

TexasET Network Water My Yard Program

What is the 'Water My Yard' Program?

The *WaterMyYard* Program (http://WaterMyYard.org) is a new program and website that solves two of the biggest problems in getting homeowners to use science-based methods to determine when and how much water to apply to their lawns:

- 1. Most homeowners do not know what ET (evapotranspiration) is or how to use it to determine water requirements.
- 2. Most homeowners do not know the precipitation rate of their sprinklers or the water holding capacity and root zone depths of their yards, all of which are required to determine irrigation runtimes.

The *WaterMyYard* website employs simple, intuitive images and information prompts. With a few clicks, homeowners get recommendations on how long (in minutes) to run their irrigation systems. Users then can quickly set their email options to have these recommendations sent to them each week.

The *WaterMyYard* Program was first launched in May 2013 as a joint effort of the Irrigation Technology Program of the Texas A&M AgriLife Extension Service and the North Texas Water Municipal Water District.

What is ET?

Evapotranspiration (or ET) is the scientific term for the amount of water that plants and crops need to grow and remain healthy. The water requirements of plants depend upon both

- a) the type of plant, and
- b) the local weather, particularly temperature, relative humidity, wind speed and solar radiation.

Over the past 60 years, research and demonstration projects have shown that using ET-based irrigation schedules can save significant amounts of water. In urban settings, automatic irrigation systems typically are improperly set-up and "over-irrigate" (and waste) 20%-50% of the water applied.



How Is the 'WaterMyYard' User Interface Set-up?

The Website uses a visual data entry format. Watering recommendations are quickly produced in a three step process. Sample screens from each step are shown at the end of this document.

Step One. Select Location

A map is displayed, and the user simply clicks the map where his/her yard is located.

<u>Step Two</u>. *Enter Sprinkler Precipitation Rate or Select Sprinkler Type*If the user does not know the precipitation rate, he/she simply clicks on the image of their system. Pop-up screens then allow the user to select the manufacture and sprinkler spacing.

Step Three. Watering Recommendation and Email Set up

The water recommendation is given in minutes (how long to run your system) for once a week or twice a week watering. Next, the user can enter his/her email address to receive automatically generated water recommendations every Monday.

How Are Water Recommendations Calculated?

WaterMyYard uses standard science-based methods to calculate irrigation runtimes using local evapotranspiration data. The process is as follows:

- 1. By selecting the user's location, *WaterMyYard* finds the closest ET weather station to obtain the past week's ETo (reference ET) and rainfall.
- 2. Next, appropriate coefficients and quality factors are used to calculate irrigation requirements which have been shown to work well for home yards from research and demonstration projects.
- 3. Irrigation requirements are reduced by the amount of effective rainfall (if any).
- 4. Soil types, and depths are used which correspond to those common in the local area in order to set the remaining parameters needed for calculations.
- 5. Sprinkler precipitation rates are determined in cooperation with the Texas Turfgrass Irrigation Association and from interviews with local irrigation dealers, and correspond to the types of systems prevalent in the area.



What Are the Requirements to Participate in the WaterMyYard Program?

To participate in the *WaterMyYard* program, you must have at least one agricultural (ET-type) weather station that meets the TexasET Network requirements. Next we will work with you to obtain the remaining information that is needed to set up your area on the *WaterMyYard* website. During this process, we create an interactive map of your service area, and a user/email database for email recommendations.

Costs

Neither the *WaterMyYard* Program nor the **TexasET Network** receives State funding; thus we rely on sponsors to help cover the costs of providing these services. There are two fees associated with this program: *Set-up Fee* and *Program Support Fee*:

1. Set-Up Fee: \$4000 base fee (one-time charge)

This fee covers the costs to set up the *WaterMyYard* website for a sponsored area. For multiple weather stations and/or remote rain gauges, a surcharge may be required. Please contact us for more information.

- 2. Program Support Fee (annual):
 - a. \$5,000 for the first weather station
 - b. \$500 for each additional data logger (weather station or remote rain gauge)
 - c. A 20% discount for 10 or more stations

This *Program Support Fee* is effective for the 2015 calendar year. The fee covers the costs of participating in the program any time during 2015. *WaterMyYard* participants are not required to pay a TexasET Network fee.

Contacts

Charles Swanson Extension Program Specialist 979-845-5614; clswanson@ag.tamu.edu

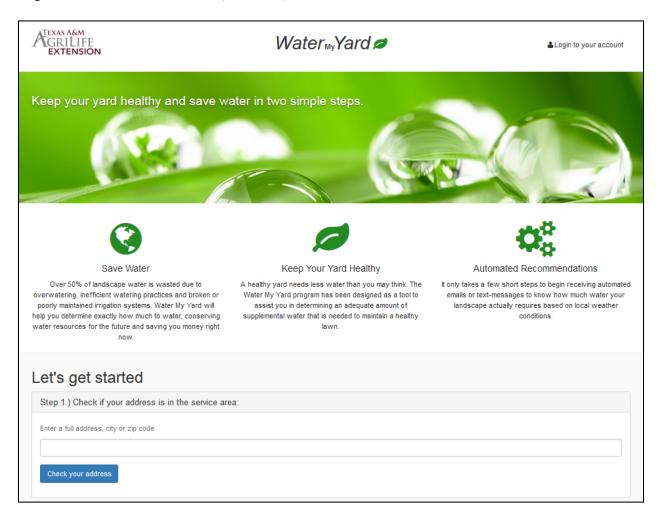
Guy Fipps, PhD, P.E. Professor and Extension Engineer 979-845-7454; gfipps@tamu.edu

Biological and Agricultural Engineering 207 Scoates Hall Texas A&M University 2117 College Station, TX 77843-2117



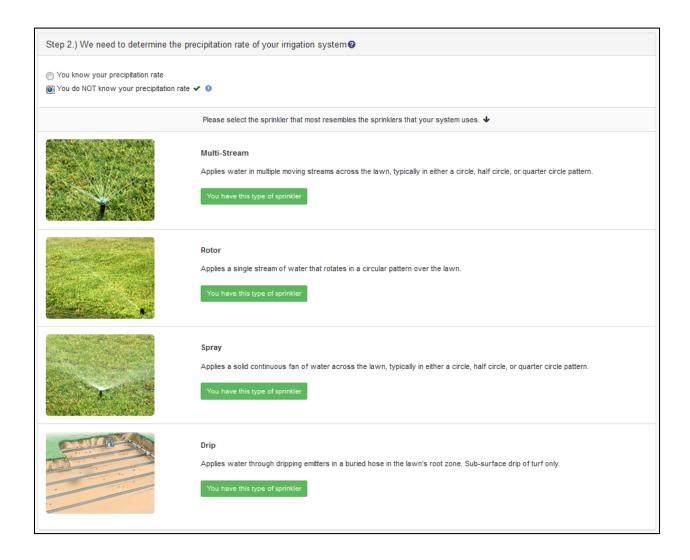
Sample Water My Yard Screen Images

Step One: Enter Your Address (Location)





Step 2. Enter Sprinkler Precipitation Rate or Select Sprinkler Type





Step 3: Watering Recommendation and Email Set-up

