

# WaterSense<sup>®</sup> Blueprint

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### **IN THIS ISSUE**

elcome to the second issue of the WaterSense *Blueprint*, which brings you the latest information and updates on the **WaterSense New Homes program**.

Americans use nearly 9 billion gallons of water each day on residential landscapes. In this issue, we focus in on how the outdoor component of the WaterSense labeled new home specification allows builders to create beautiful, low-maintenance, and water-efficient landscapes. In our "Technical Corner," we demystify the WaterSense Water Budget Tool and provide details on how builders can get the most out of it. Our partners at the Texas A&M AgriLife Research and Extension Center in Dallas who have retrofitted single- and multi-family homes to earn the WaterSense label give us some insight into what they're doing to make landscapes as water-efficient as possible, while still maintaining their beauty. Finally, we provide some fun facts and tips, as well as a new infographic touting the benefits of beautiful, water-efficient yards you can share via social media.

We want the *Blueprint* to cover the topics you're most interested in, so don't hesitate to let us know what future topics you'd like us to address. Email those and other thoughts to **watersense@epa.gov**.

# TECHNICAL CORNER: INCREASING CURB APPEAL WITH THE WATERSENSE WATER BUDGET TOOL

Curb appeal is a key component when it comes to selling any home. But what does curb appeal mean to today's homebuyer? According to the American Institute of Architects' September 2013 Home Design Trends Survey, low maintenance is the most popular characteristic for home products, beating out energy efficiency and water savings. Builders who design their homes with a **beautiful landscape** that is both low-maintenance and water-efficient—such as those homes earning the WaterSense label—will have a leg up on the competition.

In some parts of the country, homeowners use 1,000 gallons of water per day (up to three times the national average) in large part to help keep their grass green. But poorly designed, water-wasting landscapes can use as much as 3,000 gallons a day, especially when they include turfgrass, flowers, and plants that don't work well in that particular climate or region.



As more and more communities face seasonal watering restrictions, a home with a water-smart landscape can provide all the benefits of a conventional landscape with less water, less work, and less worry, while still maintaining an attractive and healthy outdoor space. WaterSense labeled new homes are designed with that in mind, enabling homeowners to have resilient and relaxing water-efficient yards that save time and money.

The criteria in the WaterSense new home specification address landscape water efficiency through a combination of appropriate landscape design and efficient irrigation systems, if a system is installed. To help builders and contractors design more efficient landscapes, the U.S. Environmental Protection Agency (EPA) developed the **WaterSense Water Budget Tool**. All homes that earn the WaterSense label are required to have landscapes that meet the requirements of this Web-based tool.

#### What Is the WaterSense Water Budget Tool?

The WaterSense Water Budget Tool is an easy-to-use Web-based resource. It is designed to guide builders and their partners in the landscaping and irrigation industries toward building efficient yet beautiful yards. Best of all, the Water Budget Tool only requires basic information, such as zip code and general plant type. So, it can be used without needing to find local climate data, which is auto-populated based on your zip code, or researching plant and soil types.

#### Using the Water Budget Tool

We designed the Water Budget Tool to be convenient, with simple steps to help make the process easy for builders. To use the Water Budget Tool, follow the steps below:

1. The first step is to input information on region and landscape, including zip code, irrigation plans, and the area of the landscape. The Water Budget Tool will provide a Landscape Water Allowance based on local climate data and help you set a goal for landscape efficiency.

STEP 1 Location STEP 2 Plants	and STEP 3	The Results				
Congratulations on choosing to design a locally appropriate water-efficient landscape! The WaterSense water budget tool will help you determine if your landscape meets EPA's criteria for	For what purpose is the tool being used? What are you landscaping? WaterSense Labeled Home(s) How many sites? Development of Multiple Landscapes X Single Site Is there an irrigation system?					
efficient outdoor water use in your area. In order to use the water budget tool, you will need to know some basic information about your landscape:						
<ul> <li>The location and zip code</li> <li>The total area of applicable landscape</li> <li>Types of plants and the total coverage</li> <li>Methods of irrigation (if any)</li> </ul>	X Yes No Enter Zip Code 20004	Enter Landscaped Area for a Single Home or Site <sup>+</sup> 2950 Sq. Ft.				
Your landscape will receive a pass/fail based on local climate, plant selection, irrigation methods, and size of the landscape. Follow the instructions on screen to find out if your landscape meets the WaterSense criteria.		Development Landscaped Area Range to Sq. Ft. NEXT STEP >				



2. The second step is to input the types of plants that will be used in the landscape (e.g., turfgrass, shrubs) and the water requirements (e.g., low, medium, high) of each. In this step, you also input what type of irrigation system, if any, will be installed. If you have questions about what types of plants to use, consult a landscape designer who can suggest the best types of plants for your region.

one	Area (sq.ft.)	Plant Type/ Landscape Feature		Wate Demai		Irrigation Type		Impact on Water Use	Required Water (gal/month)
1	1200	Turfgrass	-	Medium	-	Rotor	-		4041
2	425	Schrubs	-	Low	-	Drip (Press Comp)	-	•	161
3	200		-		-		-		
4			-		-				
5			-		-				
6			-		-				
То	tal: 1625								
ad	d zone								

3. Finally, the tool provides a comparison of the Landscape Water Allowance (determined in Step 1) to the Landscape Water Requirement (determined by your designed landscape), allowing you to determine whether or not the landscape design meets the WaterSense new home specification—a simple "pass" or "fail." For a home to earn the WaterSense label, the water budget of any landscaping you provide must stay under that Landscape Water Allowance.

STEP 1 and Area STEP 2 Plants and STEP 3	3 The Results				
Congratulations! Your designed landscape meets the water budget!	To create a report (PDF), please fill out the form below: Your Name				
Landscape Water Allowance: 8,328 Gallons/Month Landscape Water Requirements: 5,021 Gallons/Month	Builder Name Street Address				
Your landscape is 58% below the baseline for this site	City State Zip Code				
	Email Address Share my contact information with WaterSense Level Notice CREATE REPORT				



The WaterSense Water Budget Tool helps builders avoid water-wasting and high-maintenance landscapes, while still providing flexibility in plant and irrigation choices. The results are beautiful landscapes that include regionally appropriate, low water-using plants.

### **Defining the Terms**

Using the Water Budget Tool for the first time? Following are some helpful background terms:

Allowable rainfall (Ra): The amount of rainfall WaterSense is allowing to be incorporated into the water budget.

Baseline: The amount of water required by a site if watered at 100 percent of local reference evapotranspiration (ETo).

**Evapotranspiration (ET):** The loss of water from a vegetative surface through the combined processes of plant transpiration and soil evaporation. Weather data can provide an estimate of reference evapotranspiration (ETo), the evaporating power of the atmosphere at a specific location and time of the year.

**Hydrozone:** Grouping of plants with similar water and environmental requirements for irrigation with one of more common station/zone valves.

Landscape Water Allowance (LWA): A volume of water allocated to the entire landscape area over a specified period of time.

Landscape Water Requirement (LWR): The amount of water required by the landscape over a specified period of time.

**Landscaped area (A):** The designed area of landscape excluding the footprint of the home and permanent hardscape areas, such as driveways, sidewalks, and patios. Septic drainage fields and public right-of-ways should also be excluded from this calculation.

**Water budget:** Used to calculate the amount of water a landscape needs, taking into account the inputs and outputs of water to and from the root zone. Inputs, such as precipitation, are subtracted from outputs, such as ET, to calculate the water needs of the landscape. Many factors are taken into consideration when calculating a water budget, such as plant type and irrigation system efficiencies.

### NEW! INFOGRAPHIC ON THE BENEFITS OF WATER-EFFICIENT, LOW-MAINTENANCE LANDSCAPES

WaterSense labeled new homes have yards that are water-efficient and low-maintenance, all while maintaining their beauty. Use this **infographic** on websites and via social media to illustrate for your customers that water-smart yards can be both low-maintenance and aesthetically pleasing.

Note that this infographic is on the password-protected WaterSense partners' website. If you need the username and password, please **email** the WaterSense Helpline. Not a partner? Joining is easy **fill out a partnership agreement and become a partner**.



# BUILDER'S BEAT: PATRICK DICKINSON, TEXAS A&M AGRILIFE RESEARCH AND EXTENSION CENTER IN DALLAS

In drought-challenged North Texas, WaterSense partner Texas A&M AgriLife Research and Extension Center in Dallas has been spreading knowledge about water-efficient landscapes through its WaterSense Labeled Demonstration Homes project. Here's more from Patrick Dickinson, Program Coordinator at Texas A&M AgriLife Research and Extension Center in Dallas:



At the Texas A&M AgriLife Research and Extension Center in Dallas, we are transforming landscapes from inefficient and high-maintenance to healthy, easy, and beautiful. The transition is simple, should not increase your budget, and will complement the attractive homes you are building! Homebuyers are looking for beauty and ease both inside and out, so why not help increase sales by offering lovely landscapes with the added bonus of less maintenance and less water?

To showcase the benefits of indoor and outdoor home water efficiency, we developed WaterSense Labeled Demonstration Homes. These educational facilities on our campus have provided invaluable teaching tools for the general public, as well as builders, landscapers, and irrigation professionals. By using these projects as live demonstrations, we are able to show the actual water savings that occur when new homes meet the WaterSense specification.

On a regular basis, and especially during times of strict water restrictions in North Texas, we educate homeowners and business owners on ways to be water-efficient in landscaping and irrigation. Building to the WaterSense new home specification from the start can also help minimize water restriction worries for homeowners.

How successful has the WaterSense Labeled Demonstration Homes project been for us? Since the opening of the first North Texas WaterSense Labeled Home on March 23, 2013, we have welcomed more than 2,500 visitors. Whether we are giving a tour to a gardening club, hosting a professional forum, or teaching a class on site, our WaterSense Labeled Demonstration Homes have changed how we teach and look at water efficiency in North Texas.



Yard at Texas AgriLife WaterSense Labeled Demonstration Home in Dallas, Texas

Looking for additional ways to incorporate low-maintenance, water-efficient beauty into your landscapes? Here are some lessons to think about:

- Select plants that are indigenous and hardy to your area. Plant selection is one of the most important steps and also one of the most simple. Native and low water-using plants require little water beyond normal rainfall once established in the landscape, making them very easy to maintain. We chose plants for our demonstration landscapes that were native or adaptive to North Texas, and the results are beautiful! Visitors to our campus come specifically to see the landscape. If we can draw consumers just to see the landscape at our WaterSense Labeled Demonstration Home, then imagine what extra homebuyers could be attracted to yours. Not sure which plants are best for your community? Check out WaterSense's What to Plant page for resources from across the country!
- **Properly prepare and install your soil.** Soil preparation is like the foundation of your home—if it's not installed properly, your landscape could easily fail. Proper soil preparation gives plants the foundation to establish quickly and thrive. Add this step along with your native and adaptive plants, and you will be the showcase builder in your area.
- **Consider alternative water sources for irrigation.** Irrigating with rainwater will save your homeowner water and money. At our WaterSense Labeled Demonstration Home, we successfully utilize a 1,000-gallon rainwater harvesting tank as the main source of watering for our 6,800-square-foot native and adaptive landscape. This tank operates all of



the drip irrigation, as well as the two spray zones in the turf. This type of free water could help you sell those beautiful homes and apartments.

By following these easy steps, you can create a landscape that is easy for your homeowners to maintain but is also easy on the eyes. And who doesn't like easy?

# SHARE THE SAVINGS: PROMOTE YOUR WATERSENSE LABELED HOMES ON SOCIAL MEDIA

Combine our new infographic with these sample social media posts to help grow customers' interest in the easy, healthy, and beautiful landscapes of WaterSense labeled new homes.

#### Twitter

- A healthy, beautiful yard isn't hard! Our #WaterSenseNewHomes have water-smart landscapes so you stress less and enjoy more.
- Your yard should be a place to relax, NOT work. Our #WaterSenseNewHomes reduce weeding & watering w/ beautiful, low-maintenance landscapes.
- Easy effort AND easy on the eyes? The lovely landscapes of our #WaterSenseNewHomes are also low-maintenance and drought-tolerant.
- We build #WaterSenseNewHomes with beautiful, low-maintenance, water-efficient landscapes so you save time, money, and stress.

#### Facebook

We want your home's outdoor space to be an easy oasis. Landscapes can be both beautiful and low-maintenance by designing them with water efficiency in mind. We build WaterSense labeled homes that meet EPA's criteria for water-efficient landscapes so you can stress less about weeding and watering and enjoy spending time outside more. And you'll save money too!

Learn more at www.epa.gov/watersense/new\_homes/ and contact us at [insert your company/contact information] to see for yourself that a beautiful, healthy yard isn't hard.

### **CALENDAR OF EVENTS**

### July 2014: Smart Irrigation Month

An initiative started by the Irrigation Association, **Smart Irrigation Month** takes place each year in July and is designed to promote efficient irrigation practices. During July, participants educate businesses, homeowners, contractors, and others about using Did you miss the May 20 partner marketing webinar focused on WaterSense labeled new homes? Not to worry! You can view the presentation and listen to the recording on the partner website once it becomes available online on June 6, 2014.

water efficiently, and encourage professionals to promote smart irrigation practices and technologies. If you are a WaterSense partner, take advantage of our partner tools and resources designed to promote efficient outdoor water use, including infographics and bill stuffers. Visit the **partner website** to learn more.

### July 25, 2014: Q2 2014 WaterSense Quarterly Reporting Deadline

Make sure your licensed certification providers **report** to WaterSense on any of your homes that earned the WaterSense label during the second quarter of 2014. The Q2 2014 reporting deadline is Friday, July 25.

## September 23 – 25, 2014: The Energy & Environmental Building Alliance (EEBA) Excellence in Building Conference & Expo (St. Louis)

Start planning your travel now for the EEBA Excellence in Building Conference & Expo taking place in St. Louis, Missouri, September 23 through 25, 2014. EEBA provides an opportunity for stakeholders to learn about the latest in building design technology. Visit the **EEBA website to register and learn more**.

