

Lower West Coast Mobile Irrigation Lab

Quarterly Report Second Quarter – Fiscal Year 2014 January 1 through March 31, 2014

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 2014, from January 1 to March 31, 2014. The Mobile Irrigation Lab (MIL) completed 36 total evaluations, 31 of which were initial evaluations, and 5 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 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: 108.5 million gallons (333.05 acre feet) per year.

AWS: 4.2 million gallons (12.89 acre feet) per year.

Conservation Education/Outreach Activities

January

- MIL staff participated in a meeting of growers and agencies involved in the citrus industry at the University of Florida – Institute of Food and Agricultural Sciences (IFAS) research center in Immokalee.
- MIL staff presented the Irrigation portion of the landscape Best Management Practices training at the Rookery Bay National Estuarine Research Reserve in Naples.

March

- MIL staff participated in a field day for growers and agencies involved in the citrus industry 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.

Attachment # 1a: Ag - Lower West Coast

MIL

MIL ID: 2

Federal Quarter: 2

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	77	23.5	Ag	Citrus	16.81	2,4,12,22		8.10
2	Initial	Micro Spray	95	69	18.8	Ag	Citrus	16.81	2,4,12,22,33		10.45
3	Initial	Drip	90	59	121.9	Ag	Citrus	16.81	22,33,40,41		99.69
4	Initial	Drip	90	56	75.2	Ag	Citrus	16.81	22,31,33,41		71.06
5	Initial	Micro Spray	95	76	15.4	Ag	Citrus	16.81	2,4,6,30		5.68
6	Initial	Drip	90	62	79.1	Ag	Citrus	16.81	2,4,6,22,30,33,41		55.60
7	Initial	Micro Spray	95	90	46.8	Ag	Citrus	16.81	30		3.83
8	Initial	Micro Spray	95	89	59.7	Ag	Citrus	16.81	2,4,30,56		5.93
9	Follow Up	Micro Spray	95	89	30.0	Ag	Citrus	16.81	4,30,33	5.98	
10	Follow Up	Micro Spray	95	85	30.0	Ag	Citrus	16.81	4,30	0.00	
11	Follow Up	Micro Spray	95	90	18.0	Ag	Citrus	16.81	4,30	3.90	
12	Follow Up	Micro Spray	95	88	20.0	Ag	Citrus	16.81	4,30	2.33	
13	Follow Up	Micro Spray	95	88	9.0	Ag	Citrus	16.81	30,33	0.68	
14	Initial	Micro Spray	95	67	11.0	Ag	Citrus	16.81	2,4,6,40		6.78
15	Initial	Micro Spray	95	87	10.5	Ag	Citrus	16.81	2,4,33,40		1.42
16	Initial	Micro Spray	95	83	10.5	Ag	Citrus	16.81	2,4,40		2.24
17	Initial	Micro Spray	95	94	8.8	Ag	Citrus	16.81	2,12,30,56		0.14
18	Initial	Micro Spray	95	81	8.8	Ag	Citrus	16.81	2,6,12,30,41,56		2.24
19	Initial	Micro Spray	95	92	8.8	Ag	Citrus	16.81	2,12,56		0.42
20	Initial	Micro Spray	95	89	8.8	Ag	Citrus	16.81	2,12,30,41,56		0.87
21	Initial	Micro Spray	95	70	23.6	Ag	Citrus	16.81	4,6,12,30,35,56		12.43
22	Initial	Micro Spray	95	89	23.6	Ag	Citrus	16.81	12,56		2.35
23	Initial	Micro Spray	95	86	23.6	Ag	Citrus	16.81	4,12,33,41,56		3.64
24	Initial	Micro Spray	95	78	23.6	Ag	Citrus	16.81	4,6,12,35,41,56		7.58
25	Initial	Micro Spray	95	87	7.6	Ag	Citrus	16.81	12,56		1.03
26	Initial	Micro Spray	95	85	7.6	Ag	Citrus	16.81	12,56		1.32
27	Initial	Micro Spray	95	87	7.6	Ag	Citrus	16.81	12,56		1.03
28	Initial	Micro Spray	95	79	7.6	Ag	Citrus	16.81	12,56		2.27
29	Initial	Micro Spray	95	80	7.9	Ag	Citrus	16.81	4,12,30,40,56		2.18
30	Initial	Micro Spray	95	90	7.9	Ag	Citrus	16.81	12,56		0.65
31	Initial	Micro Spray	95	77	7.9	Ag	Citrus	16.81	4,12,56		2.72
32	Initial	Micro Spray	95	87	7.9	Ag	Citrus	16.81	12,30,56		1.07
33	Initial	Micro Spray	95	83	20.4	Ag	Citrus	16.81	12,30,41,56		4.35
34	Initial	Micro Spray	95	85	20.4	Ag	Citrus	16.81	4,12,33,56		3.54
35	Initial	Micro Spray	95	90	20.4	Ag	Citrus	16.81	4,12,30,41,56		1.67
36	Initial	Micro Spray	95	70	20.4	Ag	Citrus	16.81	4,6,12,56		10.74
				81.5	852.6					12.89	333.05

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	1	Well			Centrifugal		795	
2	Hendry	34142	1	Well			Centrifugal		750	Diesel
3	Hendry	34142	27	Well	600	7.0	Turbine or Submersible		660	Diesel
4	Hendry	34142	27	Well	610	6.7	Turbine or Submersible		365	Diesel
5	Hendry	34142	1	Well	850	7.0	Turbine or Submersible		810	Diesel
6	Hendry	34142	27	Well	850	7.0	Turbine or Submersible		520	Diesel
7	Hendry	34142	27	Well	650	7.3	Turbine or Submersible		940	Diesel
8	Hendry	34142	1	Well	860	7.2	Turbine or Submersible		1510	Diesel
9	Hendry	33935	7	Well	1130	6.6	Turbine or Submersible	470		Electric
10	Hendry	33935	4	Well	1130	6.6	Turbine or Submersible	480		Electric
11	Hendry	33935	62	Well	1130	6.6	Turbine or Submersible	400		Electric
12	Hendry	33935	62	Well	1130	6.6	Turbine or Submersible	410		Electric
13	Hendry	33935	61	Well	1130	6.6	Turbine or Submersible	280		Electric
14	Lee	33920	72	Surface			Centrifugal	270	270	Electric
15	Lee	33920	72	Surface			Centrifugal	275	275	Electric
16	Lee	33920	72	Surface			Centrifugal	275	275	Electric
17	Hendry	33930	62	Well	1210	7.2	Turbine or Submersible	250	245	Diesel
18	Hendry	33930	32	Well	1210	7.2	Turbine or Submersible	240	235	Diesel
19	Hendry	33930	62	Well	1210	7.2	Turbine or Submersible	235	230	Diesel
20	Hendry	33930	32	Well	1210	7.2	Turbine or Submersible	240	230	Diesel
21	Hendry	33930	1	Well	570	7.2	Turbine or Submersible	450	435	Diesel
22	Hendry	33930	51	Well	570	7.2	Turbine or Submersible	500	470	Diesel
23	Hendry	33930	51	Well	570	7.2	Turbine or Submersible	550	510	Diesel
24	Hendry	33930	1	Well	570	7.2	Turbine or Submersible	550	515	Diesel
25	Hendry	33930	51	Well	1220	7.1	Turbine or Submersible	260	235	Diesel
26	Hendry	33930	62	Well	1220	7.1	Turbine or Submersible	250	230	Diesel
27	Hendry	33930	51	Well	1220	7.1	Turbine or Submersible	240	225	Diesel
28	Hendry	33930	51	Well	1220	7.1	Turbine or Submersible	260	235	Diesel
29	Hendry	33930	51	Well	1230	7.1	Turbine or Submersible	230	210	Diesel
30	Hendry	33930	51	Well	1230	7.1	Turbine or Submersible	230	210	Diesel
31	Hendry	33930	51	Well	1230	7.1	Turbine or Submersible	240	215	Diesel
32	Hendry	33930	51	Well	1230	7.1	Turbine or Submersible	260	225	Diesel
33	Hendry	33930	32	Well	360	7.2	Turbine or Submersible	575	510	Diesel
34	Hendry	33930	14	Well	360	7.2	Turbine or Submersible	475	430	Diesel
35	Hendry	33930	51	Well	360	7.2	Turbine or Submersible	525	475	Diesel
36	Hendry	33930	51	Well	360	7.2	Turbine or Submersible	575	500	Diesel

ATTACHMENT # 3: MIL EVALUATION WAITING LIST

MIL NAME: Lower West Coast

MIL ID: 2

FEDERAL QUARTER: 2 **FEDERAL FISCAL YEAR:** 2014

COUNTY	CATEGORY		TOTAL COUNT		APPROX TOTAL ACRES
Hendry	Citrus		1		800
Glades	Berries		1		30
Lee	Citrus		2		470
Glades	Citrus		1		420
Totals			5		1720

CATEGORIES: SAME AS IN ATTACH 1A SPREADSHEET DELIVERABLE

Attachment # 4: MIL Conservation Education and Outreach Report

MIL Name:	Lower West Coast
MIL ID:	2
Federal FY	2014
Fed Quarter:	2

Date (mm/dy/year)	Type of Presentation	Name of Group	Number Attending	City or Town	Duration (hrs)
1/8/14	Meeting Participation	Citrus BMPs/IFAS	30	Immokalee	6
1/30/14	Water conservation	Greenscape Alliance	40	Naples	6
3/6/14	Meeting Participation	Citrus BMPs/IFAS	20	Immokalee	6
TOTALS			90		18

Notes:
