WaterSense® created the Water Budget Tool as one option to help builders, landscape professionals, and WaterSense irrigation partners meet the criteria for the 2009 WaterSense Single-Family New Home Specification. The following guide provides step-by-step instructions. Detailed instructions and background information are also available on the WaterSense website. The water budget tool is comprised of three sections (Part 1, Part 2, and Part 3), each on its own worksheet:

Part 1 Baseline & LWA: Collects basic information and calculates the landscape water allowance (LWA).

Part 2 LWR: Calculates the landscape water requirement (LWR) or how much water the landscape will need.

Part 3 Results: Displays the results of the tool.

Part 1—Baseline & LWA (Landscape Water Allowance)

Basic Information

To begin, you will need to enter basic information in the white boxes at the top of the worksheet titled Part 1—Baseline & LWA.

A. Fill in the information for the landscape in the white boxes at the top of the sheet.

B. Visit the Water Budget Data Finder on the WaterSense website. Enter the zip code where the landscape is located and click the “Go” icon. The tool will give you three pieces of information: peak watering month, evapotranspiration (ETo) value, and rainfall. Enter the peak month (June in the example at right) in the water budget tool in the white box labeled “peak watering month.” Record and save the other pieces of information (ETo and Rainfall) as you will need these later in the tool.¹

C. Use the drop down menu to select whether or not an irrigation system is installed on this site.

¹ If your zip code returns the message “There are no values matching your search criteria,” consult the Water Budget Approach document at http://www.epa.gov/watersense/docs/ws_water_budget_approach508.pdf or contact the WaterSense helpline at (866) WTR-SENS (987-7367)
Part 1—continued

This information will populate automatically throughout the tool, and you will not have to enter it again. Now, proceed through the following steps.

Step 1

**Step 1A:** Determine the area of the landscape. The landscaped area includes the front yard minus any hardscaped areas (concrete driveways, walkways, and decks or porches). It includes all areas that are improved upon by features such as turf, water features, irrigation systems, pools or spas, and other permanent vegetation. Areas outside the front yard, which have temporary stabilization measures such as straw or mulch, do not need to be included in this area. Septic drainage fields and public rights-of-way should also be excluded from the landscaped area. Consult Section 4.1 of the *2009 WaterSense Single-Family New Home Specification* for information about areas that may be exempt from the landscaped area.

**Step 1B:** Enter the “ETo Value” you obtained from the Water Budget Data Finder (6.43 in the example at right).

The tool will automatically generate two "output" values once you have completed Step 1. They are:

**Output:** The monthly baseline is the amount of water a typical landscape would use during the peak watering month at your site (49,219 gallons/month in the example at right).

**Output:** The monthly landscape water allowance represents an efficient allotment of water that the landscape may be designed to use during the location's peak watering month (34,453 gallons/month in the example above).

You are now ready to proceed to Part 2 – LWR on the next worksheet.
Part 2 – LWR (Landscape Water Requirement)

In Part 2, you will be entering more specific information about the landscape. The Water Budget Tool will calculate the amount of water the landscape will require during the location’s peak watering month.

Step 2

Step 2A: Enter the value you received from the Water Budget Data Finder for rainfall (3.56 in the example).

Step 2B: Enter details about the landscape in Table 1. This will enable the tool to estimate the landscape water requirement, or how much water the landscape will actually require during the peak watering month.

1. For each hydrozone, or group of plantings that have similar needs for watering, enter the area in square feet that it covers.

2. Select the plant type or feature from the list that best describes each hydrozone.²

3. If an irrigation system is installed, select the type of irrigation being used on each hydrozone (refer to Table 4 in the tool to ensure you are using an allowed type of irrigation for each zone). Irrigation systems are not required. If irrigation is not installed, you will still need to select a form of irrigation to approximate the zone’s peak water use. Use Table 5 (see below) to select the permitted irrigation type for each zone’s plant type or landscape feature.

Output: The tool will automatically calculate the amount of water your landscape will require during the peak watering month at your site (in this example: 34,439 gallons).

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² Refer to local resources such as plant guides, nurseries, and extension services for help on how to classify specific plant types as high, medium, or low water users.
Part 3 – Results

Part 3 displays the results for the landscape and requires no new information to be entered.

1. The LWA (landscape water allowance) is the amount of water the landscape is permitted under section 4.1.1.1 of the 2009 WaterSense Single-Family New Home Specification.

2. The LWR (landscape water requirement) is the amount of water the landscape would need during the peak watering month for your location.

3. Displays the total area of turfgrass in the landscape.

4. Displays the percent of the total landscape that is comprised of turfgrass.

5. If the output shows:

   “YES” - Congratulations! You have met the criteria.

   “NO” - You will need to make adjustments to your planned landscape in Table 1 of Part 2. Reducing the size of the hydrozones with highest water requirements (LWR_H) or changing to lower water use plants are good places to start.\(^3\)

6. Shows the expected reduction in water use during the peak watering month for the landscape when compared to the landscape of a typical single-family new home.

Print or save a copy of the tool for your records.

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\(^3\) If you are using the tool on an existing landscape, the YES/NO output may or may not be an appropriate measure. WaterSense recommends you try maximizing your percent reduction (output 6) to achieve as water-efficient a landscape as possible.