Now, let's put this into perspective. To water an 11'x16' area of grass for 6 months (May-Oct), you will use 15,345 gallons of water. If you install a pond, you will use 7,087 gallons of water. A big difference!