CALIBRATING YOUR IRRIGATION SYSTEM

Irrigation Basics

- Avoid applying more water than can be contained in the root zone. Never water when the soil is wet!
- Irrigate according to the requirements of the plants.
- Water lawns and shrub beds/perennial beds separately. (These should be on different irrigation zones.)
- Water trees and shrubs, which have deeper root systems, longer and less frequently than shallow rooted plants.
- Do not over water - most established vegetation does not require more than 1 to 1 ½ inches per week depending on the season and rainfall. Plants will develop deeper roots and ultimately require less watering when not over-watered.
- Use a rain gauge placed in an unobstructed bed area where it can capture rainfall to determine how much precipitation you receive during a rain event. Turn your sprinklers off if you get an inch in a week.

The “Catch Can” Test - Measuring your precipitation rate (PR)

- Step 1 – Place 6 identical, straight sided, flat bottom cans (or glasses) randomly between sprinklers in one zone. Do not use short cans like tuna cans or rain gauges, as water may splash out.
- Step 2 – Run sprinklers exactly 10 minutes.
- Step 3 – Pour all the water into one of the six cans.
- Step 4 – Measure depth of water in can. This is the precipitation rate (PR) in inches per hour.
- If the amount of water in some containers is significantly more or less than others, it indicates that the system is poorly designed or heads are malfunctioning.

Determining your run times - Converting inches to minutes

Formula:

\[
\text{Run time} = \frac{\text{Water to apply (inches)}}{\text{PR (inches/hour)}} \times 60 \text{ minutes/hour}
\]

Example:

- 0.25 inches
  
  Run time = \frac{0.25}{1.5} \times 60 \text{ minutes/hour} = 10 \text{ minutes}