Lower West Coast Mobile Irrigation Lab

Quarterly Report Second Quarter – Fiscal Year 2011 January 1 through March 31, 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

CONDENSED QUARTERLY REPORT FORM AGRICULTURAL MOBILE IRRIGATION LABS

FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

FDACS FISCAL YEAR: 2011

FDACS Contract #: 016018	FDACS Reporting Quarter: 3					
MIL #: 2	MIL Name: Lower West Coast					
Total Evaluations (Initial and Follow Up) Required: 36	Total Follow-Up Evaluations Required: 0					
Completed Initial Evaluations: 36	Completed Follow-Up Evaluations: 0					
Total Potential Water Savings (Ac-ft/MG):	Total Follow-Up Actual Water Savings (Ac-ft/MG):					
880.5 Ac-ft / 286.9 MG	0.0 Ac-ft / 0.0 MG					
Total Acres Evaluated: 1,329 Acres	Total Instant Actual Water Savings (Ac-ft/MG):					
	0.0 Ac-ft / 0.0 MG					
BREAKDOWN BY NUMBER OF EVALUATIONS						
Farms: 36	Nurseries: 0					
WAITING LIS	WAITING LIST INFORMATION					
Number of Evaluations: 47	Approximate Total Acres: 1710					
Comments / Additional Information: This report covers the following months and year: October – December 2010 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" Evaluations #14, 16, 18, 19, and 21 were marked by very low Emission Uniformity ratings. The pump stations were operating properly, but the emitters in the field showed a wide disparity of flow rates, resulting in the low uniformity. FDACS partners approved the inclusion of this evaluation. Evaluations #22-26 showed no water savings. These evaluations were an Environmental Quality Incentive Program checkout of an onion farm on a new system that was partially funded by Natural Resource Conservation Service funds.						
Submitted by: Mark Siverling	Title: MIL Team Leader					
Email: mark.siverling@fl.nacdnet.net	Date: March 31, 2010					
Questions: Please contact Camilo Gaitan at (850) 617-1715 or at gaitanc@doacs.state.fl.us						

Evaluation Results

SYSTEMS EVALUATED

This report covers the second quarter of Fiscal Year 2011, from January 1 to March 31, 2011. The Mobile Irrigation Lab (MIL) completed 36 total evaluations, all of which were initial evaluations. Of those completed, 31 evaluations were performed on citrus microspray systems, and 5 evaluations were performed on vegetable (onion) drip 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 74%.

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: 286.9 million gallons (880.5 acre feet) per year.

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

Conservation Education/Outreach Activities

<u>Ianuary</u>

• MIL staff helped deliver 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.

February

- MIL staff helped deliver a presentation about irrigation and water conservation to participants in the Lifelong Learning series at the Naples Botanical Garden.
- MIL staff participated in a meeting of the Greenscape Alliance, a collaboration of local government agencies aimed at reducing water runoff and pollution through public outreach, local ordinances, and landscaper training.

March

- MIL staff helped deliver 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.
- MIL staff participated in a Citrus Seminar at the University of Florida Institute of Food and Agricultural Sciences in Immokalee.
- MIL staff prepared and delivered a presentation about irrigation and water conservation at the Big Cypress Basin Water Symposium 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 considerable time designing and maintaining the Conservation District and MIL website at www.collierswcd.org.

Attachment # 1a:

Ag - Lower West Coast

MIL

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

MIL ID: 2 Federal Federal Quarter: 2 Federal Fiscal Year: 2011

Eval	Evaluation Type	Evaluation Method	Irrigation System Type	" '	em Distrib or Unif (%)	Irrig Sys Ac	Land Use		Annual Water Use (in.)		Irrigation System Problems	Water Savings (ac-ft) - Irrigation System Only						
	.,,,,,			Max	Per Eval	7.0	Туре	Name or Crop	NIR	Actual	1 Toblemo	Туре	DU or EU Imprv	Sched. Imprv	Planned Repairs	Imm Repairs	Total AWS	Total PWS
1	Initial	Irrig Sys Only		95	81.0	40.00	Ag	Citrus	16.8		2,4,12,20,30,35,40	Potential	10.19	0.00	0.00	0.00	0.00	10.19
2	Initial	Irrig Sys Only	Micro Spray	95	75.0	40.00	Ag	Citrus	16.8		2,4,6,12,20,30	Potential	15.73	0.00	0.00	0.00	0.00	15.73
3	Initial	Irrig Sys Only	Micro Spray	95	85.0	40.00	Ag	Citrus	16.8		2,12,20,30,40	Potential	6.94	0.00	0.00	0.00	0.00	6.94
4	Initial	Irrig Sys Only	Micro Spray	95	82.0	40.00	Ag	Citrus	16.8		2,4,6,12,20,30,41	Potential	9.35	0.00	0.00	0.00	0.00	9.35
5	Initial	Irrig Sys Only	Micro Spray	95	63.0	70.00	Ag	Citrus	16.8		2,4,6,20,30,41	Potential	52.43	0.00	0.00	0.00	0.00	52.43
6	Initial	Irrig Sys Only	Micro Spray	95	78.0	70.00	Ag	Citrus	16.8		2,4,20,30,41	Potential	22.50	0.00	0.00	0.00	0.00	22.50
7	Initial	Irrig Sys Only	Micro Spray	95	69.0	70.00	Ag	Citrus	16.8		2,6,20,30	Potential	38.89	0.00	0.00	0.00	0.00	38.89
8	Initial	Irrig Sys Only	Micro Spray	95	59.0	70.00	Ag	Citrus	16.8		2,4,6,20,30	Potential	62.98	0.00	0.00	0.00	0.00	62.98
9	Initial	Irrig Sys Only	Micro Spray	95	84.0	70.00	Ag	Citrus	16.8		2,20,30,35,40	Potential	13.52	0.00	0.00	0.00	0.00	13.52
10	Initial	Irrig Sys Only	Micro Spray	95	62.0	70.00	Ag	Citrus	16.8		2,4,6,20,30,33	Potential	54.94	0.00	0.00	0.00	0.00	54.94
11	Initial	Irrig Sys Only	Micro Spray	95	81.0	70.00	Ag	Citrus	16.8		2,4,6,20,30,35	Potential	17.84	0.00	0.00	0.00	0.00	17.84
12	Initial	Irrig Sys Only	Micro Spray	95	84.0	70.00	Ag	Citrus	16.8		2,4,6,20,30,40,41	Potential	13.52	0.00	0.00	0.00	0.00	13.52
13 14	Initial Initial	Irrig Sys Only	Micro Spray	95 95	84.0 49.0	70.00 50.00	Ag	Citrus Citrus	16.8 16.8		2,4,20,30,41 2,4,6,12,20,22,30,35,41	Potential Potential	13.52 69.21	0.00	0.00	0.00	0.00	13.52 69.21
15	Initial	Irrig Sys Only	Micro Spray	95	55.0	50.00	Ag Ag	Citrus	16.8		2,4,6,12,20,22,30,35,41	Potential	53.62	0.00	0.00	0.00	0.00	53.62
16	Initial	Irrig Sys Only Irrig Sys Only	Micro Spray Micro Spray	95	49.0	50.00	Ag	Citrus	16.8		2,4,6,12,20,22,30,41	Potential	69.21	0.00	0.00	0.00	0.00	69.21
17	Initial	Irrig Sys Only	Micro Spray	95	57.0	50.00	Ag	Citrus	16.8		2,4,6,12,20,22,30,40,41	Potential	49.15	0.00	0.00	0.00	0.00	49.15
18	Initial	Irrig Sys Only	Micro Spray	95	46.0	50.00	Ag	Citrus	16.8		2,4,6,12,22,30,40,41	Potential	78.54	0.00	0.00	0.00	0.00	78.54
19	Initial	Irrig Sys Only	Micro Spray	95	46.0	50.00	Ag	Citrus	16.8		2,4,6,12,20,22,30,41	Potential	78.54	0.00	0.00	0.00	0.00	78.54
20	Initial	Irrig Sys Only	Micro Spray	95	64.0	50.00	Ag	Citrus	16.8		2,6,12,20,22,30,41	Potential	35.71	0.00	0.00	0.00	0.00	35.71
21	Initial	Irrig Sys Only	Micro Spray	95	48.0	50.00	Ag	Citrus	16.8		2,4,6,12,20,22,30,41	Potential	72.19	0.00	0.00	0.00	0.00	72.19
22	Initial	Irrig Sys Only	Drip	90	97.0	0.80	Ag	Other	4.4		3,12,55	Potential	0.00	0.00	0.00	0.00	0.00	0.00
23	Initial	Irrig Sys Only	Drip	90	90.0	0.80	Aq	Other	4.4		3,12,55	Potential	0.00	0.00	0.00	0.00	0.00	0.00
24	Initial	Irrig Sys Only	Drip	90	95.0	0.80	Aq	Other	4.4		12,55	Potential	0.00	0.00	0.00	0.00	0.00	0.00
25	Initial	Irrig Sys Only	Drip	90	90.0	0.80	Aq	Other	4.4		12,55	Potential	0.00	0.00	0.00	0.00	0.00	0.00
26	Initial	Irrig Sys Only	Drip	90	90.0	0.80	Ag	Other	4.4		3,12,55	Potential	0.00	0.00	0.00	0.00	0.00	0.00
27	Initial	Irrig Sys Only	Micro Sprav	95	81.0	16.00	Ag	Citrus	16.8		2,4,56	Potential	4.08	0.00	0.00	0.00	0.00	4.08
28	Initial	Irrig Sys Only	Micro Spray	95	86.0	16.30	Ag	Citrus	16.8		2,4,33,56	Potential	2.52	0.00	0.00	0.00	0.00	2.52
29	Initial	Irrig Sys Only	Micro Spray	95	81.0	16.30	Ag	Citrus	16.8		2,4,41,56	Potential	4.15	0.00	0.00	0.00	0.00	4.15
30	Initial	Irrig Sys Only	Micro Spray	95	78.0	26.20	Ag	Citrus	16.8		2,3,20,33,56	Potential	8.42	0.00	0.00	0.00	0.00	8.42
31	Initial	Irrig Sys Only	Micro Spray	95	83.0	10.10	Ag	Citrus	16.8		2,4,20,41	Potential	2.15	0.00	0.00	0.00	0.00	2.15
32	Initial	Irrig Sys Only	Micro Spray	95	69.0	10.10	Ag	Citrus	16.8		2,4,20,41	Potential	5.61	0.00	0.00	0.00	0.00	5.61
33	Initial	Irrig Sys Only	Micro Spray	95	69.0	13.90	Ag	Citrus	16.8		2,4,6,20,30	Potential	7.72	0.00	0.00	0.00	0.00	7.72
34	Initial	Irrig Sys Only	Micro Spray	95	78.0	6.50	Ag	Citrus	16.8		2,4,20,30	Potential	2.09	0.00	0.00	0.00	0.00	2.09
35	Initial	Irrig Sys Only	Micro Spray	95	80.0	14.40	Ag	Citrus	16.8		2,4,20,31,41	Potential	3.98	0.00	0.00	0.00	0.00	3.98
36	Initial	Irrig Sys Only	Micro Spray	95	81.0	4.70	Ag	Citrus	16.8		2,3,31,33	Potential	1.20	0.00	0.00	0.00	0.00	1.20
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
					73.6	1,328.5						TOTALS	880.45	0.00	0.00	0.00	0.00	880.45

IRRIGATION SYSTEM WATER SOURCE, PUMPING STATION, AND OTHER INFO

MIL ID: 2 Federal Quarter: 2 Federal Fiscal Year: 2011

Eval ID	County Name	Zip Code	Soil Type	Water Source	TDS	рН	Pump Type	Has Flow	Motor Type	Savings Fro	om Irrig Sys & Mgmt	, per FIRM (ac-ft
#		·	No.	water Source	פטו	рп	Pullip Type	Meter	Motor Type	Potential	Actual	Immediate
1	Hendry	33975	6	Surface			Turbine or Submersible	Yes	Diesel			
2	Hendry	33975	9	Surface			Turbine or Submersible	Yes	Diesel			
3	Hendry	33975	14	Surface			Turbine or Submersible	Yes	Diesel			
4	Hendry	33975	6	Surface			Turbine or Submersible	Yes	Diesel			
5	Hendry	33975	27	Surface			Turbine or Submersible	Yes	Electric			
6	Hendry	33975	14	Surface			Turbine or Submersible	Yes	Electric			
7	Hendry	33975	27	Surface			Turbine or Submersible	Yes	Electric			
8	Hendry	33975	17	Surface			Turbine or Submersible	Yes	Electric			
9	Hendry	33975	1	Surface			Turbine or Submersible	Yes	Electric			
10	Hendry	33975	14	Surface			Turbine or Submersible	Yes	Electric			
11	Hendry	33975	27	Surface			Turbine or Submersible	Yes	Electric			
12	Hendry	33975	14	Surface			Turbine or Submersible	Yes	Electric			
13	Hendry	33975	14	Surface			Turbine or Submersible	Yes	Electric			
14	Hendry	33975	27	Surface			Turbine or Submersible	Yes	Electric			
15	Hendry	33975	27	Surface			Turbine or Submersible	Yes	Electric			
16	Hendry	33975	4	Surface			Turbine or Submersible	Yes	Electric			
17	Hendry	33975	1	Surface			Turbine or Submersible	Yes	Electric			
18	Hendry	33975	4	Surface			Turbine or Submersible	Yes	Electric			
19	Hendry	33975	4	Surface			Turbine or Submersible	Yes	Electric			
20	Hendry	33975	14	Surface			Turbine or Submersible	Yes	Electric			
21	Hendry	33975	14	Surface			Turbine or Submersible	Yes	Electric			
22	Glades	33935	26	Well			Turbine or Submersible	No	Electric			
23	Glades	33935	26	Well			Turbine or Submersible	No	Electric			
24	Glades	33935	26	Well			Turbine or Submersible	No	Electric			
25	Glades	33935	26	Well			Turbine or Submersible	No	Electric			
26	Glades	33935	26	Well			Turbine or Submersible	No	Electric			
27	Collier	34142	8	Well			Turbine or Submersible	Yes	Diesel			
28	Collier	34142	7	Well			Turbine or Submersible	Yes	Diesel			
29	Collier	34142	7	Well			Turbine or Submersible	Yes	Diesel			
30	Collier	34142	7	Well			Turbine or Submersible	Yes	Diesel			
31	Collier	34142	7	Well			Turbine or Submersible	Yes	Electric			
32	Collier	34142	7	Well			Turbine or Submersible	Yes	Electric			
33	Collier	34142	7	Well			Turbine or Submersible	Yes	Electric			
34	Collier	34142	7	Well			Turbine or Submersible	Yes	Electric			
35	Collier	34142	7	Well			Turbine or Submersible	Yes	Electric			
36	Collier	34142	7	Well			Turbine or Submersible	Yes	Electric			
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ATTACHMENT # 3: MIL EVALUATION WAITING LIST

MIL NAME: Lower West Coast

MIL ID: 2

FEDERAL QUARTER: 2 FEDERAL FISCAL YEAR: 2011

COUNTY	CATEGORY	TOTAL COUNT	APPROX TOTAL ACRES
Collier	Citrus	15	450
Hendry	Citrus	22	860
Lee	Citrus	10	400
	+ +		
	++		
Totals		47	1710

CATEGORIES: SAME AS IN ATTACH 1A SPREADSHEET DELIVERABLE

Attachment # 4: MIL Conservation Education and Outreach Report

MIL Name:	Lower We	est Coast
MIL ID:	2	
Federal FY	2011	
Fed Quarter:	2	

Date (mm/dy/year)	Type of Presentation	Name of Group	Number Attending	City or Town	Duration (hrs)
1/11/11	Water Conservation and Irrigation	Greenscapes Landscape Best Management Practices	30	Naples	8
2/15/11	Water Conservation and Irrigation	Naples Botanical Garden	5	Naples	8
2/18/11	Meeting Participation	Greenscape Alliance	8	Naples	4
3/3/11	Water Conservation and Irrigation	Greenscapes Landscape Best Management Practices	50	Naples	8
3/23/11	Meeting Participation	Institute of Food and Agricultural Sciences	20	Immokalee	6
3/29/11	Water Conservation and Irrigation	Big Cypress Basin Water Symposium	30	Naples	8
TOTALS			143		42

Notes: