

WATER SENSE LABELED IRRIGATION CONTROLLER PROJECT

N860 PILOT



WITHLACOOCHEE
REGIONAL
WATER
SUPPLY
AUTHORITY



Southwest Florida
Water Management District

WATERMATTERS.ORG • 1-800-423-1476

PROGRAM JUSTIFICATION



- Irrigation accounts for about 50% of Citrus County Utilities residential potable water use
- According to EPA, about half of water used for irrigation is wasted due to inefficiencies - that's 25% of potable water supply
- Smart Irrigation Controller Demonstration and Evaluation, Orange County, FL: ET controllers produced 18-32% savings
- Goal:
 - reach and/or maintain the District's 150 gallons per person per day requirement (per capita)
 - Reduce existing & future water demands of growing customer base



WATER SENSE LABELED CONTROLLERS

- ET (evapotranspiration) controllers are weather-based controllers
- Act like a thermostat for the sprinkler system
- Better match plants' water needs all year
- Independently certified for efficiency & performance (700+ available)

According to the EPA, if every home with an Automatic sprinkler system installed a WaterSense Labeled irrigation controller, the US could save 220 billion gallons annually.



PROGRAM OVERVIEW

- High-water-use residential sites (12-month average: 21K-83K)
- Customers installed one of two controllers:
 - [Hunter Pro-C with Solar Sync](#) (sensor-based)
 - [Rachio](#) (signal-based)
- Up to a \$450 account credit
- Post installation inspection & training required

Hunter w/
Solar Sync



Rachio

PARTICIPATION



Product	# Installed	Average Account Credit
Hunter Pro-C with Solar Sync	35	\$419
Rachio	14	\$327

*Not including one Rain Bird ST8I-wifi installed

COSTS



Project Expenses:

COUNTY	WRWSA	DISTRICT	TOTAL
\$4,891	\$4,891	\$9,781	\$19,563

WATER USE DATA ANALYSIS

AVERAGE PER HOME



	Projected	Actual
Gallons Per Home / Per Day	222	432
Gallons Per Home / Per Year	80,848	157,180
Percent Reduction	20%	38%
Cost - Benefit Per 1,000 Gallons	\$1.35	\$0.60

WATER USE DATA ANALYSIS

FIRST YEAR SAVINGS



# Controllers	12-month Pre-Use	12-month Post-Use	GPD Savings (gal/day)	GPY Savings (gal/year)	Est. 5-Year Savings (gal/life of product)
50	20,671,000	12,812,000	21,591	7,859,000	39,295,000

PER CAPITA SAVINGS



Pre-Evaluation Per Capita	Post-Evaluation Per Capita	Per Capita Reduction
545	338	207

LESSONS LEARNED



- Customers wanted County to provide contractor recommendations
- Significant variation in pricing \$165 to \$900
- 50% of controllers required scheduling adjustments:
 - Rachio often required increasing rain skip to 1/2" and adjusting slope
 - Hunter zone times were excessive
 - No regard for plant type
 - Little distinction between rotor & spray heads / different outputs
 - Solar Sync must be placed in all-day full sun

SUCCESSFUL PROJECT

- Phase 2 installations completed September 2019
 - Secured contractor to install Rachio (no bid on Hunter)
 - 87 participants
 - 82 Rachio / 5 Hunter w/Solar Sync
- Phase 3 began November 2019
 - Secured contractors to install both the Rachio & Hunter
 - 180 install goal
 - Applications to-date: 40 Rachio / 60 Hunter w/Solar Sync
- Phase 4 grant application submitted
 - 120 install goal



QUESTIONS

