How Much Water Does My Landscape Need

KEVIN: Hi. I'm Kevin McCaleb. You know, every year we get told that our grass need approximately one inch of water a week, more or less, depending upon the season, the types of shrubs and trees. It can vary, but we're always going to use inches as a reference point. Many of us ask "well, how much is one inch?" In this video, I'm going to show you a real easy way to calculate that number. In later videos, we're going to show you how to use that number to create a baseline schedule to help you water your yard more efficiently all season long. If you haven't done so already, please download the worksheet number 1 from the website. Grab a pencil, a tape measure 25 feet or longer, a couple of sticks or stakes and a calculator, and let's get start! So for step one, it will require us to make a little sketch of the property. On the worksheet that you downloaded is a basic sketch of a house. On that sheet, draw in driveways, decks, walkways, different planting areas, etc. Include any large lawn areas as well. Don't worry about perfection. All you need is the general shape of these areas. This sketch will separate what needs water from what does not, and help to insure that we get water to everything that needs it. If you want, write down a note or a name that will help you identify what each area is. To figure out how much water is needed to make one inch, we need to measure the square footage of the various areas.

So pick one area on the sketch to begin with. It really doesn't matter which one you start with. For this video, I'll begin with the one I've labeled "large turf area east of the house." And I'll begin by measuring the longest side first. We're going to take the first stake, stick it into the ground, then extend our tape measure out until it reaches its full length, whether that's 25 or 50 feet, whatever length that you have. And we're going to place the second stake to mark that distance. We want to write that down on the worksheet on the line marked "side one measurements." Now pick up the first stake and use it to mark the distance from the second stake in a leapfrog manner, and continue leapfrogging the stakes and the tape measure until you've completed the total distance of this side. Another good tip is to use all purpose flour. This will help you see or visualize the area that you're measuring. Just get a pitcher, some common household all purpose flour, and use it to outline the area that you're measuring. The good thing about flour is it won't hurt your lawn, and the first time it rains or when you turn your sprinklers on, it will go away. When you're done, add all of those numbers together and it will equal the total length of that side. Write that number down in the blank marked "length" on the worksheet.

We're now going to measure the width. We're going to do it the same way as we measured the length, and we're going to write those numbers down on the line marked "side 2 width," and add them up. If you're dealing with areas that are not perfectly square, simply measure square lines inside or outside of the curves the same way as before. It will look like this. Now estimate how much of the area is unmeasured outside or inside of those squared lines: 10%, 20%, whatever it may be, and on the worksheet under "estimate percentages," write down the number in decimals.

So following along on the worksheet, you will multiply the side one length with side 2 width. Use your calculator. And you'll have the approximate total of the area being measured. If there are no other unmeasured areas, this will be the total square footage of that area. If there are unmeasured areas, you will multiply the approximate total of those areas by the percentage decimal, and that will give you the square footage of the unmeasured areas. Simply add that number to the total, and that area is complete.

So if the area you're measuring most resembles a circle, then the procedure's going to be a little different. It will look like this. You're going to measure the diameter of the area, which is the center of the longest point of that circle, and divide by 2. This is called your radius. Write that number down on the worksheet under "circular areas," and then just follow the math to get the area. While it's important to be as accurate as you can, don't get too caught up in perfection. Plus or minus a few percentage points in an area will not significantly affect the outcome. Perform these steps for each area on your sketch and fill in the appropriate blanks on the worksheet before moving on to the next step.

Step 3, then, is to multiply that square footage by 0.62. This represents how many gallons of water it takes to cover one square foot, one inch deep. Do this for each section and you'll have a pretty good idea of the basic amount of water you'll need to apply on every area of your yard each week throughout the season. Remember that one inch is only a base number. The time of year and type of plant will dictate how much more or less water you should be adding.

In the next video, we'll be looking at how much water our sprinkler system is actually putting on our yard every minute that it's operated. If you'd like more information on using water efficiently, check out the other videos on ConserveH2O.org.