

# WSA Conservation Landscape Design Tool

## Sizing Guidance

### Sizing Your Practice for Water Quality Benefits

The next step is to determine the size of your conservation landscape. If you have Microsoft Excel or another compatible spreadsheet program (like [LibreOffice Calc](#), a free, [Open Source](#) program), you can use [this spreadsheet](#) to automatically calculate the ideal size, the approximate material quantities and costs, and even the amount of pollutants removed by your planned practice. Otherwise, the math is pretty simple, and this will walk you through the process. *(The spreadsheet will likely generate slightly different results due to more complex calculations contained within it.)*

#### Instructions:

1. Add up the impervious surface areas that will drain to your conservation landscape, in square feet. If this step isn't clear after reviewing the example below, refer to the [Site Assessment appendix of the Rainscaping Manual](#) for more instruction.
2. Multiply that area times four (4). Write this number down, as the numerator.
3. Determine how deep the practice will be. This is either how deeply you will till the soil, or how deep the existing good, well-drained soil goes. If you have very dense, clay-rich soils, you may need to remove some and replace with more suitable soil. Refer to the [Soil Assessment appendix of the Rainscaping Manual](#) for more info.
4. Add three (3) to that depth (in inches). Write that number down, as the denominator.
5. Now divide the numerator (from Step 2) by the denominator (from Step 4). This is the recommended minimum area of your conservation landscape in square feet for optimum water quality benefit. But, of course you can make it any size!

#### Example:

1. The house and front porch will drain to the conservation landscape area. The house has a footprint (ground level area) of 768 square feet, and the porch has an area of 32 square feet. This is **800 square feet total**.
2.  $800 \times 4 = 3200$
3. Plan is to till **18"** deep (or there is 18" of good, well-drained soil already)
4.  $18 + 3 = 21$
5.  $3200 \div 21 = 152$

**152 square feet is the recommended minimum size for optimum water quality benefit. If you use one of the templates this tool will generate, this rounds up to 180 square feet. Otherwise, you can use a template that matches the size you intend to install, or use one as a guide and make it your own!**

1. Add up impervious areas	800 square feet
2. Multiply by 4	$800 \times 4 = 3200$
3. How deep will the practice be?	18 inches
4. Add 3	$18 + 3 = 21$
5. Divide #2 by #4	$3200 \div 21 = 152$ square feet

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