

# Appendix 3A-1: Summary of Water Year 2007 Water Quality Monitoring Results

Florida Department of Environmental Protection

**Table 1.** Summary of Water Year 2007 water quality monitoring results for variables listed in Section 62-302.530, Florida Administrative Code (F.A.C.). Only water quality variables analyzed during the water year for a given region and site class are included. The "Number of Excluded Results" column provides the number of results excluded due to quality assurance/quality control screening protocols.

Parameter	Units	Area	Class	N	Arithmetic Mean	Std. Deviation	25th Percentile	Median	75th Percentile	Min.	Max.	Number of Excluded Results	Percent BDL (%)
Alkalinity	mg CaCO <sub>3</sub> /L	Refuge	Inflow	109	234	61	187	236	280	89	367	0	0
Alkalinity	mg CaCO <sub>3</sub> /L	Refuge	Rim	24	202	53	147	209	248	123	282	0	0
Alkalinity	mg CaCO <sub>3</sub> /L	Refuge	Interior	176	63	52	33	45	76	6.0	254	0	0
Alkalinity	mg CaCO <sub>3</sub> /L	Refuge	Outflow	55	146	59	94	151	193	50	281	0	0
Alkalinity	mg CaCO <sub>3</sub> /L	WCA-2	Inflow	91	231	79	179	237	284	54	390	0	0
Alkalinity	mg CaCO <sub>3</sub> /L	WCA-2	Interior	174	245	54	209	235	272	150	470	0	0
Alkalinity	mg CaCO <sub>3</sub> /L	WCA-2	Outflow	76	214	38	185	211	247	126	295	1	0
Alkalinity	mg CaCO <sub>3</sub> /L	WCA-3	Inflow	179	230	48	200	235	263	107	352	1	0
Alkalinity	mg CaCO <sub>3</sub> /L	WCA-3	Interior	167	181	39	152	181	208	101	281	0	0
Alkalinity	mg CaCO <sub>3</sub> /L	WCA-3	Outflow	112	171	48	132	168	208	79	281	0	0
Alkalinity	mg CaCO <sub>3</sub> /L	Park	Inflow	120	176	39	147	184	208	79	258	0	0
Alkalinity	mg CaCO <sub>3</sub> /L	Park	Interior	59	159	38	129	158	193	88	221	1	0
Dissolved Oxygen	mg/L	Refuge	Inflow	182	3.90	2.51	1.50	3.98	5.73	0.02	10.10	5	0
Dissolved Oxygen	mg/L	Refuge	Rim	24	4.45	2.08	2.28	4.91	6.33	1.12	7.42	0	0

Parameter	Units	Area	Class	N	Arithmetic Mean	Std. Deviation	25th Percentile	Median	75th Percentile	Min.	Max.	Number of Excluded Results	Percent BDL (%)
Dissolved Oxygen	mg/L	Refuge	Interior	210	3.77	1.95	2.35	3.64	5.20	0.16	9.06	0	0
Dissolved Oxygen	mg/L	Refuge	Outflow	55	5.75	2.06	4.39	5.66	7.63	1.75	9.05	0	0
Dissolved Oxygen	mg/L	WCA-2	Inflow	147	4.45	1.95	2.99	4.48	5.59	0.20	9.05	2	0
Dissolved Oxygen	mg/L	WCA-2	Interior	198	3.55	2.17	1.86	3.31	4.77	0.30	11.70	8	0
Dissolved Oxygen	mg/L	WCA-2	Outflow	75	5.06	1.87	3.59	4.73	6.64	1.86	9.43	2	0
Dissolved Oxygen	mg/L	WCA-3	Inflow	407	4.65	2.44	2.61	4.72	6.71	0.22	11.40	13	0
Dissolved Oxygen	mg/L	WCA-3	Interior	197	3.93	2.25	2.39	3.68	5.31	0.38	13.10	7	0
Dissolved Oxygen	mg/L	WCA-3	Outflow	203	4.15	1.87	2.66	3.81	5.33	0.20	9.32	5	0
Dissolved Oxygen	mg/L	Park	Inflow	287	4.56	2.29	2.70	4.23	6.06	0.26	12.20	6	0
Dissolved Oxygen	mg/L	Park	Interior	72	4.48	2.33	2.67	4.02	5.94	0.62	9.81	0	0
pH	Units	Refuge	Inflow	187	7.57	0.30	7.38	7.57	7.79	6.60	8.50	0	0
pH	Units	Refuge	Rim	23	7.45	0.25	7.25	7.44	7.58	7.10	8.03	0	0
pH	Units	Refuge	Interior	208	6.74	0.44	6.42	6.70	7.02	5.70	7.90	2	0
pH	Units	Refuge	Outflow	55	7.44	0.31	7.22	7.42	7.69	6.60	8.10	0	0
pH	Units	WCA-2	Inflow	147	7.58	0.26	7.40	7.58	7.77	6.76	8.35	1	0
pH	Units	WCA-2	Interior	206	7.37	0.29	7.20	7.38	7.60	6.29	8.00	0	0
pH	Units	WCA-2	Outflow	77	7.63	0.36	7.45	7.60	7.82	6.59	8.40	0	0
pH	Units	WCA-3	Inflow	420	7.52	0.35	7.28	7.50	7.80	6.08	8.48	0	0
pH	Units	WCA-3	Interior	203	7.24	0.30	7.06	7.20	7.41	6.40	8.00	0	0
pH	Units	WCA-3	Outflow	206	7.38	0.21	7.25	7.36	7.50	6.90	8.10	2	0
pH	Units	Park	Inflow	292	7.49	0.27	7.30	7.43	7.60	6.94	8.20	0	0
pH	Units	Park	Interior	72	7.62	0.30	7.40	7.50	7.86	7.14	8.46	0	0
Specific Conductance	µmho/cm	Refuge	Inflow	187	988	263	797	997	1213	297	1462	0	0
Specific Conductance	µmho/cm	Refuge	Rim	23	804	241	631	914	1015	432	1159	0	0
Specific Conductance	µmho/cm	Refuge	Interior	203	251	181	136	178	290	75	1050	7	0
Specific Conductance	µmho/cm	Refuge	Outflow	55	571	256	314	608	804	203	1081	0	0
Specific Conductance	µmho/cm	WCA-2	Inflow	148	927	268	802	965	1136	222	1308	0	0
Specific Conductance	µmho/cm	WCA-2	Interior	206	1034	281	887	986	1111	132	2753	0	0
Specific Conductance	µmho/cm	WCA-2	Outflow	75	825	181	744	849	929	7	1183	2	0
Specific Conductance	µmho/cm	WCA-3	Inflow	417	776	188	665	814	918	277	1183	3	0

Parameter	Units	Area	Class	N	Arithmetic Mean	Std. Deviation	25th Percentile	Median	75th Percentile	Min.	Max.	Number of Excluded Results	Percent BDL (%)
Specific Conductance	µmho/cm	WCA-3	Interior	201	544	195	383	519	698	179	1029	3	0
Specific Conductance	µmho/cm	WCA-3	Outflow	201	463	163	335	442	593	199	865	7	0
Specific Conductance	µmho/cm	Park	Inflow	282	494	125	405	523	570	199	880	12	0
Specific Conductance	µmho/cm	Park	Interior	72	407	195	288	430	527	0	738	0	0
Total Cadmium	µg/L	Refuge	Inflow	5	<0.3		<0.3	<0.3	<0.3	<0.3	<0.3	0	100
Total Cadmium	µg/L	WCA-3	Inflow	8	<0.3		<0.3	<0.3	<0.3	<0.3	<0.3	0	100
Total Cadmium	µg/L	WCA-3	Outflow	2	<0.3		<0.3	<0.3	<0.3	<0.3	<0.3	0	100
Total Cadmium	µg/L	Park	Inflow	8	<0.3		<0.3	<0.3	<0.3	<0.3	<0.3	0	100
Total Copper	µg/L	Refuge	Inflow	5	2.04	1.45	<1.2	<1.2	3.6	<1.2	4	0	60
Total Copper	µg/L	WCA-3	Inflow	8	<1.2	0.37	<1.2	<1.2	<1.2	<1.2	1.7	0	88
Total Copper	µg/L	WCA-3	Outflow	2	<1.2		<1.2	<1.2	<1.2	<1.2	<2.0	0	100
Total Copper	µg/L	Park	Inflow	8	1.45	1.11	0.7	<1.2	2.35	<1.2	3.6	0	75
Total Iron	µg/L	Refuge	Inflow	12	225	233	54	118.5	355	17	736	0	0
Total Iron	µg/L	Refuge	Rim	21	12	9.4	4.9	10.5	14	4.1	35.2	1	10
Total Iron	µg/L	Refuge	Interior	115	32	46	7.0	12.7	34	<3.0	285	1	7
Total Iron	µg/L	Refuge	Outflow	16	33	26	17	24.5	40	11	114	0	0
Total Iron	µg/L	WCA-2	Inflow	34	24	22	12	17	27	4.8	114	0	0
Total Iron	µg/L	WCA-2	Interior	110	14	20	6	8.750	15	1.25	174	0	14
Total Iron	µg/L	WCA-2	Outflow	8	27	19	11	21	39	7.0	63	0	0
Total Iron	µg/L	WCA-3	Inflow	46	113	131	30	49.6	166	7.0	560	0	0
Total Iron	µg/L	WCA-3	Interior	72	155	111	71	132.5	213	4.0	496	2	0
Total Iron	µg/L	WCA-3	Outflow	23	137	92	78	104	187	58	423	0	0
Total Iron	µg/L	Park	Inflow	32	165	112	78	128	228	11	423	0	0
Total Zinc	µg/L	Refuge	Inflow	5	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	0	100
Total Zinc	µg/L	WCA-3	Inflow	8	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	0	100
Total Zinc	µg/L	WCA-3	Outflow	2	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	0	100
Total Zinc	µg/L	Park	Inflow	8	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	0	100
Turbidity	NTU	Refuge	Inflow	83	5.53	5.27	2.50	3.70	6.40	0.90	34.70	0	0
Turbidity	NTU	Refuge	Rim	2	9.35	3.18		9.35		7.10	11.60	0	0
Turbidity	NTU	Refuge	Interior	88	0.66	0.28	0.50	0.60	0.70	0.30	2.40	6	0

Parameter	Units	Area	Class	N	Arithmetic Mean	Std. Deviation	25th Percentile	Median	75th Percentile	Min.	Max.	Number of Excluded Results	Percent BDL (%)
Turbidity	NTU	Refuge	Outflow	55	2.99	1.54	1.70	2.70	3.80	1.00	6.80	0	0
Turbidity	NTU	WCA-2	Inflow	72	2.78	1.74	1.43	2.40	3.60	0.50	9.80	1	0
Turbidity	NTU	WCA-2	Interior	74	1.64	1.54	0.80	1.00	1.95	0.30	8.90	0	0
Turbidity	NTU	WCA-2	Outflow	76	2.43	1.64	1.10	1.95	3.18	0.70	8.00	1	0
Turbidity	NTU	WCA-3	Inflow	169	3.05	2.45	1.60	2.40	3.60	0.80	20.30	1	0
Turbidity	NTU	WCA-3	Interior	113	0.91	0.84	0.60	0.70	0.90	0.40	6.40	0	0
Turbidity	NTU	WCA-3	Outflow	130	2.30	2.05	0.90	1.35	3.40	0.50	12.80	0	0
Turbidity	NTU	Park	Inflow	136	2.15	2.14	1.00	1.40	2.40	0.50	15.70	1	0
Turbidity	NTU	Park	Interior	59	1.36	1.82	0.60	0.80	1.30	0.30	12.40	1	0
Un-ionized ammonia	mg/L	Refuge	Inflow	109	0.0051	0.0051	0.00099	0.00344	0.0088	0.000023	0.023	0	2
Un-ionized ammonia	mg/L	Refuge	Rim	21	0.00076	0.0008	0.00021	0.00054	0.0009	0.000073	0.003	1	14
Un-ionized ammonia	mg/L	Refuge	Interior	167	0.00013	0.0004	0.000014	0.000034	0.00010	0.0000025	0.004	7	38
Un-ionized ammonia	mg/L	Refuge	Outflow	55	0.0009	0.0022	0.00014	0.00031	0.00066	0.0000079	0.013	0	18
Un-ionized ammonia	mg/L	WCA-2	Inflow	88	0.0023	0.0028	0.00056	0.00155	0.0031	0.000053	0.014	1	4
Un-ionized ammonia	mg/L	WCA-2	Interior	171	0.0006	0.0006	0.00025	0.00043	0.00076	0.000018	0.0033	2	1
Un-ionized ammonia	mg/L	WCA-2	Outflow	76	0.0013	0.0015	0.00043	0.00083	0.0016	0.00015	0.010	1	5
Un-ionized ammonia	mg/L	WCA-3	Inflow	176	0.0020	0.0023	0.00057	0.0011	0.0026	0.000093	0.012	4	7
Un-ionized ammonia	mg/L	WCA-3	Interior	159	0.0003	0.00044	0.00010	0.00020	0.00039	0.0000048	0.003	7	18
Un-ionized ammonia	mg/L	WCA-3	Outflow	176	0.0012	0.0014	0.00029	0.00066	0.0014	0.000034	0.0067	0	5
Un-ionized ammonia	mg/L	Park	Inflow	230	0.0017	0.0018	0.00044	0.00102	0.0023	0.000034	0.009	2	4
Un-ionized ammonia	mg/L	Park	Interior	59	0.0014	0.0023	0.00024	0.00052	0.0011	0.000061	0.011	1	22