

# **Lower West Coast Mobile Irrigation Lab**

## **Quarterly Report Second Quarter – Fiscal Year 2019 January 1 through March 31, 2019**

**Sponsored by:**

**Collier Soil and Water Conservation District  
Florida Department of Agriculture and Consumer Services  
Natural Resources Conservation Service**

**14700 Immokalee Road  
Naples, FL 34120  
(239) 455-4100**

# Evaluation Results

## **SYSTEMS EVALUATED**

This report covers the second quarter of Fiscal Year 2019, from January 1 to March 31, 2019. The Mobile Irrigation Lab (MIL) completed 55 total evaluations, 11 of which were initial evaluations, and 44 of which were follow-up evaluations. 51 evaluations were performed on microjet systems on citrus, and 4 evaluations were performed on drip systems on vegetables.

## **RESULTS**

Agricultural system evaluations are rated based on the measured Emission Uniformity (EU) of systems. The average EU of the agricultural systems evaluated was 82%.

## **WATER SAVINGS**

Potential Water Savings (PWS) are based on first-time evaluations and estimate the amount of water that would be saved each year by making the recommended system improvements and/or following recommended irrigation scheduling guides. Actual Water Savings (AWS) are calculated from system improvements measured by follow-up evaluations.

**PWS: 12.5 million gallons (38.3 acre feet) per year.**

**AWS: 65.3 million gallons (200.5 acre feet) per year.**

# Conservation Education/Outreach Activities

## **February**

- MIL staff taught the Irrigation module of the Green Industries Best Management Practices class at the Rookery Bay Nation Estuarine Research Reserve.
- MIL staff participated in the Greenscape Alliance meeting of local agencies and partners at the Naples Botanical Garden.

## **March**

- MIL staff participated in a Citrus Seminar at the UF/IFAS Southwest Florida Research and Education Center in Immokalee.

The MIL team also provides education and outreach services on a regular basis to individual agricultural irrigators related to evaluations performed by the MIL. The MIL continues to work on preparing and refining various PowerPoint presentations to assist in future education activities. MIL staff also designs and produces display posters that can be used in the MIL display booth. Staff spends time designing and maintaining the Collier Soil and Water Conservation District and MIL website at [www.collierswcd.org](http://www.collierswcd.org).

**LOWER WEST COAST MOBILE IRRIGATION LAB**  
**April - June 2019 (3rd Qtr. Federal Fiscal Year)**

Zip Code	County	Quarter ID	Crop	System Type	Acres	Soil Type	**** Water ****			Pump	Motor	Problems	Inline Flow	US Flow	EU%	PWS Ac./Ft.	AWS Ac./Ft.	Initial EU
							Source	pH	TDS									
34142	Collier	63	Citrus	Micro	24.0	17	Well	7.2	480	Turbine	Electric		625	600	86		16.02	61
34142	Collier	64	Citrus	Micro	26.8	7	Well	7.2	480	Turbine	Electric	4	750	720	87		8.99	72
34142	Collier	65	Citrus	Micro	18.4	7	Well	7.2	480	Turbine	Electric		575	540	85		5.48	72
34142	Collier	66	Citrus	Micro	17.1	7	Well	7.1	430	Turbine	Electric	2,12,33	550	560	88		3.89	77
34142	Collier	67	Citrus	Micro	30.3	17	Well	7.1	430	Turbine	Electric	2,6,12,33	675	660	75		4.92	69
34142	Collier	68	Citrus	Micro	30.8	7	Well	7.1	410	Turbine	Electric	2	700	675	90		16.46	67
34142	Collier	69	Citrus	Micro	39.9	7	Well	7.1	410	Turbine	Electric	2,4	900	845	76		8.65	68
34142	Collier	70	Citrus	Micro	21.4	2	Well	7.3	520	Turbine	Electric	2,30	775	730	92		0.00	95
34142	Collier	71	Citrus	Micro	27.2	17	Well	7.3	520	Turbine	Electric	4,30	750	715	90		11.33	71
34142	Collier	72	Citrus	Micro	32.5	17	Well	7.3	520	Turbine	Electric	2,4,30,33	825	780	87		36.94	51
34142	Collier	73	Citrus	Micro	32.0	17	Well	7.3	520	Turbine	Electric	2,4,30,33	800	820	86		6.86	76
34142	Collier	74	Citrus	Micro	32.0	7	Well	7.2	400	Turbine	Electric	4,30,33	925	825	81		24.71	56
34142	Collier	75	Citrus	Micro	28.7	7	Well	7.2	400	Turbine	Electric	30	775	705	86		1.69	83
34142	Collier	76	Citrus	Micro	31.2	7	Well	7.2	440	Turbine	Electric		920	860	85		25.26	57
34142	Collier	77	Citrus	Micro	28.6	7	Well	7.2	440	Turbine	Electric	30	860	820	81		16.22	61
34142	Collier	78	Citrus	Micro	28.6	7	Well	7.1	380	Turbine	Electric		825	740	80		0.00	82
34142	Collier	79	Citrus	Micro	39.6	2	Well	7.3	410	Turbine	Diesel	2,4,6,30,33	950	900	73		0.00	90
34142	Collier	80	Citrus	Micro	10.5	11	Well	6.9	630	Turbine	Diesel	2,56	350	380	88		0.39	86
34142	Collier	81	Citrus	Micro	36.3	14	Well	6.9	630	Turbine	Diesel	2,56	1175	1140	89		0.65	88
34142	Collier	82	Citrus	Micro	35.8	21	Well	7.0	790	Turbine	Diesel	4,33	750	720	79		0.00	94
34142	Collier	83	Citrus	Micro	31.7	14	Well	7.0	790	Turbine	Diesel	4,6	700	675	73	14.09		
34142	Collier	84	Citrus	Micro	22.2	14	Well	7.0	790	Turbine	Diesel	4	580	555	86		0.00	95
34142	Collier	85	Citrus	Micro	25.0	14	Well	7.0	790	Turbine	Diesel	33	700	620	87		0.00	89
34142	Collier	86	Citrus	Micro	4.9	14	Well	7.1	470	Turbine	Diesel	3,12,56		200	91		0.08	90
34142	Collier	87	Citrus	Micro	28.0	11	Well	7.2	760	Turbine	Electric	6,33	1225	1165	84		2.96	79
34142	Collier	88	Citrus	Micro	11.8	17	Well	7.2	760	Turbine	Electric	2,6	900	850	76		3.30	66
34142	Collier	89	Citrus	Micro	32.2	14	Well	6.9	560	Turbine	Diesel	2,4,12,33,56	600		85		0.00	98
34142	Collier	90	Citrus	Micro	17.7	14	Well	7.1	600	Turbine	Diesel	4,30,56		340	84		0.00	87
34142	Collier	91	Citrus	Micro	16.6	7	Well	7.1	500	Turbine	Electric		625	650	80		0.00	95
34142	Collier	92	Citrus	Micro	15.9	7	Well	7.3	500	Turbine	Electric	33	480	485	89		0.00	94
34142	Collier	93	Citrus	Micro	16.4	7	Well	7.3	500	Turbine	Electric	2,3	525	475	84		0.00	93
34142	Collier	94	Citrus	Micro	42.8	7	Well	7.2	460	Turbine	Electric	2,4,12,30,33	900	790	61		0.00	82
34142	Collier	95	Citrus	Micro	30.4	29	Well	7.2	460	Turbine	Electric	2,12,33	1050	950	84		0.00	91
34142	Collier	96	Citrus	Micro	27.2	7	Well	7.5	800	Turbine	Electric	2,4,30	800	800	87	3.69		
34142	Collier	97	Citrus	Micro	22.2	7	Well	7.4	960	Turbine	Electric	2,30	1150	1040	65		0.00	86
34142	Collier	98	Citrus	Micro	21	7	Well	7.4	960	Turbine	Electric	2,6,30	975	890	71		0.00	83
34142	Collier	99	Citrus	Micro	24.8	7	Well	7.4	960	Turbine	Electric	2,4,30	650	590	74		5.69	66
34142	Collier	100	Citrus	Micro	24.5	7	Well	7.4	960	Turbine	Electric	2,4,6,30	650	590	72		0.00	80
34142	Collier	101	Citrus	Micro	22.5	29	Well	7.4	960	Turbine	Electric	2,4,6,30	600	540	73		0.00	75
34142	Collier	102	Citrus	Micro	52.2	29	Well	7.0	460	Turbine	Diesel	31	1500	1425	71		0.00	74
34142	Collier	103	Citrus	Micro	18.4	29	Well	7.0	460	Turbine	Diesel	2	530	500	87		0.00	92
34142	Collier	104	Citrus	Micro	45.1	29	Well	7.0	460	Turbine	Diesel	2,31	1475	1350	78		0.00	79

34142	Collier	105	Citrus	Micro	28.9	7	Well	7.1	440	Turbine	Diesel	30,56	925	860	84		0.00	95			
34142	Collier	106	Citrus	Micro	32.5	7	Well	7.1	440	Turbine	Diesel	30,33,56	1100	950	79		0.00	95			
34142	Collier	107	Citrus	Micro	35.9	29	Well	7.1	460	Turbine	Diesel		1175	1060	78		0.00	95			
34142	Collier	108	Citrus	Micro	27.7	7	Well	7.1	460	Turbine	Diesel	2,4	570	510	77		0.00	80			
33930	Hendry	109	Citrus	Micro	30.7	51	Surface			Turbine	Diesel			820	92	1.48					
33930	Hendry	110	Citrus	Micro	38.0	51	Surface			Turbine	Diesel			1030	93	1.21					
33930	Hendry	111	Citrus	Micro	35.6	51	Surface			Turbine	Diesel	6		800	84	6.87					
34142	Collier	112	Vegetable	Drip	32.0	17	Well	7.0	550	Turbine	Diesel	4,33	800	760	77	4.17					
34142	Collier	113	Vegetable	Drip	45.0	10	Well	7.5	630	Turbine	Diesel	4,30	950	930	95	0.00					
34142	Collier	114	Vegetable	Drip	39.5	10	Well	7.0	670	Turbine	Diesel		750	740	87	1.05					
34142	Collier	115	Vegetable	Drip	25.0	17	Well			Turbine	Diesel	33	325	310	74	4.17					
34142	Collier	116	Citrus	Micro	10.0	27	Well	7.4	730	Turbine	Diesel		860	860	96	0.00					
34142	Collier	117	Citrus	Micro	10.0	27	Well	7.4	730	Turbine	Diesel	2,4	840	850	86	1.54					
													1516.0				82.3	38.27	200.47		

Millions of gallons: 12,471,070 65,322,254