

Appendix 2A-1: Summary of Water Year 2004 Water Quality Monitoring Results

Florida Department of Environmental Protection

Table 1. Summary of Water Year 2004 (WY2004) 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 (QA/QC) screening protocols.

Variable	Units	Area	Class	N	Arithmetic Mean	Std. Deviation	25th Percentile	Median	75th Percentile	Min.	Max.	Percent BDL (%)	Number of Excluded Results
Alkalinity	mg CaCO ₃ /L	Refuge	Inflow	80	243	47	209	245	283	126	341	0.00	0
Alkalinity	mg CaCO ₃ /L	Refuge	Rim	22	248	33	221	255	278	189	305	0.00	0
Alkalinity	mg CaCO ₃ /L	Refuge	Interior	213	97	79	32	73	146	6	288	0.00	2
Alkalinity	mg CaCO ₃ /L	Refuge	Outflow	65	201	55	162	204	244	98	303	0.00	0
Alkalinity	mg CaCO ₃ /L	WCA-2	Inflow	100	265	60	224	279	305	98	398	0.00	0
Alkalinity	mg CaCO ₃ /L	WCA-2	Interior	226	228	54	189	220	258	121	449	0.00	0
Alkalinity	mg CaCO ₃ /L	WCA-2	Outflow	80	211	47	176	207	237	112	344	0.00	0
Alkalinity	mg CaCO ₃ /L	WCA-3	Inflow	209	216	40	190	215	241	107	347	0.00	0
Alkalinity	mg CaCO ₃ /L	WCA-3	Interior	321	170	38	143	171	195	82	271	0.00	0
Alkalinity	mg CaCO ₃ /L	WCA-3	Outflow	177	148	40	111	149	184	75	232	0.00	0
Alkalinity	mg CaCO ₃ /L	Park	Inflow	199	162	42	117	176	198	75	232	0.00	0
Alkalinity	mg CaCO ₃ /L	Park	Interior	101	158	33	145	162	181	83	217	0.00	0
Dissolved Oxygen	mg/L	Refuge	Inflow	136	3.36	2.16	1.71	2.55	4.91	0.17	8.01	0.00	0
Dissolved Oxygen	mg/L	Refuge	Rim	24	4.09	1.84	2.53	5.06	5.65	0.92	6.43	0.00	0
Dissolved Oxygen	mg/L	Refuge	Interior	244	3.01	2.16	1.28	2.42	4.40	0.12	8.71	0.00	0
Dissolved Oxygen	mg/L	Refuge	Outflow	64	5.32	2.19	3.67	5.24	7.11	0.65	10.40	0.00	1
Dissolved Oxygen	mg/L	WCA-2	Inflow	161	4.53	1.98	2.87	4.59	5.81	0.25	10.40	0.00	5
Dissolved Oxygen	mg/L	WCA-2	Interior	259	2.62	1.76	1.18	2.21	3.73	0.16	9.72	0.00	2
Dissolved Oxygen	mg/L	WCA-2	Outflow	77	4.22	1.71	2.87	3.94	5.59	1.40	9.68	0.00	5
Dissolved Oxygen	mg/L	WCA-3	Inflow	395	4.58	2.16	2.77	4.32	6.25	0.58	10.90	0.00	17
Dissolved Oxygen	mg/L	WCA-3	Interior	334	2.57	1.74	1.25	2.17	3.44	0.19	11.20	0.00	9
Dissolved Oxygen	mg/L	WCA-3	Outflow	220	3.45	1.60	2.17	3.34	4.74	0.10	7.14	0.00	1
Dissolved Oxygen	mg/L	Park	Inflow	320	3.47	1.93	1.87	3.36	4.83	0.10	9.06	0.00	5
Dissolved Oxygen	mg/L	Park	Interior	101	5.19	2.56	3.12	4.68	7.09	0.49	10.83	0.00	0

Variable	Units	Area	Class	N	Arithmetic Mean	Std. Deviation	25th Percentile	Median	75th Percentile	Min.	Max.	Percent BDL (%)	Number of Excluded Results
pH	Units	Refuge	Inflow	134	7.48	0.25	7.30	7.44	7.65	6.84	8.14	0.00	2
pH	Units	Refuge	Rim	24	7.59	0.17	7.47	7.62	7.71	7.20	7.83	0.00	0
pH	Units	Refuge	Interior	244	6.87	0.38	6.66	6.88	7.12	5.58	7.73	0.00	0
pH	Units	Refuge	Outflow	65	7.70	0.32	7.47	7.69	7.91	7.08	8.62	0.00	0
pH	Units	WCA-2	Inflow	166	7.55	0.28	7.38	7.53	7.67	6.74	8.62	0.00	0
pH	Units	WCA-2	Interior	268	7.40	0.20	7.27	7.40	7.52	6.56	8.27	0.00	0
pH	Units	WCA-2	Outflow	82	7.43	0.24	7.29	7.38	7.54	6.94	8.07	0.00	0
pH	Units	WCA-3	Inflow	412	7.44	0.28	7.24	7.40	7.61	6.65	8.29	0.00	0
pH	Units	WCA-3	Interior	345	7.25	0.19	7.14	7.25	7.37	6.72	7.77	0.00	0
pH	Units	WCA-3	Outflow	216	7.26	0.18	7.15	7.28	7.38	6.77	7.79	0.00	5
pH	Units	Park	Inflow	319	7.33	0.23	7.18	7.30	7.46	6.77	8.07	0.00	6
pH	Units	Park	Interior	101	7.52	0.30	7.26	7.40	7.76	7.04	8.22	0.00	0
Specific Conductance	µmhos/cm	Refuge	Inflow	134	1061	223	979	1119	1217	450	1429	0.00	2
Specific Conductance	µmhos/cm	Refuge	Rim	24	1093	191	936	1043	1257	776	1432	0.00	0
Specific Conductance	µmhos/cm	Refuge	Interior	244	398	310	139	293	595	74	1263	0.00	0
Specific Conductance	µmhos/cm	Refuge	Outflow	65	866	241	686	875	1047	390	1314	0.00	0
Specific Conductance	µmhos/cm	WCA-2	Inflow	165	1101	214	962	1130	1289	443	1425	0.00	1
Specific Conductance	µmhos/cm	WCA-2	Interior	267	985	294	782	955	1135	479	2707	0.00	0
Specific Conductance	µmho/cm	WCA-2	Outflow	82	871	200	732	855	1054	446	1261	0.00	0
Specific Conductance	µmhos/cm	WCA-3	Inflow	411	729	195	603	715	832	106	1315	0.00	1
Specific Conductance	µmhos/cm	WCA-3	Interior	337	485	152	380	457	559	205	990	0.00	8
Specific Conductance	µmhos/cm	WCA-3	Outflow	221	408	153	264	376	543	190	747	0.00	0
Specific Conductance	µmhos/cm	Park	Inflow	290	459	269	311	490	528	190	4425	0.00	35
Specific Conductance	µmhos/cm	Park	Interior	101	461	154	364	479	536	198	1405	0.00	0
Total Cadmium	µg/L	Refuge	Inflow	4.00	0.36	0.25	<0.30	0.33	0.60	<0.30	0.63	0.50	0
Total Cadmium	µg/L	WCA-2	Inflow	1.00	0.48	N/A	N/A	0.48	N/A	0.48	0.48	0.00	0
Total Cadmium	µg/L	WCA-3	Inflow	13.00	0.34	0.20	<0.30	0.30	0.56	<0.30	0.64	0.46	0
Total Cadmium	µg/L	WCA-3	Outflow	8.00	0.45	0.25	<0.30	0.42	0.66	<0.30	0.86	0.25	0

Variable	Units	Area	Class	N	Arithmetic Mean	Std. Deviation	25th Percentile	Median	75th Percentile	Min.	Max.	Percent BDL (%)	Number of Excluded Results
Total Cadmium	µg/L	Park	Inflow	16.00	0.54	0.33	0.30	0.42	0.89	0.15	1.04	0.19	0
Total Copper	µg/L	Refuge	Inflow	4.00	5.6	1.8	4.3	5.0	7.4	4.1	8.2	0.00	0
Total Copper	µg/L	WCA-2	Inflow	1.00	4.8	N/A	N/A	4.8	N/A	4.8	4.8	0.00	0
Total Copper	µg/L	WCA-3	Inflow	13.00	3.8	1.5	2.4	3.0	5.2	2.2	6.7	0.00	0
Total Copper	µg/L	WCA-3	Outflow	8.00	2.0	1.7	<1.0	1.7	3.0	<1.0	5.6	0.38	0
Total Copper	µg/L	Park	Inflow	16.00	1.8	1.4	<1.0	1.7	2.3	<1.0	5.6	0.38	0
Total Iron	µg/L	Refuge	Inflow	8	119	39	79	123	146	66	179	0.00	0
Total Iron	µg/L	Refuge	Rim	24	11	6	5	12	18	5	20	0.42	0
Total Iron	µg/L	Refuge	Interior	155	30	44	5	7	35	<3	233	0.49	0
Total Iron	µg/L	Refuge	Outflow	22	23	21	8	18	33	3	95	0.00	0
Total Iron	µg/L	WCA-2	Inflow	44	28	21	18	25	31	3	115	0.00	0
Total Iron	µg/L	WCA-2	Interior	128	7	4	5	5	10	<3	23	0.65	0
Total Iron	µg/L	WCA-2	Outflow	8	68	97	20	35	60	10	304	0.00	0
Total Iron	µg/L	WCA-3	Inflow	56	124	147	27	58	158	10	579	0.00	0
Total Iron	µg/L	WCA-3	Interior	148	111	75	51	100	158	2	316	0.01	0
Total Iron	µg/L	WCA-3	Outflow	27	72	33	42	69	97	21	132	0.00	0
Total Iron	µg/L	Park	Inflow	40	125	104	46	87	192	18	380	0.00	0
Total Zinc	µg/L	Refuge	Inflow	4	<4	N/A	<4	<4	<4	<4	<4	1.00	0
Total Zinc	µg/L	WCA-2	Inflow	1	<4	N/A	N/A	<4	N/A	<4	<4	1.00	0
Total Zinc	µg/L	WCA-3	Inflow	13	<4	N/A	<4	<4	<4	<4	<4	1.00	0
Total Zinc	µg/L	WCA-3	Outflow	8	<4	N/A	<4	<4	<4	<4	<4	1.00	0
Total Zinc	µg/L	Park	Inflow	16	<4	N/A	<4	<4	<4	<4	<4	1.00	0
Turbidity	NTU	Refuge	Inflow	80	2.91	1.19	2.23	2.70	3.58	0.74	6.76	0.00	0
Turbidity	NTU	Refuge	Interior	114	1.13	1.56	0.50	0.64	1.00	0.30	12.3	0.00	1
Turbidity	NTU	Refuge	Outflow	65	2.84	2.29	1.35	2.14	3.58	0.60	13.9	0.00	0
Turbidity	NTU	WCA-2	Inflow	80	2.77	2.44	1.00	1.87	4.00	0.50	13.9	0.00	0
Turbidity	NTU	WCA-2	Interior	127	1.23	2.09	0.50	0.69	0.90	0.36	16.4	0.00	0
Turbidity	NTU	WCA-2	Outflow	78	2.15	2.60	0.77	1.08	2.99	0.37	17.3	0.00	0

Variable	Units	Area	Class	N	Arithmetic Mean	Std. Deviation	25th Percentile	Median	75th Percentile	Min.	Max.	Percent BDL (%)	Number of Excluded Results
Turbidity	NTU	WCA-3	Inflow	185	2.51	1.95	1.10	2.10	3.30	0.50	17.3	0.00	0
Turbidity	NTU	WCA-3	Interior	200	0.66	0.46	0.45	0.57	0.71	0.30	5.40	0.00	0
Turbidity	NTU	WCA-3	Outflow	177	1.19	0.88	0.63	0.90	1.40	0.30	7.18	0.00	0
Turbidity	NTU	Park	Inflow	201	1.36	0.80	0.80	1.10	1.89	0.30	4.26	0.00	0
Turbidity	NTU	Park	Interior	100	1.32	1.46	0.56	0.80	1.35	0.29	9.13	0.00	1
Un-ionized ammonia	mg/L	Refuge	Inflow	78	0.0023	0.0022	0.0006	0.0018	0.0034	0.0001	0.0145	0.06	0
Un-ionized ammonia	mg/L	Refuge	Rim	24	0.0011	0.0005	0.0005	0.0011	0.0016	0.0003	0.0020	0.00	0
Un-ionized ammonia	mg/L	Refuge	Interior	223	0.00014	0.0002	0.00002	0.0001	0.0002	0.000002	0.0016	0.40	0
Un-ionized ammonia	mg/L	Refuge	Outflow	65	0.0009	0.0010	0.0003	0.0005	0.0013	0.0001	0.0051	0.14	0
Un-ionized ammonia	mg/L	WCA-2	Inflow	100	0.0054	0.0104	0.0007	0.0018	0.0047	0.0001	0.0641	0.06	0
Un-ionized ammonia	mg/L	WCA-2	Interior	226	0.0008	0.0013	0.0003	0.0005	0.0008	0.00003	0.0121	0.07	0
Un-ionized ammonia	mg/L	WCA-2	Outflow	79	0.0007	0.0008	0.0002	0.0005	0.0009	0.00004	0.0036	0.11	0
Un-ionized ammonia	mg/L	WCA-3	Inflow	213	0.0016	0.0029	0.0004	0.0009	0.0017	0.0001	0.0363	0.08	2
Un-ionized ammonia	mg/L	WCA-3	Interior	311	0.00025	0.0003	0.00008	0.0002	0.0003	0.00001	0.0016	0.31	0
Un-ionized ammonia	mg/L	WCA-3	Outflow	180	0.0006	0.0006	0.0002	0.0004	0.0008	0.00003	0.0038	0.07	0
Un-ionized ammonia	mg/L	Park	Inflow	205	0.0008	0.0009	0.0003	0.0006	0.0010	0.00003	0.0058	0.07	0
Un-ionized ammonia	mg/L	Park	Interior	100	0.0008	0.0008	0.0003	0.0006	0.0010	0.0001	0.0050	0.09	0