

Refuge's Enhanced Water Quality Program Monthly Sampling *October through December 2010 Data Update*

Provided March 1, 2011

Prepared by:

Donatto Surratt
Everglades National Park
c/o A.R.M. Loxahatchee National Wildlife Refuge

Phone: 561-735-6003
Email: donatto_surratt@nps.gov

**REFUGE'S ENHANCED WATER QUALITY PROGRAM
MONTHLY SAMPLING**

October through December, 2010 Data Update
Submitted February 22, 2011

by:

Donatto Surratt

**Everglades National Park
c/o A.R.M. Loxahatchee National Wildlife Refuge**

Phone: 561.735.6003

Email: donatto_surratt@nps.gov

A.R.M. Loxahatchee National Wildlife Refuge
Enhanced Water Quality Monitoring Network

Oct-10

Site	Sample Date	Full(F), Partial(P), None(N), Reanalyzer (R)	Depth ¹ meter	Total Depth ² meter	DCS ³ meter	Alkalinity mg/l	Calcium Dissolved mg/l	Carbon, Dissolved Organic mg/l	Carbon, Total Organic mg/l	Chloride mg/l	Conductivity (Field) µMHSO/cm	Nitrate + Nitrite as Nitrogen mg/l	Nitrogen, Total Kjeldahl (TKN) mg/l	Ortho- phosphate as Phosphorus mg/l	Oxygen, Dissolved (Field) mg/l	pH (Field) pH units	Phosphorus, Total mg/l	Silica mg/l	Solids, Total Dissolved (TDS) mg/l	Solids, Total Suspended (TSS) mg/l	Sulfate mg/l	Temperature (Field) DEG C	Turbidity NTU
A101	10/12/2010	F	0.15	0.31	0.36	119	40	31.6	29.9	93	573	U	1.45	0.0059	5.0	7.2	0.016	22.7	369	U	10.4	24.6	0.41
A102	10/12/2010	F	0.13	0.26	0.31	66	24.1	23.4	23.3	69.8	395.4	U	1.05	0.0065	3.4	6.9	0.012	20.6	255	U	10.6	24.1	0.42
A103	10/12/2010	F	0.13	0.27	0.33	70.1	24	26	25.2	74	409.1	U	1.12	0.0054	3.2	7.0	0.012	21	270	U	3.0	24.4	0.32
A104	10/13/2010	F	-	0.5	>1M	189	66	33	35	135	909	0.014	2.0	0.007	4.9	7.8	0.027	22	580	U	57.5	26.1	0.1
A105	10/13/2010	F	0.17	0.35	0.47	168	58	36	37	121	827	U	1.8	0.007	4.2	7.3	0.021	27	537	U	48.8	24.8	0.8
A106	10/13/2010	F	0.17	0.34	0.39	132	44	28	28	104	647	U	1.5	0.007	4.5	7.2	0.016	22	419	U	25.0	25.1	0.6
A107	10/13/2010	F	0.12	0.24	0.33	43	13	23	24	29	126	U	1.0	0.005	5.4	6.9	0.013	11	140	U	0.6	24.9	0.4
A108	10/12/2010	F	0.11	0.22	0.37	18	7	25	24	28	139	U	1.5	0.007	7.8	7.2	0.008	4	108	U	U	26.4	0.8
A109	10/13/2010	F	0.14	0.28	0.58	46	18	20	20	54	289	U	1.0	0.005	3.7	6.7	0.011	13	200	U	8.9	24.3	0.5
A110	10/13/2010	F	0.19	0.39	0.45	22	6	13	13	13	85	U	1.0	0.004	6.8	6.9	0.010	4	53	U	0.6	25.0	0.6
A111	10/13/2010	F	0.19	0.38	0.48	23	6	15	15	10	79	U	0.9	0.005	3.2	6.5	0.009	6	66	U	0.6	24.5	0.6
A112	10/13/2010	F	0.2	0.41	0.54	30	9	17	17	13	104	U	1.0	0.004	3.5	6.6	0.010	6	85	U	0.8	24.5	0.5
A113	10/13/2010	F	0.2	0.4	0.47	18	5	14	15	11	72	U	1.1	0.004	4.2	7.2	0.010	5	68	U	U	25.0	0.8
A114	10/13/2010	F	0.17	0.35	0.58	22	6	16	16	11	73	U	1.1	0.004	3.4	6.6	0.012	5	66	9.5	U	24.7	2.9
A115	10/14/2010	F	-	-	>1M	192	67	39	40	148	1006	0.030	2.2	0.016	4.1	7.7	0.030	29	639	U	71.9	25.6	0.6
A117	10/14/2010	F	-	0.45	0.57	108	40	31	30	96	597	U	1.5	0.009	12.3	6.9	0.022	20	393	U	29.1	24.5	0.8
A118	10/14/2010	F	-	0.45	0.53	39	15	19	19	37	223	U	1.1	0.008	26.2	6.6	0.013	13	153	U	1.6	24.4	0.6
A119	10/14/2010	F	-	0.44	0.55	26	8	15	17	12	94	U	1.1	0.009	52.5	6.8	0.012	7	87	U	U	25.5	0.7
A120	10/14/2010	F	-	0.38	0.63	17	6	14	15	16	92	U	1.0	0.006	5.0	6.6	0.008	6	80	U	U	25.6	0.7
A122	10/14/2010	F	-	0.5	0.6	114	42	26	26	70	495	0.009	1.2	0.011	8.4	6.8	0.019	16	329	U	12.6	24.2	1.5
A124	10/11/2010	F	0.2	0.45	0.65	49	19	18	18	52	273	U	0.9	0.004	2.0	6.7	0.013	13	177	U	1.1	26.0	0.5
A126	10/11/2010	F	0.11	0.45	0.56	113	39	24	24	102	555	U	1.4	0.008	4.7	7.2	0.013	18	379	U	20.1	25.5	0.4
A127	10/11/2010	F	0.21	0.33	0.54	15	6	15	15	15	85	U	1.0	0.007	7.8	7.1	0.007	8	80	U	U	26.6	0.5
A128	10/14/2010	F	-	0.32	0.43	17	6	15	16	14	85	U	1.0	0.005	4.2	6.5	0.009	5	74	U	U	25.3	0.5
A129	10/11/2010	F	-	-	>1M	132	49	22	22	125	734	U	1.4	0.004	3.2	7.3	0.028	12	433	U	28.4	26.8	1.3
A130	10/11/2010	F	0.09	0.42	0.51	109	39	26	25	93	547	U	1.3	0.006	1.3	6.7	0.015	18	346	U	10.9	25.5	0.5
A131	10/11/2010	F	0.14	0.38	0.52	36	14	20	20	30	111	U	1.2	0.009	8.8	7.3	0.009	14	142	U	0.7	27.6	0.7
A132	10/11/2010	F	-	-	>1M	135	52	20	20	124	742	0.017	1.3	0.004	4.0	7.4	0.029	10	425	U	33.4	27.6	1.1
A133	10/11/2010	F	0.15	0.29	0.46	109	40	27	28	104	610	U	1.5	0.005	2.6	6.7	0.020	18	371	U	6.8	24.6	0.6
A134	10/11/2010	F	0.15	0.31	0.48	84	33	24	25	87	477	U	1.2	0.007	4.3	6.9	0.016	17	313	U	6.6	26.3	0.7
A135	10/12/2010	F	0.5	-	>1M	139	56	20	19	130	774	0.028	1.2	0.003	4.6	7.5	0.021	9	458	U	40.8	25.6	0.9
A136	10/12/2010	F	0.24	0.48	0.71	120	44	30	30	113	645	U	1.5	0.006	3.0	7.0	0.023	20	413	U	11.3	24.6	0.7
A137	10/12/2010	F	0.17	0.35	0.4	74	30	28	26	82	453	U	1.4	0.006	4.5	6.8	0.017	19	290	U	3.0	24.7	0.6
A138	10/12/2010	F	0.13	0.26	0.37	37	12	22	21	19	139	U	1.3	0.006	4.7	6.9	0.017	11	121	U	0.6	25.4	0.5
A139	10/12/2010	F	0.11	0.23	0.32	15	6	24	22	15	109	U	1.4	0.003	4.5	7.1	0.007	4	101	U	U	25.4	0.6
A140	10/12/2010	F	0.15	0.31	0.39	55	22	33	33	60	298	U	1.5	0.007	7.0	7.4	0.012	19	218	U	1.1	26.0	0.4
A141	10/14/2010	F	-	0.79	1.31	98	33	24	24	71	468	U	1.4	0.010	3.8	6.7	0.020	16	308	U	13.5	24.3	2.5
Total			37																				
Full			37																				
Partial			0																				
None			0																				

(1) Sample depth

(2) Total depth is depth of the clear water column

(3) Depth to consolidated substrate

U indicates that the compound was analyzed for but not detected; see "LOXA_Parameter_Info" tab for table of MDLs.

Additional information on the Enhanced Water Quality Monitoring Network can be found at:

http://sofia.usgs.gov/lox_monitor_model/wq_network.html

Data from June 2004 to May 2006 available on DBHYDRO:

<http://www.sfwmd.gov/org/ema/dbhydro/>

Field notes are maintained by the Everglades Program Team at the A.R.M. Loxahatchee National Wildlife Refuge.

A.R.M. Loxahatchee National Wildlife Refuge
Enhanced Water Quality Monitoring Network

Nov-10

Site	Sample Date	Full(F), Partial(P), None(N), Reanalyzer (R)	Depth ¹ meter	Total Depth ² meter	DCS ³ meter	Alkalinity mg/l	Calcium Dissolved mg/l	Carbon, Dissolved Organic mg/l	Carbon, Total Organic mg/l	Chloride mg/l	Conductivity (Field) µMHSO/cm	Nitrate + Nitrite as Nitrogen mg/l	Nitrogen, Total Kjeldahl (TKN) mg/l	Ortho- phosphate as Phosphorus mg/l	Oxygen, Dissolved (Field) mg/l	pH (Field) pH units	Phosphorus, Total mg/l	Silica mg/l	Solids, Total Dissolved (TDS) mg/l	Solids, Total Suspended (TSS) mg/l	Sulfate mg/l	Temperature (Field) DEG C	Turbidity NTU
A101	11/9/2010	F	0.14	0.28	0.36	132	41.3	30.8	31.1	98	581	U	1.23	0.0058	5.0	6.9	0.014	14.7	382	U	6.3	18.3	0.3
A102	11/9/2010	P	0.09	0.19	0.42	-	-	-	-	25.5	168.6	-	-	-	5.9	6.5	0.008	-	-	U	2.0	17.4	-
A103	11/9/2010	F	0.14	0.29	0.36	41.2	12.6	20.3	20.4	34.9	209.9	U	0.83	0.0047	2.4	6.5	0.010	8.27	142	U	1.4	16.7	0.5
A104	11/10/2010	F	-	0.5	>1M	163	56	29	30	127	814	0.037	1.5	0.006	5.7	7.5	0.028	15	513	U	41.3	20.5	1.1
A105	11/10/2010	F	0.17	0.35	0.44	148	44	27	28	102	655	U	1.4	0.004	3.0	6.7	0.016	15	425	U	17.1	17.6	0.4
A106	11/10/2010	F	0.13	0.27	0.33	73	23	20	20	65	378	U	1.1	0.002	8.2	6.9	0.009	8	244	U	5.3	18.7	0.3
A107	11/10/2010	P	0.08	0.17	0.21	-	-	-	-	23	158	-	-	-	6.1	6.4	0.009	-	-	U	0.7	17.7	-
A108	11/9/2010	F	0.1	0.21	0.31	16	6	22	22	29	135	U	1.1	0.004	11.1	7.0	0.005	4	106	U	U	22.8	0.4
A109	11/10/2010	F	0.14	0.29	0.49	31	10	13	14	21	141	U	0.7	U	7.8	6.3	0.007	4	103	U	1.5	19.3	0.3
A110	11/10/2010	F	0.14	0.28	0.31	33	6	17	17	17	110	U	1.0	0.004	7.0	6.7	0.008	2	88	U	0.6	18.5	0.5
A111	11/10/2010	F	0.16	0.33	0.44	15	5	13	13	11	80	U	0.6	0.002	6.7	6.0	0.006	3	61	U	0.6	17.5	0.3
A112	11/10/2010	F	0.16	0.32	0.52	24	8	14	14	11	71	U	0.7	0.003	5.7	6.2	0.007	5	79	U	0.7	17.6	0.3
A113	11/10/2010	F	0.14	0.29	0.43	14	5	13	13	12	75	U	0.6	0.003	5.7	6.0	0.005	3	58	U	0.6	16.9	0.2
A114	11/10/2010	F	0.14	0.28	0.43	14	5	14	14	13	78	U	0.7	0.003	5.1	5.9	U	3	63	U	0.5	16.3	0.4
A115	11/11/2010	F	-	-	>1M	191	68	39	39	147	999	0.031	1.8	0.014	-	7.6	0.027	20	637	U	81.7	20.2	0.7
A117	11/11/2010	F	0.17	0.35	0.43	102	36	28	28	84	504	U	1.1	0.007	-	6.5	0.015	14	330	U	11.9	17.7	0.6
A118	11/11/2010	F	0.18	0.36	0.49	35	11	16	16	23	154	U	0.7	0.005	-	6.3	0.009	9	107	U	0.8	18.0	0.3
A119	11/11/2010	F	0.17	0.34	0.43	22	7	17	18	13	94	U	0.8	0.005	-	6.8	0.007	4	75	U	0.6	20.7	0.5
A120	11/11/2010	F	0.18	0.37	0.51	13	5	13	14	16	89	U	0.7	0.003	-	6.5	0.007	5	63	U	U	20.6	0.5
A122	11/11/2010	F	0.18	0.37	0.47	114	42	25	26	60	459	U	1.0	0.005	-	6.5	0.013	12	278	U	7.1	18.4	0.6
A124	11/8/2010	F	-	0.42	0.54	40	14	17	18	40	205	U	0.8	0.006	-	6.4	0.010	9	152	U	0.6	17.1	0.3
A126	11/8/2010	F	-	0.42	0.55	116	37	24	24	107	609	U	1.2	0.008	-	7.1	0.012	16	382	U	15.6	16.7	0.4
A127	11/8/2010	F	-	0.26	0.51	15	7	17	17	18	94	U	1.0	0.005	-	6.3	0.008	8	84	U	U	16.8	0.3
A128	11/11/2010	F	0.14	0.28	0.34	13	5	15	15	15	84	U	0.7	0.005	-	6.1	0.004	4	61	U	0.5	22.2	0.3
A129	11/8/2010	F	-	-	>1M	140	48	24	23	114	684	0.033	1.2	0.008	-	7.5	0.028	12	420	U	18.4	19.2	1.8
A130	11/8/2010	F	-	0.36	0.51	75	26	21	22	67	374	U	0.9	0.006	-	6.8	0.011	11	244	U	1.9	17.4	0.4
A131	11/8/2010	F	-	0.32	0.44	28	9	17	17	16	118	U	0.8	0.004	-	7.1	0.007	7	98	U	0.7	17.7	0.5
A132	11/8/2010	F	-	-	>1M	151	53	22	22	130	767	0.074	1.3	0.011	-	7.4	0.030	10	455	U	24.6	19.9	1.5
A133	11/8/2010	F	-	0.3	0.38	88	31	25	26	85	452	U	1.2	0.006	-	6.6	0.015	12	302	U	2.2	17.7	0.4
A134	11/8/2010	F	-	0.31	0.47	65	24	22	22	62	341	U	1.0	0.005	-	6.8	0.011	13	239	U	3.0	18.7	0.4
A135	11/9/2010	F	-	0.5	>1M	151	54	21	21	131	777	0.084	1.2	0.011	4.2	7.4	0.027	9	447	U	25.0	19.8	1.1
A136	-	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A137	11/9/2010	F	0.12	0.25	0.38	53	21	23	23	53	278	U	1.0	0.004	6.3	6.5	0.011	10	192	U	1.3	17.2	0.3
A138	11/9/2010	F	0.14	0.29	0.38	29	10	20	21	19	133	U	1.2	0.004	6.9	6.5	0.006	6	105	U	0.7	16.7	0.4
A139	11/9/2010	P	0.08	0.16	0.25	-	-	-	-	14	82	-	-	-	7.9	6.2	0.008	-	-	U	0.6	17.0	-
A140	11/9/2010	F	0.12	0.24	0.43	51	19	33	34	50	246	U	1.4	0.005	8.3	7.0	0.011	11	212	U	0.9	19.1	0.4
A141	11/11/2010	F	-	-	>1M	89	28	22	23	60	399	U	1.0	0.007	-	6.2	0.015	13	247	U	8.1	18.1	0.8
Total			37																				
Full			33																				
Partial			3																				
None			1																				

(1) Sample depth

(2) Total depth is depth of the clear water column

(3) Depth to consolidated substrate

U indicates that the compound was analyzed for but not detected; see "LOXA_Parameter_Info" tab for table of MDLs.

Additional information on the Enhanced Water Quality Monitoring Network can be found at:

http://sofia.usgs.gov/lox_monitor_model/wq_network.html

Data from June 2004 to May 2006 available on DBHYDRO:

<http://www.sfwmd.gov/org/ema/dbhydro/>

Field notes are maintained by the Everglades Program Team at the A.R.M. Loxahatchee National Wildlife Refuge.

A.R.M. Loxahatchee National Wildlife Refuge
Enhanced Water Quality Monitoring Network

Dec-10

Site	Sample Date	Full(F), Partial(P), None(N), Reanalyzer (R)	Depth ¹ meter	Total Depth ² meter	DCS ³ meter	Alkalinity mg/l	Calcium Dissolved mg/l	Carbon, Dissolved Organic mg/l	Carbon, Total Organic mg/l	Chloride mg/l	Conductivity (Field) µMHSO/cm	Nitrate + Nitrite as Nitrogen mg/l	Nitrogen, Total Kjeldahl (TKN) mg/l	Ortho- phosphate as Phosphorus mg/l	Oxygen, Dissolved (Field) mg/l	pH (Field) pH units	Phosphorus, Total mg/l	Silica mg/l	Solids, Total Dissolved (TDS) mg/l	Solids, Total Suspended (TSS) mg/l	Sulfate mg/l	Temperature (Field) DEG C	Turbidity NTU
A101	12/14/2010	P	0.08	0.16	0.25					116	648				7.4	6.8	0.020			U	8.5	7.0	
A102		N			0.15																		
A103	12/14/2010	P	0.05	0.11	0.23					32.2	198.8				7.5	6.7	0.010			U	1.6	8.3	
A104	12/15/2010	F			>1M	204	54	32	27	129	794	0.037	1.5	0.006	8.9	7.6	0.020	13	475	U	33.4	7.6	1.1
A105	12/15/2010	F	0.12	0.25	0.32	135	31	24	22	80	478	U	1.2	U	7.3	6.8	0.008	6	284	U	8.7	7.7	0.3
A106	12/15/2010	P	0.08	0.16	0.19					67	383				9.2	6.8	0.003			U	4.7	7.6	
A107		N			0.15																		
A108	12/14/2010	P	0.06	0.13	0.23					42	188				8.3	7.0	0.009			U	0.6	10.7	
A109	12/15/2010	F	0.13	0.26	0.37	43	10	16	14	21	141	U	0.9	U	7.8	6.5	0.003	2	82	U	1.3	7.6	0.3
A110	12/15/2010	P	0.06	0.13	0.2					25	127				9.6	6.6	0.006			U	0.7	6.6	
A111	12/15/2010	P	0.08	0.17	0.32					16	91				7.5	6.3	U			U	0.7	7.4	
A112	12/15/2010	P	0.09	0.19	0.36					15	106				5.9	6.2	0.005			U	0.9	7.4	
A113	12/15/2010	P	0.09	0.18	0.35					18	96				7.8	7.0	0.006			U	0.6	7.3	
A114	12/15/2010	P	0.08	0.17	0.36					19	97				8.0	6.6	U			U	0.6	7.8	
A115	12/16/2010	F			>1M	216	61	35	35	136	902	U	1.8	0.006	9.2	7.7	0.023	22	583	U	69.3	12.9	0.7
A116		N			--																		
A117	12/16/2010	F	0.13	0.27	0.36	103	27	24	24	70	414	U	1.1	0.003	3.6	6.7	0.009	13	279	U	7.6	7.3	0.3
A118	12/16/2010	F	0.12	0.25	0.34	38	9	16	16	21	136	U	0.8	0.002	3.5	6.5	0.006	7	113	U	1.1	7.9	0.3
A119	12/16/2010	F	0.16	0.33	0.45	32	8	18	18	18	113	U	1.0	0.002	9.0	6.8	0.005	5	99	U	0.6	9.6	0.3
A120	12/16/2010	F	0.16	0.33	0.44	17	5	14	14	22	107	U	0.9	0.003	11.3	6.8	0.005	4	92	U	0.5	10.5	0.2
A121		N			--																		
A122	12/16/2010	F	0.13	0.26	0.35	114	30	24	23	54	363	U	0.9	0.003	2.8	6.6	0.009	11	242	U	4.6	9.7	0.3
A123		N			--																		
A124	12/13/2010	F	0.14	0.28	0.54	37	11	18	18	28	155	U	0.8	0.005	2.3	7.0	0.014	7	122	U	0.6	13.0	0.4
A126	12/13/2010	F	0.14	0.28	0.39	91	24	21	20	73	403	U	1.1	0.002	4.5	6.7	0.016	9	263	U	4.9	13.2	0.4
A127	12/13/2010	F	0.11	0.22	0.37	14	6	22	22	22	107	U	1.0	0.003	2.5	6.0	0.011	6	112	U	0.5	13.5	0.3
A128	12/16/2010	P	0.08	0.17	0.27					21	104				7.7	6.2	U			U	0.6	11.7	
A129	12/13/2010	F			>1M	146	40	27	25	104	593	0.012	1.3	0.005	6.5	7.2	0.025	11	389	U	8.5	13.6	1.8
A130	12/13/2010	F	0.12	0.25	0.35	77	21	23	23	48	285	U	1.0	0.003	4.7	6.7	0.014	6	208	U	1.8	13.8	0.3
A131	12/13/2010	F	0.14	0.28	0.38	37	10	21	20	20	130	U	1.1	0.003	5.4	6.3	0.009	5	116	U	0.7	13.8	0.3
A132	12/13/2010	F			>1M	160	45	28	28	114	648	0.028	1.3	0.006	6.9	7.2	0.026	11	419	U	11.1	15.4	1.7
A133	12/13/2010	P	0.06	0.13	0.27					69	405				3.3	6.5	0.028			U	2.3	14.4	
A134	12/13/2010	F	0.1	0.21	0.36	68	17	21	21	36	231	U	1.0	0.003	4.4	6.6	0.011	6	188	U	1.7	14.1	0.3
A135	12/14/2010	F			>1M	174	47	28	26	124	708	0.040	1.3	0.009	8.4	7.4	0.028	11	459	U	14.6	12.8	1.3
A136	12/14/2010	P	0.07	0.14	0.4					85	458				2.1	6.5	0.021			U	3.4	7.9	
A137	12/14/2010	P	0.07	0.14	0.19					40	237				4.8	6.2	0.012			U	1.3	5.9	
A138	12/14/2010	P	0.07	0.15	0.25					24	147				12.7	6.3	0.008			U	0.7	5.9	
A139	12/14/2010	P	0.06	0.12	0.2					20	111				7.9	6.9	0.009			U	0.6	6.3	
A140	12/14/2010	P	0.05	0.11	0.2					46	261				8.4	6.6	0.016			U	0.8	7.7	
A141	12/16/2010	F	0.16	0.33	0.49	91	22	19	20	47	309	U	1.0	0.003	5.3	6.4	0.010	14	204	U	3.4	9.4	0.3
Total			37																				
Full			19																				
Partial			14																				
None			4																				

(1) Sample depth

(2) Total depth is depth of the clear water column

(3) Depth to consolidated substrate

U indicates that the compound was analyzed for but not detected; see "LOXA_Parameter_Info" tab for table of MDLs.

Highlighted values indicate the analyte was detected in both the sample and the associated method blank. Data should not be used.

Additional information on the Enhanced Water Quality Monitoring Network can be found at:

http://sofia.usgs.gov/lox_monitor_model/wq_network.html

Data from June 2004 to May 2006 available on DBHYDRO:

<http://www.sfwmd.gov/org/ema/dbhydro/>

Field notes are maintained by the Everglades Program Team at the A.R.M. Loxahatchee National Wildlife Refuge.

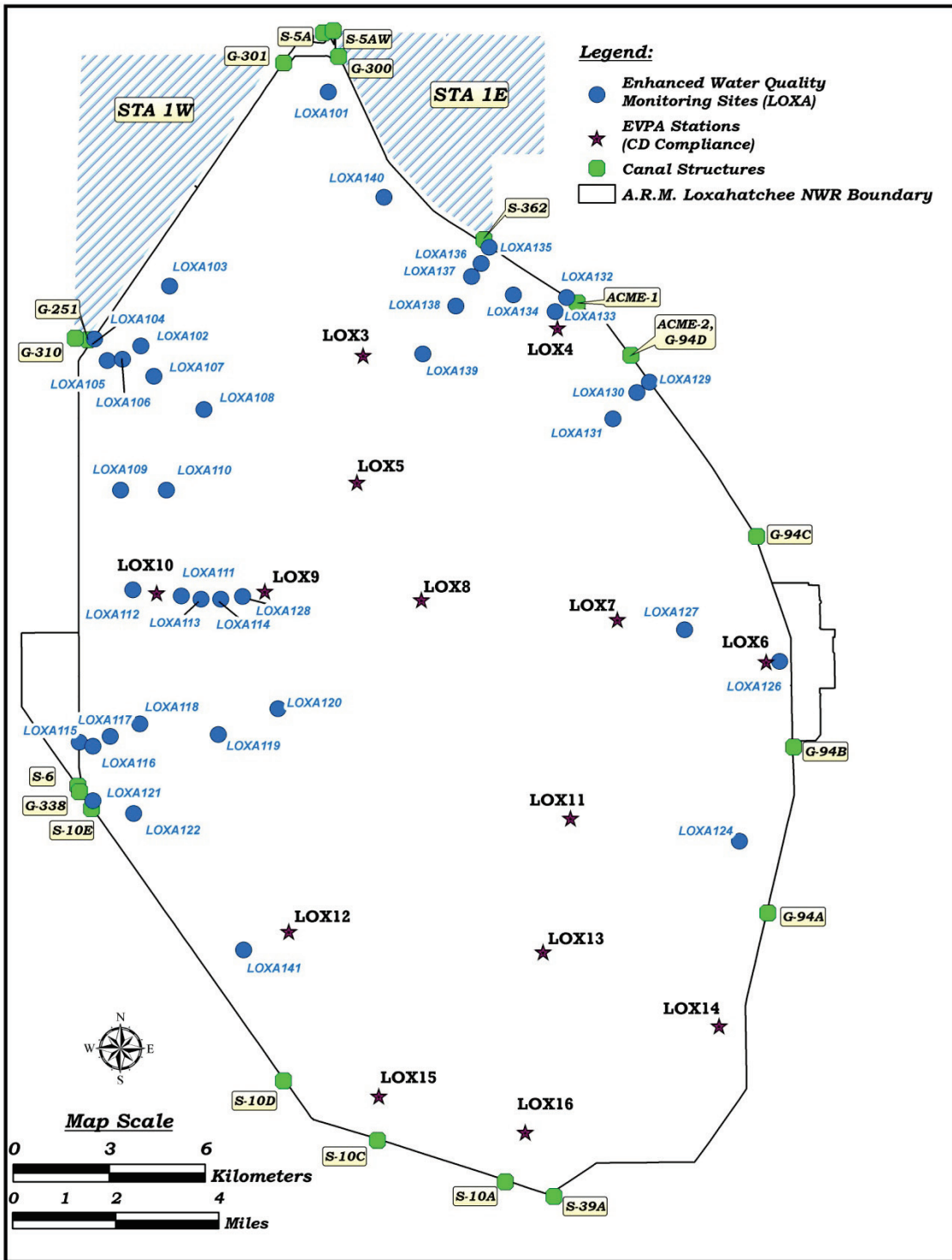
**A.R.M. Loxahatchee National Wildlife Refuge
Enhanced Water Quality Monitoring Network**

Parameter Information:

Parameter	Units	Analysis Method	MDL
Alkalinity as CaCO ₃ , Total	mg/L	310.1	1.9
Calcium Dissolved	mg/L	200.7	0.014
Carbon, Dissolved Organic	mg/L	415.1	0.5
Carbon, Total Organic	mg/L	415.1	0.5
Chloride	mg/L	300.0	0.052
Conductivity (field)	µMHOS/cm	120.1 (field)	-
Nitrate + Nitrite as Nitrogen	mg/L	300.0	0.004
Nitrogen, Total Kjeldahl (TKN)	mg/L	351.2	0.1
Ortho-phosphate as Phosphorus	mg/L	365.1	0.003
Oxygen, Dissolved (Field)	mg/L	360.1	1
pH (Field)	pH units	150.1	-
Phosphorus, Total	mg/L	365.3	0.003
Silica	mg/L	370.1	0.068
Solids, Total Dissolved (TDS)	mg/L	160.1	4.7
Solids, Total Suspended (TSS)	mg/L	160.2	1.6
Sulfate	mg/L	300.0	0.16
Temperature (Field)	DEG C	170.1	-
Turbidity	NTU	180.1	0.17

Note: Nitrate and Nitrite not analyzed after June 2006

A.R.M. Loxahatchee National Wildlife Refuge Enhanced Water Quality Monitoring Network



Coordinates of sites:

Name	Latitude	Longitude	X DMS*	Y DMS*	X DM**	Y DM**
LOXA 101	26.66739249	-80.36636475	80° 21' 58.91" W	26° 40' 2.61" N	80° 21.9818333' W	26° 40.0435' N
LOXA 102	26.59598877	-80.42553769	80° 25' 31.94" W	26° 35' 45.56" N	80° 25.532333' W	26° 35.7593333333333' N
LOXA 103	26.61285142	-80.41643631	80° 24' 59.17" W	26° 36' 46.27" N	80° 24.98616667' W	26° 36.7711666666667' N
LOXA 104	26.59798188	-80.44004508	80° 26' 24.16" W	26° 35' 52.73" N	80° 26.4026667' W	26° 35.8788333333333' N
LOXA 105	26.59189923	-80.43609407	80° 26' 9.94" W	26° 35' 30.84" N	80° 26.1656667' W	26° 35.514' N
LOXA 106	26.59220622	-80.43128096	80° 25' 52.61" W	26° 35' 31.94" N	80° 25.876833' W	26° 35.5323333333333' N
LOXA 107	26.58739046	-80.42144468	80° 25' 17.20" W	26° 35' 14.61" N	80° 25.286667' W	26° 35.2435' N
LOXA 108	26.5779601	-80.40585344	80° 24' 21.07" W	26° 34' 40.66" N	80° 24.35116667' W	26° 34.6776666666667' N
LOXA 109	26.55528865	-80.43205157	80° 25' 55.39" W	26° 33' 19.04" N	80° 25.92316667' W	26° 33.3173333333333' N
LOXA 110	26.5523973	-80.41769154	80° 25' 3.69" W	26° 33' 18.86" N	80° 25.0615' W	26° 33.3143333333333' N
LOXA 111	26.52533583	-80.41314705	80° 24' 47.33" W	26° 31' 31.21" N	80° 24.7888333' W	26° 31.5201666666667' N
LOXA 112	26.52712473	-80.42837332	80° 25' 42.14" W	26° 31' 37.65" N	80° 25.702333' W	26° 31.6275' N
LOXA 113	26.52442784	-80.40699875	80° 24' 25.20" W	26° 31' 27.94" N	80° 24.42' W	26° 31.4656666666667' N
LOXA 114	26.52439258	-80.40083965	80° 24' 3.02" W	26° 31' 27.81" N	80° 24.050333' W	26° 31.4635' N
LOXA 115	26.48422578	-80.44533675	80° 26' 43.21" W	26° 29' 3.21" N	80° 26.7201667' W	26° 29.0535' N
LOXA 116	26.4830586	-80.441098	80° 26' 27.95" W	26° 28' 59.01" N	80° 26.4658333' W	26° 28.9835' N
LOXA 117	26.48580427	-80.4356858	80° 26' 8.47" W	26° 29' 8.90" N	80° 26.14116667' W	26° 29.1483333333333' N
LOXA 118	26.48928924	-80.42639091	80° 25' 35.01" W	26° 29' 21.44" N	80° 25.5835' W	26° 29.3573333333333' N
LOXA 119	26.48621462	-80.40180845	80° 24' 6.51" W	26° 29' 10.37" N	80° 24.1085' W	26° 29.1728333333333' N
LOXA 120	26.49341054	-80.38307987	80° 22' 59.09" W	26° 29' 36.28" N	80° 22.9848333' W	26° 29.6046666666667' N
LOXA 121	26.46767673	-80.44113231	80° 26' 28.08" W	26° 28' 3.64" N	80° 26.468' W	26° 28.0606666666667' N
LOXA 122	26.46404297	-80.42843367	80° 25' 42.36" W	26° 27' 50.55" N	80° 25.706' W	26° 27.8425' N
LOXA 123	26.42675307	-80.40036372	80° 24' 1.31" W	26° 25' 36.31" N	80° 24.0218333' W	26° 25.6051666666667' N
LOXA 124	26.45535397	-80.23875455	80° 14' 19.52" W	26° 27' 19.27" N	80° 14.325333' W	26° 27.3211666666667' N
LOXA 126	26.50601148	-80.22585171	80° 13' 33.07" W	26° 30' 21.64" N	80° 13.55116667' W	26° 30.3606666666667' N
LOXA 127	26.51513474	-80.25555976	80° 15' 20.02" W	26° 30' 54.49" N	80° 15.3336667' W	26° 30.9081666666667' N
LOXA 128	26.52516286	-80.3940121	80° 23' 38.44" W	26° 31' 30.59" N	80° 23.6406667' W	26° 31.5098333333333' N
LOXA 129	26.58500726	-80.26608256	80° 15' 57.90" W	26° 35' 6.03" N	80° 15.965' W	26° 35.1005' N
LOXA 130	26.58211881	-80.27005531	80° 16' 12.20" W	26° 34' 55.63" N	80° 16.20333' W	26° 34.9271666666667' N
LOXA 131	26.57474791	-80.27764653	80° 16' 39.53" W	26° 34' 29.09" N	80° 16.6588333' W	26° 34.4848333333333' N
LOXA 132	26.60900561	-80.29189939	80° 17' 30.84" W	26° 36' 32.42" N	80° 17.514' W	26° 36.5403333333333' N
LOXA 133	26.6050896	-80.29557491	80° 17' 44.07" W	26° 36' 18.32" N	80° 17.7345' W	26° 36.3053333333333' N
LOXA 134	26.60985664	-80.30860325	80° 18' 30.97" W	26° 36' 35.48" N	80° 18.51616667' W	26° 36.5913333333333' N
LOXA 135	26.62335538	-80.31612276	80° 18' 58.04" W	26° 37' 24.08" N	80° 18.967333' W	26° 37.4013333333333' N
LOXA 136	26.61879302	-80.31866688	80° 19' 7.20" W	26° 37' 7.65" N	80° 19.12' W	26° 37.1275' N
LOXA 137	26.61510337	-80.32170327	80° 19' 18.13" W	26° 36' 54.37" N	80° 19.30216667' W	26° 36.9061666666667' N
LOXA 138	26.60681693	-80.32666537	80° 19' 36.00" W	26° 36' 24.54" N	80° 19.6' W	26° 36.409' N
LOXA 139	26.59332525	-80.33715389	80° 20' 13.75" W	26° 35' 35.97" N	80° 20.22916667' W	26° 35.5995' N
LOXA 140	26.63760323	-80.34909432	80° 20' 56.74" W	26° 38' 15.37" N	80° 20.9456667' W	26° 38.2561666666667' N
LOXA 141	26.42708333	80.3942	80° 23' 39.12" W	26° 38' 37.5" N	80° 23.652' W	26° 25.625' N

* DMS = Degrees Minutes Seconds

** DM = Degrees Minutes Decimal Minutes

Additional information on the coordinates for the Enhanced Water Quality Monitoring Network can be found at:

http://sofia.usgs.gov/lox_monitor_model/workplans/EnhancedWQsamplingStations_.pdf