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## Tech Tip of the Month

### How to Measure Water Usage Without a Flow Meter

A Calsense controller can calculate water usage for irrigation without a flow meter. After adding programs and stations, go to **Main Menu > Flow > Track Estimated**. Edit the setting for Do you want to set the expected flow rates for reports to YES.

Each station that is used for irrigation needs an expected flow rate. The easiest way to determine a valve's expected flow rate is:

- Ensure that no water is currently running on the site. Go to the water meter and record the starting number. Run a station valve for three minutes. Subtract the starting number from the ending number. Divide the total by three to get an average flow rate per minute.

$$\text{Estimated Flow} = \frac{(\text{Ending water meter reading}) - (\text{Starting water meter reading})}{3}$$

If the water meter measures in gallons, you now have the expected flow rate.

If the water meter measures in cubic feet, multiply the above calculated number by 7.48 to convert to gallons.

If the water meter measures in hundreds of cubic feet, multiply the above calculated number by 748 to convert to gallons.

Go to **Main Menu > Programs & Stations > Stations**. Enter the expected flow rate. Repeat for each station. Now you can monitor station water usage, irrigate using system capacity, and set up a budget without the convenience of a flow meter.