

# Flow Sensors and Dedicated Irrigation Submeters working together to save Water!



Dedicated Irrigation Submeter

## Dedicated Irrigation Submeters Benefits

1. Exact water usage –define water savings and usage through periodic readings to stay within water budgets
2. Leak detection at very low flows- quickly determines that the irrigation system does not have any leaks using a water meter's leak indicator. Do not have to turn off house water to do this check since it is separated.
3. Defines indoor vs. outdoor use – understand exactly how much water is used outside versus inside and also help quickly identify leaks that may be inside home such as toilet leaks.

## Field Study parameters:

Residential Estates retrofitted with Dedicated irrigation Submeters and Flow Sensors.

Estate sizes :1 to 5 acres.

Irrigation systems: 14 to 58 zones.

Results: Estates managed with sensor and submeter average savings: 35%

A comparison estate was also managed with only a mixed use water meter and had significant water loss over the same 1 year period.

## Actual Leak Alarms:

The following are actual causes of leaks and failures that were detected by the flow sensor and quickly fixed at the managed estates:

1. Broken shrub riser in driveway was hit 2 times by the garbage truck. He was determined!
2. Broken MP rotator head on street by telephone pole was crushed by the telephone service truck.
3. Leaking valves
4. Crushed PVC piping by tree roots after 10 years of no leaks in that pipe; 3 feet underground leak found
5. Broken sprinkler by Tree Service company; gushing riser by street
6. Clogged nozzles that reduced the flow

## Exact Water Savings Reports

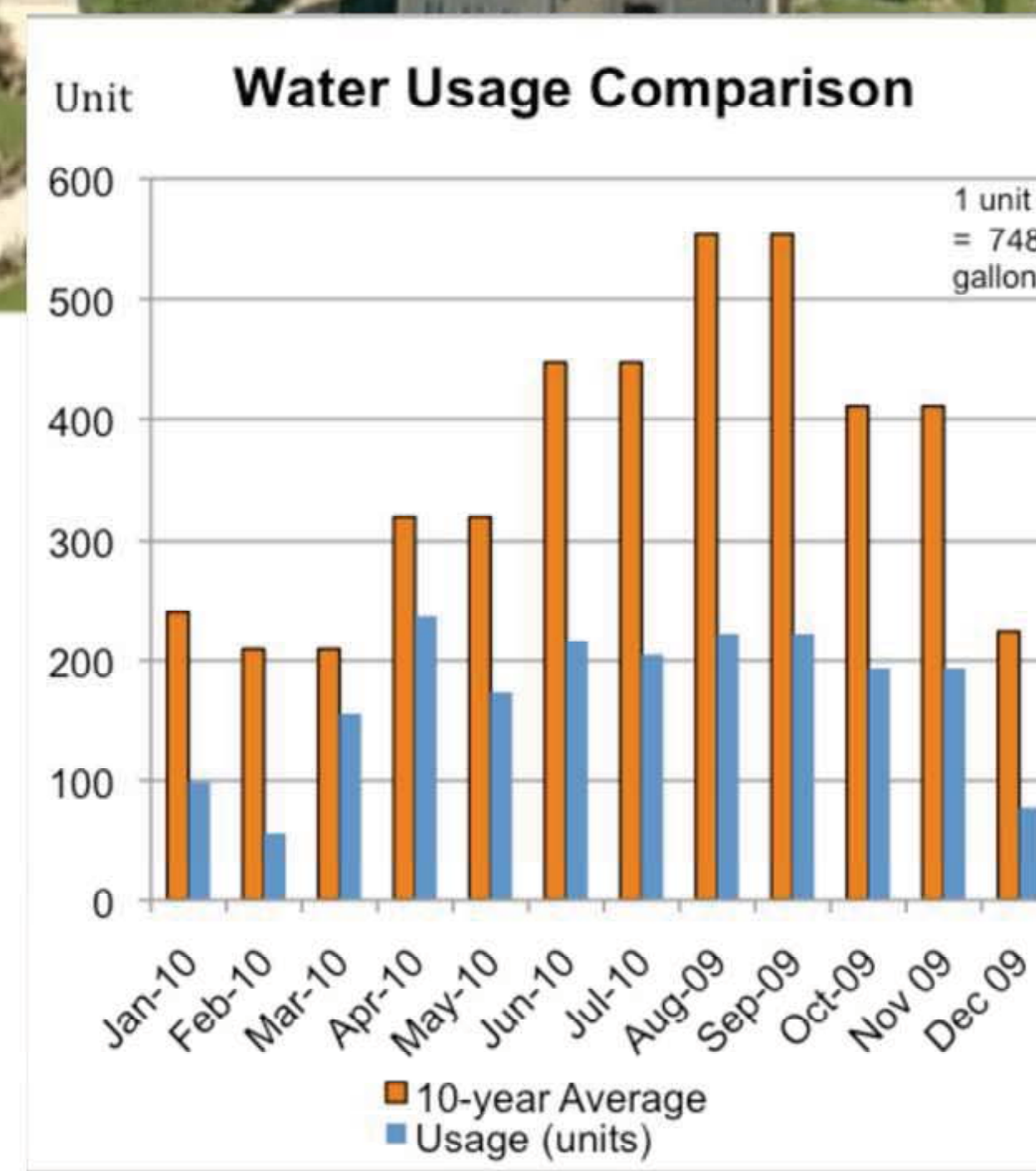
1. Dedicated Irrigation Submeter gives exact data so water managers and clients can be fully aware of the outdoor water use and keep it within the water budget.
2. Use this data to show the value in money for water saved and the client sees the return on investment every month.



Flow Sensor

## Flow Sensor Benefits

1. system design awareness- establishes baseline flow per station.
2. Leak detection- during operation detect the sensor detect breaks in the sprinkler system. Also detects mainline breaks when irrigation system is not operating.
3. Quicker site inspections- all zones are running at baseline flows, then only inspect for breaks with the zones that have alarms.



Exact Water Savings Reports