

Phase 5 Irrigation System Evaluation Program Status Report

January 15, 2020

A Cooperative Project between the WRWSA
and the Southwest Florida Water
Management District

Phase 5

Irrigation System Evaluation Program

- * April 2019 – SWFWMD Cooperative Funding Agreement
- * September 2018 – Eco Land Design Contract
- * \$145,000 total project budget
 - * 50% SWFWMD
 - * 50% WRWSA
 - * 50% WRWSA
 - * 50% Local Utility

Phase 5

Irrigation System Evaluation Program

- * Participating Utilities:

- * Citrus County (\$8,000)

- * Hernando County (\$6,000)

- * Marion County (\$12,000)

- * The Village Center Community Development District (\$2,000)

- * North Sumter County Utility Dependent District (\$4,000)

Phase 5 Irrigation System Evaluation Program

Budget

Utility	Local Utility	WRWSA	SWFWMD	Total
Citrus	\$8,000	\$8,000	\$16,000	\$32,000
Hernando	\$6,000	\$6,000	\$12,000	\$24,000
Marion	\$12,000	\$12,000	\$24,000	\$48,000
VCCDD (LSSA)	\$2,000	\$2,000	\$4,000	\$8,000
NSCUDD (VWCA)	\$4,000	\$4,000	\$8,000	\$16,000
Total	\$32,000	\$32,000	\$64,000	\$128,000

Phase 5

Irrigation System Evaluation Program

Program Goal and Benefits

- * Goal: Reduced water demands on participating utilities caused by single-family residential customers
- * Benefits to utilities:
 - * Existing infrastructure meets the demands of more customers
 - * Postpones the need for new infrastructure
 - * Can avoid or postpone the need for rate increases
 - * Maximizes the least expensive alternative to meeting growing water demands – conservation
 - * Assists utilities to meet and surpass the WMD regulatory conservation requirements, including SWFWMD compliance per capita rate of 150 or less
 - * Can reduce runoff and infiltration caused by over watering

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Irrigation System Evaluation Program

Program Goal and Benefits

- * Benefits to the customers:
 - * Reduces water consumption
 - * Saves money
 - * Can improve lawn and landscape appearance
 - * Can avoid or postpone the need for rate increases

Phase 5

Irrigation System Evaluation Program

Core Program

- * Outdoor irrigation audits conducted by a certified contractor
 - * Rain sensor/shut off evaluation and replacement
 - * Controller timer education to resident
 - * Irrigation zone review and possible adjustment
 - * Controller battery replacement
 - * Audit report to homeowner

Phase 5

Irrigation System Evaluation Program

Enhanced Program

- * Catch-can water audits
- * Sprinkler head replacements (broken & mixed heads)
- * Capping unnecessary heads
- * Rain sensors replacement with solar sync sensors
- * Replace outdated-obsolete controllers with smart controllers
- * Homeowner water savings analysis and report

Phase 5

Irrigation System Evaluation Program

Progress To-date

Utility	Audits Completed			Anticipated Additional Audits
	Core	Enhanced	Total	
Citrus	62	13	75	0
Hernando	10	33	43	17
Marion	11	51	62	28
VCCDD (LSSA)	24	0	24	0
NSCUDD (VWCA)	23	0	23	17
Total	130	97	227	62

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Irrigation System Evaluation Program

Schedule

- * May 31, 2020 – Contractor Completes Audits
- * August 30, 2020 – Contractor Completes Follow-ups
- * October 31, 2020 – Complete Survey of Participants
- * July 31, 2021 – Utilities provide 12 months of pre- and post-audit water use data
- * September 30, 2021 – Draft Report
- * November 30, 2021 – Final Report Presented to WRWSA Board
- * December 31, 2021 – Final Report Submitted to SWFWMD

Irrigation System Evaluation Program

Program Schedule

<u>Phase</u>	<u>Schedule</u>
* Pilot	January 2011 – September 2013
* Phase II	April 2013 – November 2015
* Phase III	March 2015 – July 2017
* Phase IV	November 2016 – March 2020
* Phase V	September 2018 – December 2021
* Phase VI	September 2020 – December 2023

Irrigation System Evaluation Program

Accomplishments To-Date Pilot – Phase IV

Savings (averages)

- * 18.7 million gallons per year
- * 51,144 gallons per day
- * 240 gallons per day per account
- * 112 gallons per person per day

Phase 5 Irrigation System Evaluation Program

Regional Water Supply Plan

County	Water Conservation ¹	Reclaimed Water	Groundwater (Upper Floridan Aquifer)		Surface Water		Seawater Desalination ⁷	Total
			SWFWMD ³	SJRWMD ⁴	Withlacoochee ⁵	Ocklawaha ⁶		
Citrus	5.72	1.86	5.4	-	16.5		15.0	44.48
Hernando	1.62	4.32	11.4	-				17.34
Marion	3.82	2.40 ²	13.1	0.0 to 15.9		TBD		35.22
Sumter	3.68	3.60	21.5		16.5			45.28
Total	14.86	12.18	51.4	0.0 to 15.9	33.0	TBD	15.0	126.4 to 142.34

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- * Staff Recommendation – information item only, no action required