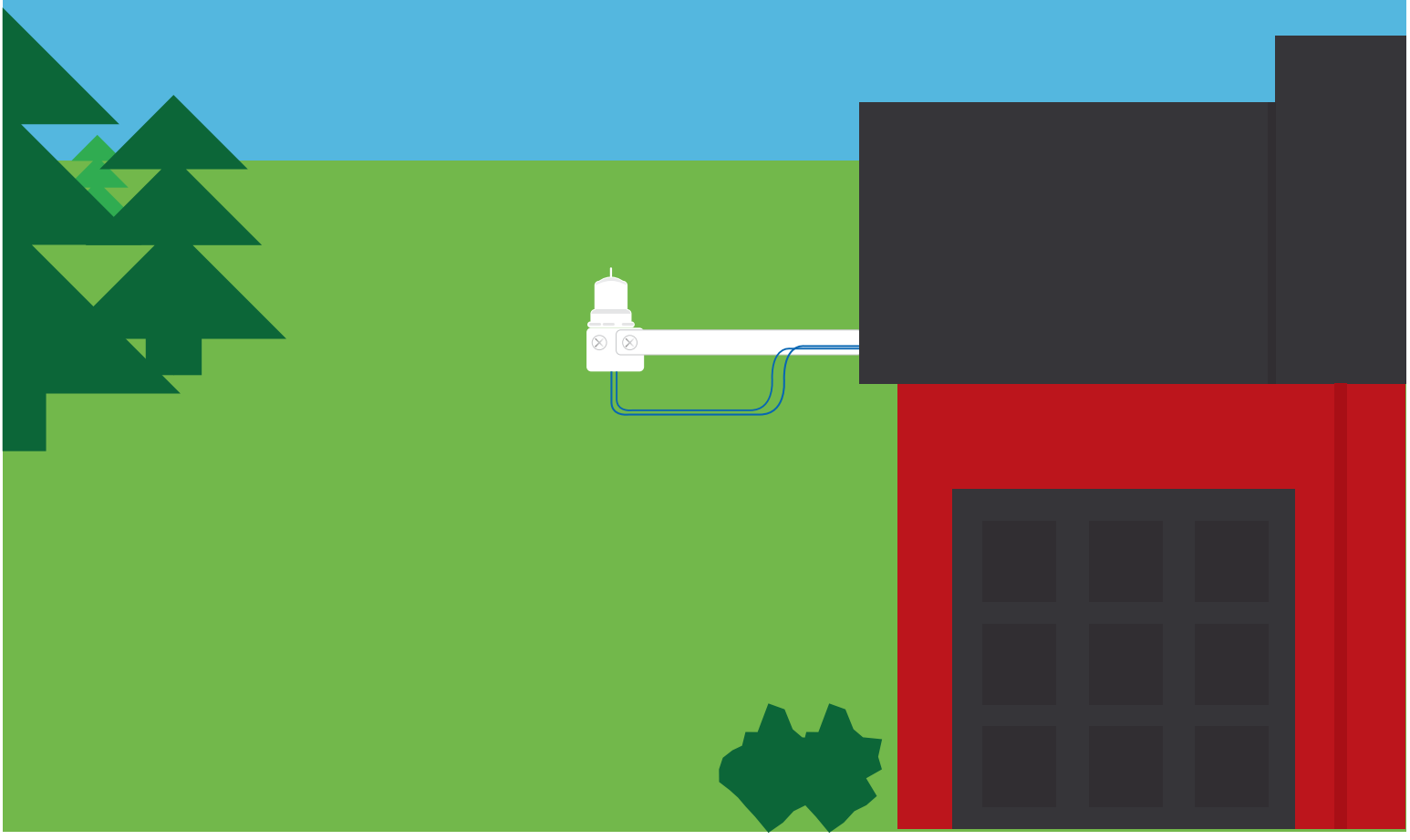
Florida Automated Weather Network

FACTSHEET

The Rain Sensor



FAWN FACTS: Rainfall Shutoff Devices

Florida law requires that any person who purchases and installs an automatic landscape irrigation system must properly install, maintain, and operate technology that inhibits or interrupts operation of the system during periods of sufficient moisture. (F.S. 373.662). Some counties and local communities have laws requiring *all* systems have them. *Rainfall shutoff devices* do just what their name implies; they *shut off* the irrigation system when they detect *rainfall*.

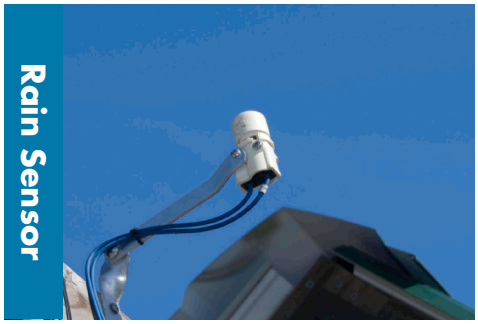
Why should you use a rainfall shutoff device?

1. **They conserve water.** Rainfall shutoff devices automatically shut down your irrigation system when they detect rainfall, which prevents overwatering – too much water can promote disease and damage your grass.

2. **They save money.** Rainfall shutoff devices save money simply by reducing money spent on water usage.

3. **They reduce system wear-and-tear.** Rainfall shutoff devices reduce wear-and-tear on your system by reducing the amount of time it runs.

4. **They help protect surface and groundwater.** Surface water runoff and water that percolates deep into the soil can transport access fertilizers and pollutants into groundwater and storm drains.



The most popular type of rainfall shutoff device is the expanding disk-type, which contains material that expands and contracts. As the material collects moisture, it expands, and if it expands to a pre-set limit, the irrigation system shuts off. Other types operate by weighing the rain collected, or use electrodes to detect the amount of water collected. IFAS researchers recommend rain sensor thresholds of 1/4" for 2 or 3 day per week irrigation with no more than 1/2" for 1 day per week irrigation. Remember, the lower the setting, the more water saved.

Rainfall shutoff devices should be installed in a location that will be exposed to unobstructed rainfall, away from potential spray from the irrigation system. They can be either plugged directly into your existing controller, or "hard-wired" if not compatible. You may also want to periodically test your rainfall shutoff device to ensure it is measuring the correct amount of rain. This can be done during a rainfall event by placing small, straight-sided cans in your yard and collecting a pre-determined amount of rain (1/2", for example). Once that amount is collected, set your device to that amount and manually engage your system. It should *not* operate if the device is working properly.

Special thanks to Dr. Michael Dukes, Dr. Dorota Haman, and the Southwest Florida Water Management District.