

# Refuge's Enhanced Water Quality Program Monthly Sampling January through March, 2011 Data Update

Technical Oversight Committee Quarterly Meeting

Submitted May 27, 2011

Presented May 31, 2011

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Presented by:

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**Everglades National Park  
co A.R.M. Loxahatchee National Wildlife Refuge**

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

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

Jan-11

Site	Sample Date	Full(F), Partial(P), None(N), Reanalyzer (R)	Depth <sup>1</sup> meter	Total Depth <sup>2</sup> meter	DCS <sup>3</sup> meter	Alkalinity mg/l	Calcium Dissolved mg/l	Carbon, Dissolved Organic mg/l	Carbon, Total Organic mg/l	Chloride mg/l	Conductivity (Field) mMHSO/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	1/10/2011	P	0.05	0.11	0.15	-	-	-	-	132	738	-	-	-	6.6	0.012	-	-	U	8.2	18.5	-	
A102	1/10/2011	N	-	-	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A103	1/10/2011	N	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A104	1/12/2011	F	-	-	>1M	165	51.3	29.1	29.5	126	779	0.02	1.6	0.003	7.2	0.021	13	486	U	32.2	17.7	1.4	
A105	1/12/2011	N	-	-	0.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A106	1/12/2011	N	-	-	0.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A107	1/12/2011	N	-	-	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A108	1/10/2011	N	-	-	0.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A109	1/12/2011	P	0.07	0.15	0.33	-	-	-	-	22.5	148	-	-	-	6.2	0.007	-	-	U	1.1	15.8	-	
A110	1/11/2011	N	-	-	0.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A111	1/12/2011	F	0.11	0.22	0.38	41.5	6.98	15.1	14.9	18.6	108	U	2.86	U	6.0	0.041	1	88	36	0.6	14.7	8.6	
A112	1/11/2011	N	-	-	0.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A113	1/12/2011	P	0.06	0.12	0.18	-	-	-	-	21.1	123	-	-	-	6.3	0.004	-	-	U	0.5	15.0	-	
A114	1/12/2011	P	0.07	0.15	0.3	-	-	-	-	22.3	128	-	-	-	6.3	0.005	-	-	U	0.5	14.5	-	
A115	1/11/2011	F	-	-	>1M	176	56	34.5	35.3	133	879	0.01	1.81	0.004	7.3	0.020	18	563	U	67.5	18.6	0.7	
A117	1/11/2011	P	0.09	0.19	0.28	-	-	-	-	55.4	332	-	-	-	6.6	0.012	-	-	U	5.0	21.0	-	
A118	1/11/2011	P	0.09	0.18	0.35	-	-	-	-	21.6	151	-	-	-	6.6	0.007	-	-	U	0.7	23.3	-	
A119	1/11/2011	P	0.09	0.19	0.31	-	-	-	-	19.7	136	-	-	-	7.1	0.014	-	-	U	0.5	24.2	-	
A120	1/11/2011	F	0.17	0.35	0.49	16	5.81	16.1	16.3	23.7	122	U	1.01	0.003	6.7	0.006	2	94	U	23.2	0.4		
A122	1/11/2011	P	0.09	0.19	0.27	-	-	-	-	49.9	335	-	-	-	6.5	0.013	-	-	U	3.6	21.4	-	
A124	1/13/2011	P	0.08	0.17	0.29	-	-	-	-	28	162	-	-	-	6.2	0.007	-	-	U	0.5	12.0	-	
A126	1/13/2011	F	0.12	0.24	0.32	59.5	19.1	18.7	18.7	57.6	310	U	1.11	U	6.3	0.005	5	212	U	1.5	11.6	0.7	
A127	1/11/2011	N	-	-	0.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A128	1/11/2011	N	-	-	0.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A129	1/13/2011	F	-	-	>1M	96.3	32.2	24.6	24.9	87.3	494	U	1.31	0.003	7.1	0.030	8	312	6	6.5	16.4	2.9	
A130	1/13/2011	F	0.1	0.21	0.26	62	19.8	21.4	21.4	46.5	276	U	1.01	U	6.5	0.005	3	181	U	1.2	12.9	0.4	
A131	1/13/2011	P	0.07	0.15	0.27	-	-	-	-	22.6	146	-	-	-	6.3	0.005	-	-	U	0.6	11.7	-	
A132	1/13/2011	F	-	-	>1M	107	35.9	26.2	26.1	98.5	554	0.009	1.4	0.007	7.2	0.039	8	343	U	7.7	16.7	2.8	
A133	1/13/2011	N	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A134	1/13/2011	P	0.06	0.12	0.27	-	-	-	-	33.1	211	-	-	-	6.4	0.005	-	-	U	1.3	13.3	-	
A135	1/10/2011	F	-	-	>1M	120	37.3	26.4	25	104	585	U	1.49	0.003	7.2	0.032	9	357	U	9.2	18.0	1.7	
A136	1/10/2011	P	0.06	0.12	0.23	-	-	-	-	74	416	-	-	-	6.4	0.011	-	-	U	1.9	18.2	-	
A137	1/10/2011	F	0.11	0.23	0.35	52.9	15.6	25.1	23.7	33.8	215	U	1.43	U	6.3	0.011	2	156	U	0.9	21.6	0.6	
A138	1/10/2011	N	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A139	1/10/2011	N	-	-	0.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A140	1/10/2011	N	-	-	0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A141	1/11/2011	F	0.35	0.7	0.35	65.3	18	20.6	21.1	37.6	259	U	1.3	0.003	6.0	0.011	12	175	U	2.2	18.5	0.5	
Total																							
Full																							
Partial																							
None																							

(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](http://sofia.usgs.gov/lox_monitor_model/wq_network.html)

Data from June 2004 to May 2006 available on DBHYDRO:

<http://www.sfwmd.gov/ora/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

Feb-11

Site	Sample Date	Full(F), Partial(P), None(N), Reanalyzer (R)	Depth <sup>1</sup> meter	Total Depth <sup>2</sup> meter	DCS <sup>3</sup> meter	Alkalinity mg/l	Calcium Dissolved mg/l	Carbon, Dissolved Organic mg/l	Carbon, Total Organic mg/l	Chloride mg/l	Conductivity (Field) mMHSO/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	2/8/2011	N	-	-	0.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A102	2/8/2011	N	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A103	2/8/2011	N	-	-	0.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A104	2/9/2011	F	-	-	>1M	221	64	30	30	158	1027	0.01	1.85	U	7.8	7.6	0.029	8.1	624	U	67.3	20.8	1.7
A105	2/9/2011	N	-	-	0.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A106	2/9/2011	N	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A107	2/9/2011	N	-	-	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A108	2/8/2011	N	-	-	0.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A109	2/9/2011	P	0.07	0.15	0.29	-	-	-	-	26	167	-	-	-	5.3	6.3	0.008	-	-	U	1.1	17.5	-
A110	2/9/2011	N	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A111	2/9/2011	P	0.07	0.15	0.23	-	-	-	-	23	137	-	-	-	6.5	6.4	0.010	-	-	U	0.6	15.6	-
A112	2/9/2011	N	-	-	0.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A113	2/9/2011	N	-	-	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A114	2/9/2011	N	-	-	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A115	2/10/2011	F	-	-	>1M	217	60	35	37	179	1095	U	2.05	U	6.6	7.6	0.022	6.5	670	U	63.5	21.1	1.4
A117	2/10/2011	P	0.09	0.19	0.27	-	-	-	-	60	367	-	-	-	1.6	6.5	0.014	-	-	U	3.3	20.4	-
A118	2/10/2011	P	0.07	0.15	0.31	-	-	-	-	26	181	-	-	-	1.8	6.5	0.009	-	-	U	0.6	20.7	-
A119	2/10/2011	F	0.1	0.21	0.35	46	14	22	24	25	176	U	1.33	0.003	6.3	6.7	0.017	5.8	143	U	0.5	22.6	2.2
A120	2/10/2011	F	0.11	0.23	0.35	21	7	19	20	29	140	U	1.41	U	6.3	6.6	0.010	2.2	84	U	U	22.7	1.3
A122	2/10/2011	P	0.08	0.17	0.25	-	-	-	-	55	395	-	-	-	1.4	6.6	0.013	-	-	U	3.3	20.3	-
A124	2/7/2011	P	0.09	0.18	0.4	-	-	-	-	29	179	-	-	-	6.1	6.2	0.015	-	-	U	0.6	22.8	-
A126	2/7/2011	P	0.095	0.19	0.3	-	-	-	-	64	347	-	-	-	2.3	6.7	0.007	-	-	U	1.8	22.0	-
A127	2/7/2011	P	0.085	0.17	0.31	-	-	-	-	29	148	-	-	-	4.2	6.2	0.009	-	-	U	U	23.2	-
A128	2/10/2011	N	-	-	0.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A129	2/7/2011	F	-	-	>1M	146	47	26	28	121	705	0.02	1.58	0.010	9.6	7.3	0.041	6.5	427	U	15.3	22.9	2.5
A130	2/7/2011	P	0.095	0.19	0.3	-	-	-	-	46	309	-	-	-	7.2	6.6	0.013	-	-	U	0.8	24.4	-
A131	2/7/2011	P	0.055	0.11	0.23	-	-	-	-	26	173	-	-	-	11.9	6.5	0.009	-	-	U	0.5	26.7	-
A132	2/7/2011	F	-	-	>1M	159	51	27	27	130	766	0.02	1.62	0.009	10.5	7.4	0.043	6.6	464	5.5	19.4	23.3	2.4
A133	2/7/2011	N	-	-	0.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A134	2/7/2011	P	0.07	0.14	0.33	-	-	-	-	38	246	-	-	-	7.3	6.7	0.012	-	-	U	1.1	23.2	-
A135	2/8/2011	F	-	-	>1M	171	52	28	29	133	789	0.01	1.62	0.005	5.7	7.0	0.033	8.6	479	U	24.4	21.6	2.0
A136	2/8/2011	P	0.05	0.1	0.61	-	-	-	-	79	450	-	-	-	1.4	6.2	0.017	-	-	U	1.3	18.8	-
A137	2/8/2011	P	0.08	0.15	0.3	-	-	-	-	40	276	-	-	-	3.6	6.5	0.014	-	-	U	0.7	18.6	-
A138	2/8/2011	N	-	-	0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A139	2/8/2011	N	-	-	0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A140	2/8/2011	N	-	-	0.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A141	2/10/2011	F	0.23	0.46	0.89	70	20	21	22	40	276	U	3.21	0.004	3.8	6.9	0.061	11.1	182	66	2.7	20.4	19.8
Total			37																				
Full			8																				
Partial			13																				
None			16																				

(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.

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Site	Sample Date	Full(F), Partial(P), None(N), Reanalyzer (R)	Depth <sup>1</sup> meter	Total Depth <sup>2</sup> meter	DCS <sup>3</sup> 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	3/9/2011	N	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A102	3/10/2011	N	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A103	3/10/2011	N	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A104	3/7/2011	F	-	-	>1M	185	56	34	34	147	921	0.044	1.85	0.013	8.1	7.6	0.032	6.3	590	U	51.9	22.4	2.8
A105	3/10/2011	N	-	-	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A106	3/10/2011	N	-	-	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A107	3/10/2011	N	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A108	3/10/2011	N	-	-	0.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A109	3/10/2011	N	-	-	0.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A110	3/10/2011	N	-	-	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A111	3/10/2011	P	0.05	0.11	0.23	-	-	-	-	33	178	-	-	-	4.5	6.7	0.051	-	-	U	0.8	21.8	-
A112	3/10/2011	N	-	-	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A113	3/10/2011	N	-	-	0.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A114	3/10/2011	N	-	-	0.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A115	3/7/2011	F	-	-	>1M	167	51	32	33	135	844	0.014	1.53	0.005	8.3	6.6	0.023	7.0	530	U	47.2	22.0	1.9
A117	3/7/2011	N	-	-	0.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A118	3/7/2011	N	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A119	3/7/2011	N	-	-	0.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A120	3/7/2011	P	0.09	0.18	0.28	-	-	-	-	37	174	-	-	-	9.6	6.7	0.013	-	-	U	0.5	21.6	-
A122	3/7/2011	N	-	-	0.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A124	3/7/2011	N	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A126	3/7/2011	N	-	-	0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A127	3/7/2011	N	-	-	0.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A128	3/9/2011	N	-	-	0.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A129	3/7/2011	F	-	-	>1M	154	51	29	28	129	747	0.004	1.71	0.008	8.0	7.3	0.063	1.7	450	7.5	17.1	22.7	5.9
A130	3/9/2011	P	0.05	0.11	0.23	-	-	-	-	59	367	-	-	-	4.2	6.6	0.021	-	-	U	0.9	28.6	-
A131	3/9/2011	N	-	-	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A132	3/7/2011	F	-	-	>1M	158	53	29	29	136	789	U	1.87	U	9.3	7.4	0.059	0.9	499	8	20.7	22.8	4.7
A133	3/9/2011	N	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A134	3/9/2011	N	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A135	3/7/2011	F	-	-	>1M	187	62	30	30	167	945	U	1.71	U	10.3	7.3	0.046	1.6	583	6	30.5	22.2	3.5
A136	3/9/2011	N	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A137	3/9/2011	N	-	-	0.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A138	3/9/2011	N	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A139	3/9/2011	N	-	-	0.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A140	3/9/2011	N	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A141	3/7/2011	F	0.135	0.27	0.4	82.7	23	21	21	41	241	U	1.03	0.003	4.4	6.7	0.012	9.8	250	U	1.6	20.5	0.8
Total					37																		
Full					6																		
Partial					3																		
None					28																		

(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](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.

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

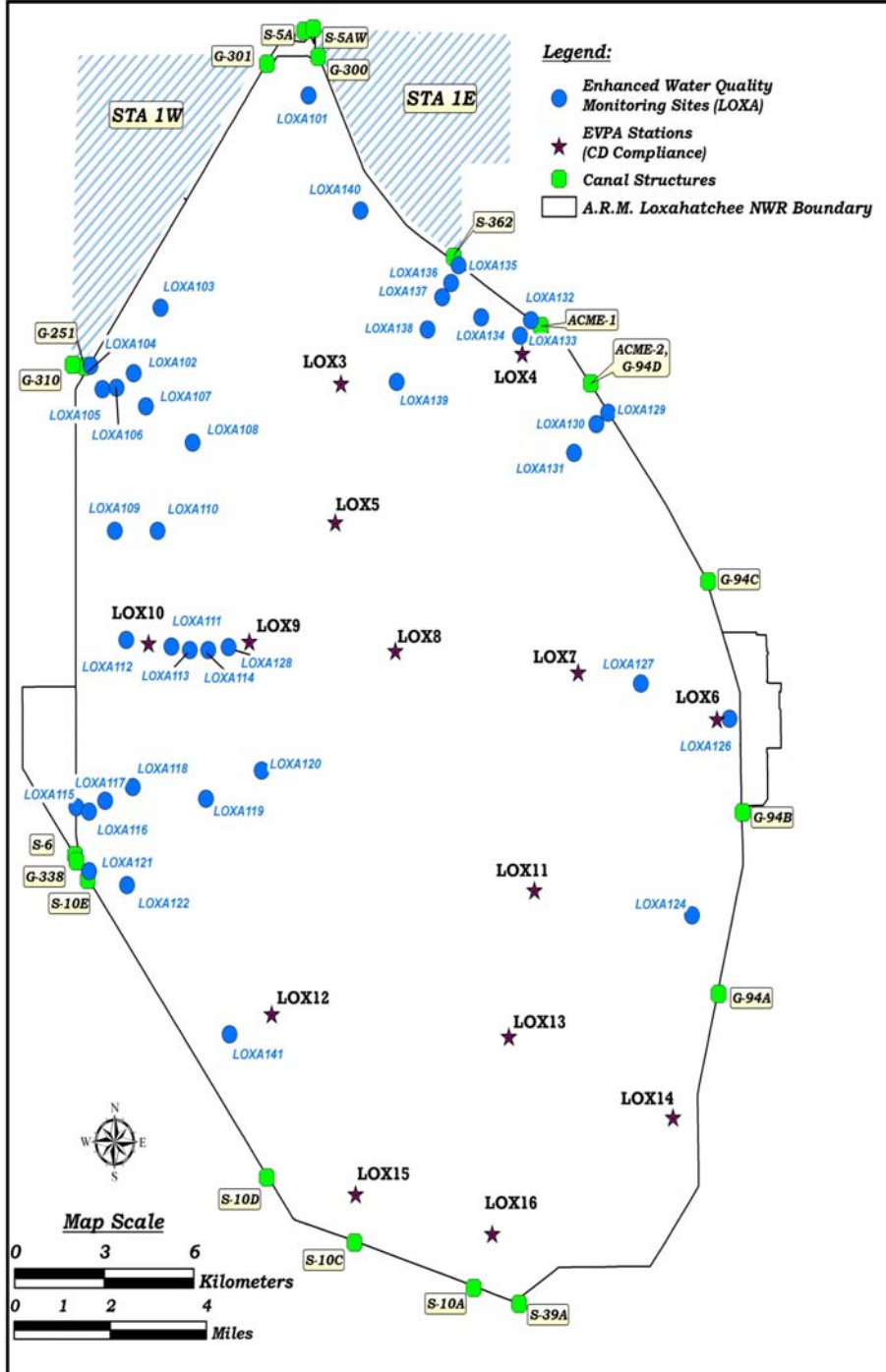
Parameter Information:

<b>Parameter</b>	<b>Units</b>	<b>Analysis Method</b>	<b>MDL</b>
Alkalinity as CaCO <sub>3</sub> , Total	mg/L	310.1	5
Calcium Dissolved	mg/L	200.7	0.02 - 0.03
Carbon, Dissolved Organic	mg/L	415.1	0.1 - 0.3
Carbon, Total Organic	mg/L	415.1	0.1 - 0.3
Chloride	mg/L	300.0	0.1
Conductivity (field)	µMHOS/cm	120.1 (field)	-
Nitrate + Nitrite as Nitrogen	mg/L	300.0	0.003 - 0.009
Nitrogen, Total Kjeldahl (TKN)	mg/L	351.2	0.06 - 0.07
Ortho-phosphate as Phosphorus	mg/L	365.1	0.002 - 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	0.14
Solids, Total Dissolved (TDS)	mg/L	160.1	10
Solids, Total Suspended (TSS)	mg/L	160.2	5
Sulfate	mg/L	300.0	0.1
Temperature (Field)	DEG C	170.1	-
Turbidity	NTU	180.1	0.1

Note: Nitrate and Nitrite not analyzed after June 2006

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

Map of sites:



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

**August 2006**

**Coordinates of sites:**

Name	Latitude	Longitude	X_DMS*	Y_DMS*	X_DM**	Y_DM**
LOXA101	26.66739249	-80.36636475	80° 21' 58.91" W	26° 40' 2.61" N	80° 21.9818333' W	26° 40.0435' N
LOXA102	26.59598877	-80.42553769	80° 25' 31.94" W	26° 35' 45.56" N	80° 25.532333' W	26° 35.7593333333333' N
LOXA103	26.61285142	-80.41643631	80° 24' 59.17" W	26° 36' 46.27" N	80° 24.98616667' W	26° 36.7711666666667' N
LOXA104	26.59798188	-80.44004508	80° 26' 24.16" W	26° 35' 52.73" N	80° 26.4026667' W	26° 35.8788333333333' N
LOXA105	26.59189923	-80.43609407	80° 26' 9.94" W	26° 35' 30.84" N	80° 26.1656667' W	26° 35.514' N
LOXA106	26.59220622	-80.43128096	80° 25' 52.61" W	26° 35' 31.94" N	80° 25.876833' W	26° 35.5323333333333' N
LOXA107	26.58739046	-80.42144468	80° 25' 17.20" W	26° 35' 14.61" N	80° 25.286667' W	26° 35.2435' N
LOXA108	26.5779601	-80.40585344	80° 24' 21.07" W	26° 34' 40.66" N	80° 24.35116667' W	26° 34.6776666666667' N
LOXA109	26.55528865	-80.43205157	80° 25' 55.39" W	26° 33' 19.04" N	80° 25.92316667' W	26° 33.3173333333333' N
LOXA110	26.55523973	-80.41769154	80° 25' 3.69" W	26° 33' 18.86" N	80° 25.0615' W	26° 33.3143333333333' N
LOXA111	26.52533583	-80.41314705	80° 24' 47.33" W	26° 31' 31.21" N	80° 24.7888333' W	26° 31.5201666666667' N
LOXA112	26.52712473	-80.42837332	80° 25' 42.14" W	26° 31' 37.65" N	80° 25.702333' W	26° 31.6275' N
LOXA113	26.52442784	-80.40699875	80° 24' 25.20" W	26° 31' 27.94" N	80° 24.42' W	26° 31.4656666666667' N
LOXA114	26.52439258	-80.40083965	80° 24' 3.02" W	26° 31' 27.81" N	80° 24.050333' W	26° 31.4635' N
LOXA115	26.48422578	-80.44533675	80° 26' 43.21" W	26° 29' 3.21" N	80° 26.7201667' W	26° 29.0535' N
LOXA116	26.4830586	-80.441098	80° 26' 27.95" W	26° 28' 59.01" N	80° 26.4658333' W	26° 28.9835' N
LOXA117	26.48580427	-80.4356858	80° 26' 8.47" W	26° 29' 8.90" N	80° 26.14116667' W	26° 29.1483333333333' N
LOXA118	26.48928924	-80.42639091	80° 25' 35.01" W	26° 29' 21.44" N	80° 25.5835' W	26° 29.3573333333333' N
LOXA119	26.48621462	-80.40180845	80° 24' 6.51" W	26° 29' 10.37" N	80° 24.1085' W	26° 29.1728333333333' N
LOXA120	26.49341054	-80.38307987	80° 22' 59.09" W	26° 29' 36.28" N	80° 22.9848333' W	26° 29.6046666666667' N
LOXA121	26.46767673	-80.44113231	80° 26' 28.08" W	26° 28' 3.64" N	80° 26.468' W	26° 28.0606666666667' N
LOXA122	26.46404297	-80.42843367	80° 25' 42.36" W	26° 27' 50.55" N	80° 25.706' W	26° 27.8425' N
LOXA123	26.42675307	-80.40036372	80° 24' 1.31" W	26° 25' 36.31" N	80° 24.0218333' W	26° 25.6051666666667' N
LOXA124	26.45535397	-80.23875455	80° 14' 19.52" W	26° 27' 19.27" N	80° 14.325333' W	26° 27.3211666666667' N
LOXA126	26.50601148	-80.22585171	80° 13' 33.07" W	26° 30' 21.64" N	80° 13.55116667' W	26° 30.3606666666667' N
LOXA127	26.51513474	-80.25555976	80° 15' 20.02" W	26° 30' 54.49" N	80° 15.3336667' W	26° 30.9081666666667' N
LOXA128	26.52516286	-80.3940121	80° 23' 38.44" W	26° 31' 30.59" N	80° 23.6406667' W	26° 31.5098333333333' N
LOXA129	26.58500726	-80.26608256	80° 15' 57.90" W	26° 35' 6.03" N	80° 15.965' W	26° 35.1005' N
LOXA130	26.58211881	-80.27005531	80° 16' 12.20" W	26° 34' 55.63" N	80° 16.20333' W	26° 34.9271666666667' N
LOXA131	26.57474791	-80.27764653	80° 16' 39.53" W	26° 34' 29.09" N	80° 16.6588333' W	26° 34.4848333333333' N
LOXA132	26.60900561	-80.29189939	80° 17' 30.84" W	26° 36' 32.42" N	80° 17.514' W	26° 36.5403333333333' N
LOXA133	26.6050896	-80.29557491	80° 17' 44.07" W	26° 36' 18.32" N	80° 17.7345' W	26° 36.3053333333333' N
LOXA134	26.60985664	-80.30860325	80° 18' 30.97" W	26° 36' 35.48" N	80° 18.51616667' W	26° 36.5913333333333' N
LOXA135	26.62335538	-80.31612276	80° 18' 58.04" W	26° 37' 24.08" N	80° 18.967333' W	26° 37.4013333333333' N
LOXA136	26.61879302	-80.31866688	80° 19' 7.20" W	26° 37' 7.65" N	80° 19.12' W	26° 37.1275' N
LOXA137	26.61510337	-80.32170327	80° 19' 18.13" W	26° 36' 54.37" N	80° 19.30216667' W	26° 36.9061666666667' N
LOXA138	26.60681693	-80.32666537	80° 19' 36.00" W	26° 36' 24.54" N	80° 19.6' W	26° 36.409' N
LOXA139	26.59332525	-80.33715389	80° 20' 13.75" W	26° 35' 35.97" N	80° 20.22916667' W	26° 35.5995' N
LOXA140	26.63760323	-80.34909432	80° 20' 56.74" W	26° 38' 15.37" N	80° 20.9456667' W	26° 38.2561666666667' N
LOXA141	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](http://sofia.usgs.gov/lox_monitor_model/workplans/EnhancedWQsamplingStations_.pdf)