

# **Lower West Coast Mobile Irrigation Lab**

## **Quarterly Report First Quarter – Fiscal Year 2014 October 1 through December 31, 2013**

**Sponsored by:**

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

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# Evaluation Results

## **SYSTEMS EVALUATED**

This report covers the first quarter of Fiscal Year 2014, from October 1 to December 31, 2013. The Mobile Irrigation Lab (MIL) completed 36 total evaluations, 27 of which were initial evaluations, and 9 of which were follow-up evaluations. Of those completed, 33 evaluations were performed on microjet systems in citrus groves, and 3 evaluations were performed on drip systems in citrus groves.

## **RESULTS**

Agricultural system evaluations are rated based on the measured Emission Uniformity (EU) of systems. The average EU of the agricultural systems evaluated was 80%.

## **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: 105.7 million gallons (324.27 acre feet) per year.**

**AWS: 8.6 million gallons (26.37 acre feet) per year.**

# Conservation Education/Outreach Activities

## **October**

- MIL staff presented the Irrigation portion of the landscape Best Management Practices training at the Rookery Bay National Estuarine Research Reserve in Naples.

## **November**

- MIL staff participated in a meeting of growers and agencies involved in Citrus Best Management Practices (BMPs) at the University of Florida – Institute of Food and Agricultural Sciences (IFAS) research 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).

## Attachment # 1a: Ag - Lower West Coast

MIL

MIL ID: 2

Federal Quarter: 1

Federal Fiscal Year: 2014

Eval ID #	Evaluation Type	Irrigation System Type	Irrig System Distrib or Emiss Unif (%)		Irrig Sys Ac	Land Use		Annual Water Use (in.) NIR	Irrigation System Problems	Water Savings (ac-ft)	
			Max	Per Eval		Type	Crop			Total AWS	Total PWS
1	Initial	Micro Spray	95	82	12.0	Ag	Citrus	16.81	2,4,6,40,56		2.81
2	Initial	Micro Spray	95	79	12.0	Ag	Citrus	16.81	2,4,6,30,56		3.58
3	Initial	Micro Spray	95	78	12.0	Ag	Citrus	16.81	2,4,6,30,35,56		3.86
4	Initial	Micro Spray	95	83	12.0	Ag	Citrus	16.81	2,4,6,33,56		2.56
5	Initial	Micro Spray	95	88	12.0	Ag	Citrus	16.81	2,4,56		1.41
6	Initial	Micro Spray	95	74	12.0	Ag	Citrus	16.81	2,4,6,30,56		5.02
7	Follow Up	Micro Spray	95	81	18.8	Ag	Citrus	16.81	2,4,6,30,35	1.69	
8	Initial	Micro Spray	95	83	18.8	Ag	Citrus	16.81	2,4,6,35		4.01
9	Follow Up	Micro Spray	95	89	18.8	Ag	Citrus	16.81	2,4	4.17	
10	Follow Up	Micro Spray	95	78	18.8	Ag	Citrus	16.81	2,4,6	0.89	
11	Follow Up	Micro Spray	95	76	18.8	Ag	Citrus	16.81	2,4,6	0.00	
12	Follow Up	Micro Spray	95	78	18.8	Ag	Citrus	16.81	2,4,6	3.33	
13	Initial	Micro Spray	95	86	13.8	Ag	Citrus	16.81	2,4,6,30,33,56		2.13
14	Initial	Micro Spray	95	83	13.8	Ag	Citrus	16.81	2,4,6,33,56		2.94
15	Initial	Micro Spray	95	82	13.8	Ag	Citrus	16.81	2,4,6,30,33,56		3.23
16	Initial	Micro Spray	95	85	13.8	Ag	Citrus	16.81	2,4,6,33,56		2.39
17	Initial	Micro Spray	95	82	13.8	Ag	Citrus	16.81	2,4,6,33,56		3.23
18	Follow Up	Micro Spray	95	89	14.7	Ag	Citrus	16.81	2,4	3.26	
19	Initial	Micro Spray	95	80	14.7	Ag	Citrus	16.81	2,4,6,33,40		4.06
20	Initial	Micro Spray	95	91	14.7	Ag	Citrus	16.81	2,4,33,40		0.95
21	Initial	Micro Spray	95	90	14.7	Ag	Citrus	16.81	2,4		1.20
22	Initial	Micro Spray	95	86	14.7	Ag	Citrus	16.81	2,4,40		2.27
23	Follow Up	Micro Spray	95	77	14.7	Ag	Citrus	16.81	2,4,6,33,40	12.11	
24	Initial	Micro Spray	95	87	11.2	Ag	Citrus	16.81	2,4,33		1.52
25	Follow Up	Micro Spray	95	86	11.2	Ag	Citrus	16.81	2,4,33	0.00	
26	Initial	Micro Spray	95	68	11.2	Ag	Citrus	16.81	2,4,6,33		6.56
27	Initial	Micro Spray	95	70	11.2	Ag	Citrus	16.81	2,4,6,30		5.90
28	Follow Up	Micro Spray	95	73	11.2	Ag	Citrus	16.81	2,3,6	0.92	
29	Initial	Micro Spray	95	86	25.0	Ag	Citrus	16.81	4,6,12		3.86
30	Initial	Micro Spray	95	78	16.0	Ag	Citrus	16.81	3,12,22,30,41		5.14
31	Initial	Micro Spray	95	89	17.0	Ag	Citrus	16.81	12,22,30,41		1.69
32	Initial	Micro Spray	95	66	21.0	Ag	Citrus	16.81	12,22,30,41		13.61
33	Initial	Drip	95	47	36.0	Ag	Citrus	16.81	2,4,6,12,22,41		51.26
34	Initial	Drip	95	76	36.0	Ag	Citrus	16.81	2,4,6,12,22,41		10.32
35	Initial	Micro Spray	95	93	10.8	Ag	Citrus	16.81			0.34
36	Initial	Drip	95	56	188.8	Ag	Citrus	16.81	2,4,6,35		178.42
				<b>79.9</b>	<b>748.6</b>					<b>26.37</b>	<b>324.27</b>

## Attachment # 1b: Ag - Lower West Coast

## IRRIGATION SYSTEM WATER SOURCE, PUMPING STATION, AND OTHER INFO

MIL ID: 2

Federal Quarter: 1

Federal Fiscal Year: 2014

Eval ID #	County Name	Zip Code	Soil Type No.	Water Source	TDS	pH	Pump Type	Inline Flow	UFM Flow	Motor Type
1	Hendry	34142	7	Well	560	7.3	Turbine or Submersible	375	350	Diesel
2	Hendry	34142	7	Well	560	7.3	Turbine or Submersible	360	340	Diesel
3	Hendry	34142	7	Well	560	7.3	Turbine or Submersible	360	340	Diesel
4	Hendry	34142	7	Well	560	7.3	Turbine or Submersible	360	340	Diesel
5	Hendry	34142	7	Well	560	7.3	Turbine or Submersible	370	350	Diesel
6	Hendry	34142	7	Well	560	7.3	Turbine or Submersible	375	400	Diesel
7	Hendry	34142	17	Well	420	7.1	Turbine or Submersible	540	560	Diesel
8	Hendry	34142	17	Well	420	7.1	Turbine or Submersible	550	560	Diesel
9	Hendry	34142	17	Well	420	7.1	Turbine or Submersible	530	545	Diesel
10	Hendry	34142	17	Well	420	7.1	Turbine or Submersible	550	560	Diesel
11	Hendry	34142	7	Well	420	7.1	Turbine or Submersible	540	560	Diesel
12	Hendry	34142	7	Well	420	7.1	Turbine or Submersible	550	550	Diesel
13	Hendry	34142	17	Well	560	7.0	Turbine or Submersible	550	460	Diesel
14	Hendry	34142	17	Well	560	7.0	Turbine or Submersible	575	470	Diesel
15	Hendry	34142	17	Well	560	7.0	Turbine or Submersible	550	455	Diesel
16	Hendry	34142	17	Well	560	7.0	Turbine or Submersible	560	460	Diesel
17	Hendry	34142	17	Well	560	7.0	Turbine or Submersible	570	470	Diesel
18	Hendry	34142	1	Well	740	7.3	Turbine or Submersible	370	370	Diesel
19	Hendry	34142	17	Well	740	7.3	Turbine or Submersible	410	410	Diesel
20	Hendry	34142	17	Well	740	7.3	Turbine or Submersible	430	430	Diesel
21	Hendry	34142	17	Well	740	7.3	Turbine or Submersible	430	430	Diesel
22	Hendry	34142	1	Well	740	7.3	Turbine or Submersible	375	400	Diesel
23	Hendry	34142	1	Well	740	7.3	Turbine or Submersible	330	350	Diesel
24	Hendry	34142	7	Well	600	6.8	Turbine or Submersible	360	340	Diesel
25	Hendry	34142	17	Well	600	6.8	Turbine or Submersible	380	360	Diesel
26	Hendry	34142	17	Well	600	6.8	Turbine or Submersible	250	250	Diesel
27	Hendry	34142	1	Well	600	6.8	Turbine or Submersible	300	275	Diesel
28	Hendry	34142	17	Well	600	6.8	Turbine or Submersible	230	230	Diesel
29	Hendry	33935	29	Surface	270	7.1	Turbine or Submersible		430	Electric
30	Hendry	33935	4	Well	810	7.5	Turbine or Submersible	580	530	Electric
31	Hendry	33935	4	Well	810	7.5	Turbine or Submersible	550	540	Electric
32	Hendry	33935	4	Well	950	7.3	Turbine or Submersible	570	600	Electric
33	Hendry	33935	7	Well	1230	6.9	Turbine or Submersible	200	220	Electric
34	Hendry	33935	7	Well	1230	6.9	Turbine or Submersible	200	220	Electric
35	Hendry	33935	7	Surface	250	7.5	Turbine or Submersible	210	210	Electric
36	Hendry	34142	1	Well			Centrifugal		630	Diesel

**ATTACHMENT # 3: MIL EVALUATION WAITING LIST**

**MIL NAME:** Lower West Coast

**MIL ID:** 2

**FEDERAL QUARTER:** 1      **FEDERAL FISCAL YEAR:** 2014

COUNTY	CATEGORY		TOTAL COUNT		APPROX TOTAL ACRES
Glades	Citrus		1		420
Hendry	Citrus		2		800
Collier	Citrus		1		1000
<b>Totals</b>			<b>4</b>		<b>2220</b>

**CATEGORIES: SAME AS IN ATTACH 1A SPREADSHEET DELIVERABLE**

