

# **Lower West Coast Mobile Irrigation Lab**

## **Quarterly Report Fourth Quarter – Fiscal Year 2011 July 1 through September 30, 2011**

**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 fourth quarter of Fiscal Year 2011, from July 1 to September 30, 2011. The Mobile Irrigation Lab (MIL) completed 36 total evaluations, all of which were initial evaluations. Of those completed, all 36 evaluations were performed on citrus microspray systems.

## **RESULTS**

Agricultural system evaluations are rated based on the measured Emission Uniformity (EU) of systems. The average EU of the agricultural systems evaluated was 79%.

## **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: 70.9 million gallons (217.6 acre feet) per year.**

**AWS: 0.0 million gallons (0.0 acre feet) per year.**

# Conservation Education/Outreach Activities

## **July**

- MIL staff delivered the Irrigation portion of the Project Greenscape Best Management Practices training seminar for lawn care professionals, which was held at the Rookery Bay National Estuarine Research Reserve in Naples.

## **August**

- MIL staff set up and manned a Mobile Irrigation Lab booth at the 2011 Citrus Expo in Fort Myers.

## **September**

- MIL staff delivered a presentation about irrigation system design and maintenance at a Project Greenscape Best Management Practices refresher course, which was held at the Rookery Bay National Estuarine Research Reserve in Naples.

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, which are available to all MILs 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 Conservation District and MIL website at [www.collierswcd.org](http://www.collierswcd.org).

**CONDENSED QUARTERLY REPORT FORM  
AGRICULTURAL MOBILE IRRIGATION LABS**

**FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES**

**FDACS FISCAL YEAR: 2012**

<b>FDACS Contract #:</b> 016018	<b>FDACS Reporting Quarter:</b> 1
<b>MIL #:</b> 2	<b>MIL Name:</b> Lower West Coast
<b>Total Evaluations (Initial and Follow Up) Required:</b> 36	<b>Total Follow-Up Evaluations Required:</b> 0
<b>Completed Initial Evaluations:</b> 36	<b>Completed Follow-Up Evaluations:</b> 0
<b>Total Potential Water Savings (Ac-ft/MG):</b> 217.6 Ac-ft / 70.9 MG	<b>Total Follow-Up Actual Water Savings (Ac-ft/MG):</b> 0.0 Ac-ft / 0.0 MG
<b>Total Acres Evaluated:</b> 581 Acres	<b>Total Instant Actual Water Savings (Ac-ft/MG):</b> 0.0 Ac-ft / 0.0 MG
<b>BREAKDOWN BY NUMBER OF EVALUATIONS</b>	
Farms: 36	Nurseries: 0
<b>WAITING LIST INFORMATION</b>	
Number of Evaluations: 4	Approximate Total Acres: 2100
<b>Comments / Additional Information:</b> This report covers the following months and year: July – September 2011 The following Attachments are also included under separate cover: Attachments 1a and 1b, “Water Savings Data and Results”, Attachment 3, “Waiting List”, and Attachment 4, “Education and Outreach” Evaluation #31 had uniformity less than 50%. This system was co-managed by a grove that the MIL was evaluating and a neighboring landowner. The pump and valves were working properly, and the low uniformity was due to poor general emitter maintenance.	
<b>Submitted by:</b> Mark Siverling	<b>Title:</b> MIL Team Leader
<b>Email:</b> <a href="mailto:mark.siverling@fl.nacdnet.net">mark.siverling@fl.nacdnet.net</a>	<b>Date:</b> September 30, 2011
<b>Questions:</b> Please contact Camilo Gaitan at (850) 617-1715 or at <a href="mailto:gaitanc@doacs.state.fl.us">gaitanc@doacs.state.fl.us</a>	

IRRIGATION SYSTEM EVALUATIONS: WATER SAVINGS DATA AND RESULTS, PER MIL HANDBOOK

MIL ID: 2

Federal Quarter: 4

Federal Fiscal Year: 2011

Eval ID #	Evaluation Type	Evaluation Method	Irrigation System Type	Irrig System Distrib or Emiss Unif (%)		Irrig Sys Ac	Land Use		Annual Water Use (in.)		Irrigation System Problems	Water Savings (ac-ft) - Irrigation System Only						
				Max	Per Eval		Type	Name or Crop	NIR	Actual		Type	DU or EU Imprv	Sched. Imprv	Planned Repairs	Imm Repairs	Total AWS	Total PWS
				1	Initial		Irrig Sys Only	Micro Spray	95	73.0		8.00	Ag	Citrus	16.8		5,21,27,30,33,40,56	Potential
2	Initial	Irrig Sys Only	Micro Spray	95	90.0	8.00	Ag	Citrus	16.8		21,27,40,56	Potential	0.66	0.00	0.00	0.00	0.00	0.66
3	Initial	Irrig Sys Only	Micro Spray	95	87.0	8.00	Ag	Citrus	16.8		21,27,56	Potential	1.08	0.00	0.00	0.00	0.00	1.08
4	Initial	Irrig Sys Only	Micro Spray	95	84.0	8.00	Ag	Citrus	16.8		21,27,56	Potential	1.54	0.00	0.00	0.00	0.00	1.54
5	Initial	Irrig Sys Only	Micro Spray	95	71.0	13.00	Ag	Citrus	16.8		4,21,27,40,41,56	Potential	6.48	0.00	0.00	0.00	0.00	6.48
6	Initial	Irrig Sys Only	Micro Spray	95	78.0	13.00	Ag	Citrus	16.8		21,27,30,40,56	Potential	4.18	0.00	0.00	0.00	0.00	4.18
7	Initial	Irrig Sys Only	Micro Spray	95	87.0	13.00	Ag	Citrus	16.8		21,27,40,56	Potential	1.76	0.00	0.00	0.00	0.00	1.76
8	Initial	Irrig Sys Only	Micro Spray	95	85.0	13.00	Ag	Citrus	16.8		13,21,27,30,56	Potential	2.26	0.00	0.00	0.00	0.00	2.26
9	Initial	Irrig Sys Only	Micro Spray	95	79.0	13.00	Ag	Citrus	16.8		4,6,21,27,30,56	Potential	3.88	0.00	0.00	0.00	0.00	3.88
10	Initial	Irrig Sys Only	Micro Spray	95	89.0	13.00	Ag	Citrus	16.8		21,27,30,56	Potential	1.29	0.00	0.00	0.00	0.00	1.29
11	Initial	Irrig Sys Only	Micro Spray	95	85.0	13.00	Ag	Citrus	16.8		21,27,30,56	Potential	2.26	0.00	0.00	0.00	0.00	2.26
12	Initial	Irrig Sys Only	Micro Spray	95	84.0	13.00	Ag	Citrus	16.8		21,27,30,56	Potential	2.51	0.00	0.00	0.00	0.00	2.51
13	Initial	Irrig Sys Only	Micro Spray	95	71.0	18.00	Ag	Citrus	16.8		4,21,27,30,41,56	Potential	8.97	0.00	0.00	0.00	0.00	8.97
14	Initial	Irrig Sys Only	Micro Spray	95	78.0	30.00	Ag	Citrus	16.8		4,6,21,27,30,41,56	Potential	9.64	0.00	0.00	0.00	0.00	9.64
15	Initial	Irrig Sys Only	Micro Spray	95	80.0	23.00	Ag	Citrus	16.8		27,33,40,56	Potential	6.36	0.00	0.00	0.00	0.00	6.36
16	Initial	Irrig Sys Only	Micro Spray	95	82.0	24.80	Ag	Citrus	16.8		6,27,40,56	Potential	5.80	0.00	0.00	0.00	0.00	5.80
17	Initial	Irrig Sys Only	Micro Spray	95	79.0	24.50	Ag	Citrus	16.8		27,33,35,40,56	Potential	7.32	0.00	0.00	0.00	0.00	7.32
18	Initial	Irrig Sys Only	Micro Spray	95	85.0	24.40	Ag	Citrus	16.8		5,27,30,56	Potential	4.23	0.00	0.00	0.00	0.00	4.23
19	Initial	Irrig Sys Only	Micro Spray	95	70.0	14.20	Ag	Citrus	16.8		2,5,6,21,30,33	Potential	7.48	0.00	0.00	0.00	0.00	7.48
20	Initial	Irrig Sys Only	Micro Spray	95	75.0	14.40	Ag	Citrus	16.8		2,6,27,30	Potential	5.66	0.00	0.00	0.00	0.00	5.66
21	Initial	Irrig Sys Only	Micro Spray	95	77.0	15.60	Ag	Citrus	16.8		2,5,6,27,30,40	Potential	5.38	0.00	0.00	0.00	0.00	5.38
22	Initial	Irrig Sys Only	Micro Spray	95	82.0	17.80	Ag	Citrus	16.8		2,27	Potential	4.16	0.00	0.00	0.00	0.00	4.16
23	Initial	Irrig Sys Only	Micro Spray	95	79.0	12.90	Ag	Citrus	16.8		5,27,40,56	Potential	3.85	0.00	0.00	0.00	0.00	3.85
24	Initial	Irrig Sys Only	Micro Spray	95	76.0	13.70	Ag	Citrus	16.8		5,27,30,33,35,40,56	Potential	5.05	0.00	0.00	0.00	0.00	5.05
25	Initial	Irrig Sys Only	Micro Spray	95	84.0	16.40	Ag	Citrus	16.8		2,27,30,33,40,56	Potential	3.17	0.00	0.00	0.00	0.00	3.17
26	Initial	Irrig Sys Only	Micro Spray	95	83.0	17.30	Ag	Citrus	16.8		27,30,40,41,56	Potential	3.69	0.00	0.00	0.00	0.00	3.69
27	Initial	Irrig Sys Only	Micro Spray	95	83.0	16.30	Ag	Citrus	16.8		5,27,33,40	Potential	3.47	0.00	0.00	0.00	0.00	3.47
28	Initial	Irrig Sys Only	Micro Spray	95	77.0	15.80	Ag	Citrus	16.8		5,6,27,30,40	Potential	5.45	0.00	0.00	0.00	0.00	5.45
29	Initial	Irrig Sys Only	Micro Spray	95	74.0	17.20	Ag	Citrus	16.8		2,6,27,30,40	Potential	7.20	0.00	0.00	0.00	0.00	7.20
30	Initial	Irrig Sys Only	Micro Spray	95	89.0	16.20	Ag	Citrus	16.8		5,27,35	Potential	1.61	0.00	0.00	0.00	0.00	1.61
31	Initial	Irrig Sys Only	Micro Spray	95	39.0	20.40	Ag	Citrus	16.8		2,8,30,33,40	Potential	43.19	0.00	0.00	0.00	0.00	43.19
32	Initial	Irrig Sys Only	Micro Spray	95	57.0	20.70	Ag	Citrus	16.8		2,21,30,33	Potential	20.35	0.00	0.00	0.00	0.00	20.35
33	Initial	Irrig Sys Only	Micro Spray	95	67.0	20.60	Ag	Citrus	16.8		5,30	Potential	12.69	0.00	0.00	0.00	0.00	12.69
34	Initial	Irrig Sys Only	Micro Spray	95	79.0	19.00	Ag	Citrus	16.8		2,30,40	Potential	5.67	0.00	0.00	0.00	0.00	5.67
35	Initial	Irrig Sys Only	Micro Spray	95	84.0	16.80	Ag	Citrus	16.8		27,40	Potential	3.24	0.00	0.00	0.00	0.00	3.24
36	Initial	Irrig Sys Only	Micro Spray	95	85.0	14.60	Ag	Citrus	16.8		27,35,40	Potential	2.53	0.00	0.00	0.00	0.00	2.53
37				#N/A			Ag					#N/A	#N/A	0.00	0.00	0.00	#N/A	#N/A
38				#N/A			Ag					#N/A	#N/A	0.00	0.00	0.00	#N/A	#N/A
39				#N/A			Ag					#N/A	#N/A	0.00	0.00	0.00	#N/A	#N/A
40				#N/A			Ag					#N/A	#N/A	0.00	0.00	0.00	#N/A	#N/A
41				#N/A			Ag					#N/A	#N/A	0.00	0.00	0.00	#N/A	#N/A
42				#N/A			Ag					#N/A	#N/A	0.00	0.00	0.00	#N/A	#N/A
43				#N/A			Ag					#N/A	#N/A	0.00	0.00	0.00	#N/A	#N/A
44				#N/A			Ag					#N/A	#N/A	0.00	0.00	0.00	#N/A	#N/A
45				#N/A			Ag					#N/A	#N/A	0.00	0.00	0.00	#N/A	#N/A
					78.5	580.6						<b>TOTALS</b>	<b>217.63</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>217.63</b>

IRRIGATION SYSTEM WATER SOURCE, PUMPING STATION, AND OTHER INFO

MIL ID: 2

Federal Quarter: 4

Federal Fiscal Year: 2011

Eval ID #	County Name	Zip Code	Soil Type No.	Water Source	TDS	pH	Pump Type	Has Flow Meter	Motor Type	Savings From Irrig Sys & Mgmt, per FIRM (ac-ft)		
										Potential	Actual	Immediate
1	Hendry	33930	14	Well			Turbine or Submersible	Yes	Diesel			
2	Hendry	33930	4	Well			Turbine or Submersible	Yes	Diesel			
3	Hendry	33930	4	Well			Turbine or Submersible	Yes	Diesel			
4	Hendry	33930	14	Well			Turbine or Submersible	Yes	Diesel			
5	Hendry	33930	14	Well			Turbine or Submersible	Yes	Diesel			
6	Hendry	33930	4	Well			Turbine or Submersible	Yes	Diesel			
7	Hendry	33930	4	Well			Turbine or Submersible	Yes	Diesel			
8	Hendry	33930	4	Well			Turbine or Submersible	Yes	Diesel			
9	Hendry	33930	4	Well			Turbine or Submersible	Yes	Diesel			
10	Hendry	33930	4	Well			Turbine or Submersible	Yes	Diesel			
11	Hendry	33930	51	Well			Turbine or Submersible	Yes	Diesel			
12	Hendry	33930	4	Well			Turbine or Submersible	Yes	Diesel			
13	Hendry	33930	51	Well			Turbine or Submersible	Yes	Diesel			
14	Hendry	33930	4	Well			Turbine or Submersible	Yes	Diesel			
15	Lee	33913	34	Well			Turbine or Submersible	Yes	Diesel			
16	Lee	33913	26	Well			Turbine or Submersible	Yes	Diesel			
17	Lee	33913	34	Well			Turbine or Submersible	Yes	Diesel			
18	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
19	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
20	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
21	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
22	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
23	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
24	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
25	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
26	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
27	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
28	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
29	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
30	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
31	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
32	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
33	Lee	33913	28	Well			Turbine or Submersible	Yes	Diesel			
34	Lee	33913	6	Well			Turbine or Submersible	Yes	Diesel			
35	Lee	33913	6	Well			Turbine or Submersible	Yes	Diesel			
36	Lee	33913	33	Well			Turbine or Submersible	Yes	Diesel			
37												
38												
39												
40												
41												
42												
43												
44												
45												
										0.00	0.00	0.00

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

**MIL NAME:** Lower West Coast

**MIL ID:** 2

**FEDERAL QUARTER:** 4 **FEDERAL FISCAL YEAR:** 2011

COUNTY	CATEGORY		TOTAL COUNT		APPROX TOTAL ACRES
Hendry	Citrus		2		600
Lee	Citrus		2		1500
<b>Totals</b>			<b>4</b>		<b>2100</b>

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

### Attachment # 4: MIL Conservation Education and Outreach Report

<b>MIL Name:</b>	<b>Lower West Coast</b>
<b>MIL ID:</b>	2
<b>Federal FY:</b>	2011
<b>Fed Quarter:</b>	4

Date (mm/dy/year)	Type of Presentation	Name of Group	Number Attending	City or Town	Duration (hrs)
7/27/11	Water Conservation and Irrigation	Greenscapes Landscape Best Management Practices	30	Naples	8
8/17-18/2011	MIL Display Booth	Citrus Expo 2011	500	Fort Myers	20
9/7/11	Water Conservation and Irrigation	Greenscapes Landscape Irrigation Class	25	Naples	8
<b>TOTALS</b>			<b>555</b>		<b>36</b>

**Notes:**

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