

Appendix 2A-1: Summary of Water Year 2005 Water Quality Monitoring Results

Florida Department of Environmental Protection

Table 1. Summary of WY2005 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.

| Variable | Area | Class | Units | Arithmetic Mean | Std. Deviation | 25th Percentile | Median | 75th Percentile | Min. | Max. | N | Number of Excluded Results | Percent BDL (%) |
|------------------|--------|----------|-------------------------|-----------------|----------------|-----------------|--------|-----------------|------|-------|-----|----------------------------|-----------------|
| Alkalinity | Refuge | Inflow | mg CaCO ₃ /L | 213 | 45 | 178 | 210 | 241 | 95 | 305 | 73 | 0 | 0.0 |
| Alkalinity | Refuge | Rim | mg CaCO ₃ /L | 206 | 38 | 182 | 202 | 229 | 151 | 292 | 23 | 0 | 0.0 |
| Alkalinity | Refuge | Interior | mg CaCO ₃ /L | 75 | 63 | 37 | 57 | 98 | 7 | 332 | 193 | 0 | 0.0 |
| Alkalinity | Refuge | Outflow | mg CaCO ₃ /L | 172 | 53 | 135 | 165 | 207 | 44 | 278 | 58 | 0 | 0.0 |
| Alkalinity | WCA-2 | Inflow | mg CaCO ₃ /L | 237 | 71 | 187 | 244 | 299 | 44 | 344 | 104 | 1 | 0.0 |
| Alkalinity | WCA-2 | Interior | mg CaCO ₃ /L | 224 | 55 | 188 | 217 | 257 | 105 | 403 | 171 | 2 | 0.0 |
| Alkalinity | WCA-2 | Outflow | mg CaCO ₃ /L | 217 | 56 | 179 | 214 | 265 | 107 | 338 | 78 | 0 | 0.0 |
| Alkalinity | WCA-3 | Inflow | mg CaCO ₃ /L | 220 | 49 | 192 | 220 | 255 | 94 | 335 | 207 | 3 | 0.0 |
| Alkalinity | WCA-3 | Interior | mg CaCO ₃ /L | 187 | 44 | 157 | 179 | 215 | 76 | 306 | 197 | 0 | 0.0 |
| Alkalinity | WCA-3 | Outflow | mg CaCO ₃ /L | 160 | 46 | 124 | 158 | 199 | 72 | 259 | 138 | 0 | 0.0 |
| Alkalinity | Park | Inflow | mg CaCO ₃ /L | 165 | 43 | 126 | 177 | 198 | 72 | 258 | 141 | 1 | 0.0 |
| Alkalinity | Park | Interior | mg CaCO ₃ /L | 169 | 38 | 142 | 166 | 196 | 90 | 246 | 75 | 0 | 0.0 |
| Chromium VI | WCA-3 | Outflow | µg/L | 6.8 | --- | --- | 6.8 | --- | 6.8 | 6.8 | 1 | 0 | 0.0 |
| Dissolved Oxygen | Refuge | Inflow | mg/L | 3.66 | 2.26 | 1.78 | 3.41 | 5.11 | 0.26 | 10.10 | 128 | 1 | 0.0 |
| Dissolved Oxygen | Refuge | Rim | mg/L | 4.90 | 2.04 | 2.67 | 5.21 | 6.84 | 1.76 | 8.51 | 19 | 0 | 0.0 |
| Dissolved Oxygen | Refuge | Interior | mg/L | 3.42 | 2.00 | 1.75 | 3.16 | 4.97 | 0.10 | 8.81 | 195 | 6 | 0.0 |
| Dissolved Oxygen | Refuge | Outflow | mg/L | 4.94 | 1.96 | 3.32 | 4.71 | 6.13 | 1.04 | 8.68 | 58 | 0 | 0.0 |
| Dissolved Oxygen | WCA-2 | Inflow | mg/L | 4.63 | 1.96 | 3.08 | 4.42 | 6.09 | 1.04 | 9.39 | 158 | 2 | 0.0 |
| Dissolved Oxygen | WCA-2 | Interior | mg/L | 3.80 | 2.59 | 1.62 | 3.53 | 5.46 | 0.12 | 11.90 | 209 | 0 | 0.0 |
| Dissolved Oxygen | WCA-2 | Outflow | mg/L | 4.59 | 2.08 | 2.73 | 4.29 | 5.95 | 1.24 | 9.30 | 74 | 4 | 0.0 |

| Variable | Area | Class | Units | Arithmetic Mean | Std. Deviation | 25th Percentile | Median | 75th Percentile | Min. | Max. | N | Number of Excluded Results | Percent BDL (%) |
|----------------------|--------|----------|----------|-----------------|----------------|-----------------|--------|-----------------|------|-------|-----|----------------------------|-----------------|
| Dissolved Oxygen | WCA-3 | Inflow | mg/L | 4.65 | 2.25 | 2.88 | 4.29 | 6.52 | 0.45 | 10.06 | 386 | 13 | 0.0 |
| Dissolved Oxygen | WCA-3 | Interior | mg/L | 3.69 | 2.08 | 2.27 | 3.39 | 4.71 | 0.22 | 10.10 | 210 | 2 | 0.0 |
| Dissolved Oxygen | WCA-3 | Outflow | mg/L | 4.19 | 1.71 | 2.89 | 3.92 | 5.35 | 1.13 | 10.40 | 185 | 0 | 0.0 |
| Dissolved Oxygen | Park | Inflow | mg/L | 4.47 | 1.96 | 2.89 | 4.25 | 5.72 | 0.23 | 10.40 | 265 | 0 | 0.0 |
| Dissolved Oxygen | Park | Interior | mg/L | 5.08 | 2.43 | 3.31 | 4.85 | 6.72 | 1.32 | 10.40 | 74 | 0 | 0.0 |
| pH | Refuge | Inflow | mg/L | 7.53 | 0.30 | 7.35 | 7.45 | 7.67 | 7.01 | 8.54 | 129 | 0 | 0.0 |
| pH | Refuge | Rim | Units | 7.70 | 0.20 | 7.60 | 7.75 | 7.82 | 7.20 | 8.04 | 23 | 0 | 0.0 |
| pH | Refuge | Interior | Units | 6.69 | 0.49 | 6.39 | 6.76 | 7.05 | 5.02 | 8.02 | 219 | 0 | 0.0 |
| pH | Refuge | Outflow | Units | 7.57 | 0.42 | 7.27 | 7.64 | 7.89 | 6.58 | 8.27 | 58 | 0 | 0.0 |
| pH | WCA-2 | Inflow | Units | 7.62 | 0.26 | 7.49 | 7.61 | 7.76 | 6.58 | 8.21 | 166 | 0 | 0.0 |
| pH | WCA-2 | Interior | Units | 7.44 | 0.33 | 7.29 | 7.44 | 7.58 | 4.82 | 8.70 | 204 | 14 | 0.0 |
| pH | WCA-2 | Outflow | Units | 7.67 | 0.19 | 7.53 | 7.63 | 7.80 | 7.29 | 8.16 | 76 | 2 | 0.0 |
| pH | WCA-3 | Inflow | Units | 7.61 | 0.27 | 7.44 | 7.59 | 7.77 | 6.58 | 8.45 | 402 | 2 | 0.0 |
| pH | WCA-3 | Interior | Units | 7.34 | 0.31 | 7.21 | 7.34 | 7.46 | 4.48 | 8.26 | 198 | 21 | 0.0 |
| pH | WCA-3 | Outflow | Units | 7.29 | 0.27 | 7.10 | 7.25 | 7.41 | 6.85 | 8.37 | 186 | 0 | 0.0 |
| pH | Park | Inflow | Units | 7.39 | 0.31 | 7.17 | 7.33 | 7.58 | 6.85 | 8.37 | 265 | 0 | 0.0 |
| pH | Park | Interior | Units | 7.51 | 0.27 | 7.30 | 7.46 | 7.68 | 7.10 | 8.18 | 75 | 0 | 0.0 |
| Specific Conductance | Refuge | Inflow | µmhos/cm | 890 | 199 | 765 | 884 | 1049 | 300 | 1272 | 125 | 4 | 0.0 |
| Specific Conductance | Refuge | Rim | µmhos/cm | 1182 | 1611 | 719 | 822 | 949 | 654 | 8360 | 22 | 0 | 0.0 |
| Specific Conductance | Refuge | Interior | µmhos/cm | 316 | 233 | 160 | 233 | 433 | 45 | 1243 | 203 | 15 | 0.0 |
| Specific Conductance | Refuge | Outflow | µmhos/cm | 720 | 234 | 517 | 707 | 834 | 142 | 1238 | 56 | 2 | 0.0 |
| Specific Conductance | WCA-2 | Inflow | µmhos/cm | 955 | 259 | 755 | 1002 | 1154 | 142 | 1411 | 165 | 1 | 0.0 |
| Specific Conductance | WCA-2 | Interior | µmhos/cm | 933 | 271 | 776 | 872 | 1061 | 279 | 2317 | 217 | 1 | 0.0 |
| Specific Conductance | WCA-2 | Outflow | µmhos/cm | 857 | 193 | 731 | 888 | 1003 | 420 | 1162 | 78 | 0 | 0.0 |

| Variable | Area | Class | Units | Arithmetic Mean | Std. Deviation | 25th Percentile | Median | 75th Percentile | Min. | Max. | N | Number of Excluded Results | Percent BDL (%) |
|----------------------|--------|----------|----------|-----------------|----------------|-----------------|--------|-----------------|--------|--------|-----|----------------------------|-----------------|
| Specific Conductance | WCA-3 | Inflow | µhmos/cm | 763 | 195 | 647 | 764 | 904 | 293 | 1162 | 401 | 1 | 0.0 |
| Specific Conductance | WCA-3 | Interior | µhmos/cm | 590 | 212 | 429 | 523 | 719 | 269 | 1190 | 215 | 3 | 0.0 |
| Specific Conductance | WCA-3 | Outflow | µhmos/cm | 462 | 193 | 319 | 434 | 613 | 1 | 979 | 176 | 10 | 0.0 |
| Specific Conductance | Park | Inflow | µhmos/cm | 497 | 145 | 373 | 517 | 592 | 3 | 952 | 253 | 12 | 0.0 |
| Specific Conductance | Park | Interior | µhmos/cm | 514 | 174 | 351 | 506 | 650 | 237 | 925 | 75 | 0 | 0.0 |
| Total Antimony | WCA-3 | Outflow | µg/L | <2.8 | --- | --- | <2.8 | --- | <2.8 | <2.8 | 1 | 0 | 100.0 |
| Total Arsenic | WCA-3 | Outflow | µg/L | <2 | --- | --- | <2 | --- | <2 | <2 | 1 | 0 | 100.0 |
| Total Iron | Refuge | Inflow | µg/L | 269 | 255 | 131 | 156 | 351 | 97 | 858 | 8 | 0 | 0.0 |
| Total Iron | Refuge | Rim | µg/L | 14 | <10 | <10 | 12 | 17 | <10 | 40 | 24 | 0 | 29.2 |
| Total Iron | Refuge | Interior | µg/L | 29 | 43 | <10 | <10 | 30 | <10 | 187 | 132 | 0 | 47.7 |
| Total Iron | Refuge | Outflow | µg/L | 88 | 80 | 22 | 65 | 138 | <10 | 248 | 17 | 2 | 0.0 |
| Total Iron | WCA-2 | Inflow | µg/L | 47 | 64 | 10 | 16 | 59 | <10 | 248 | 44 | 0 | 25.0 |
| Total Iron | WCA-2 | Interior | µg/L | 10 | 13 | <10 | <10 | 11 | <10 | 111 | 107 | 0 | 63.6 |
| Total Iron | WCA-2 | Outflow | µg/L | 30 | 19 | 12 | 26 | 46 | 10 | 65 | 10 | 0 | 0.0 |
| Total Iron | WCA-3 | Inflow | µg/L | 97 | 116 | 28 | 56 | 129 | <10 | 659 | 68 | 0 | 2.9 |
| Total Iron | WCA-3 | Interior | µg/L | 124 | 81 | 58 | 123 | 167 | <10 | 402 | 97 | 1 | 1.0 |
| Total Iron | WCA-3 | Outflow | µg/L | 96 | 44 | 69 | 90 | 122 | 18 | 203 | 35 | 0 | 0.0 |
| Total Iron | Park | Inflow | µg/L | 147 | 144 | 67 | 98 | 171 | 18 | 833 | 46 | 0 | 0.0 |
| Total Selenium | WCA-3 | Outflow | µg/L | <4 | --- | --- | <4 | --- | <4 | <4 | 1 | 0 | 100.0 |
| Total Silver | WCA-3 | Outflow | µg/L | <0.017 | --- | --- | <0.017 | --- | <0.017 | <0.017 | 1 | 0 | 100.0 |
| Total Thallium | WCA-3 | Outflow | µg/L | 0.26 | --- | --- | 0.26 | --- | 0.26 | 0.26 | 1 | 0 | 0.0 |
| Turbidity | Refuge | Inflow | NTU | 4.24 | 3.20 | 2.00 | 3.60 | 5.25 | 0.70 | 15.3 | 73 | 0 | 0.0 |
| Turbidity | Refuge | Interior | NTU | 1.17 | 2.58 | 0.50 | 0.70 | 1.00 | 0.30 | 25.5 | 97 | 0 | 0.0 |
| Turbidity | Refuge | Outflow | NTU | 6.58 | 9.82 | 1.60 | 3.70 | 7.35 | 0.80 | 55.8 | 57 | 1 | 0.0 |

| Variable | Area | Class | Units | Arithmetic Mean | Std. Deviation | 25th Percentile | Median | 75th Percentile | Min. | Max. | N | Number of Excluded Results | Percent BDL (%) |
|--------------------|--------|----------|-------|-----------------|----------------|-----------------|---------|-----------------|-----------|--------|-----|----------------------------|-----------------|
| Turbidity | WCA-2 | Inflow | NTU | 4.62 | 8.59 | 1.10 | 1.80 | 4.42 | 0.60 | 55.8 | 80 | 0 | 0.0 |
| Turbidity | WCA-2 | Interior | NTU | 1.52 | 2.67 | 0.60 | 0.90 | 1.50 | 0.40 | 23.2 | 77 | 1 | 0.0 |
| Turbidity | WCA-2 | Outflow | NTU | 2.07 | 1.62 | 1.00 | 1.60 | 2.55 | 0.40 | 8.80 | 77 | 1 | 0.0 |
| Turbidity | WCA-3 | Inflow | NTU | 2.79 | 2.20 | 1.40 | 2.40 | 3.40 | 0.50 | 15.90 | 185 | 2 | 0.0 |
| Turbidity | WCA-3 | Interior | NTU | 0.98 | 0.93 | 0.50 | 0.70 | 1.08 | 0.30 | 7.20 | 116 | 0 | 0.0 |
| Turbidity | WCA-3 | Outflow | NTU | 2.06 | 2.77 | 0.90 | 1.20 | 2.18 | 0.50 | 25.1 | 148 | 1 | 0.0 |
| Turbidity | Park | Inflow | NTU | 2.15 | 2.78 | 0.90 | 1.30 | 2.30 | 0.50 | 25.1 | 165 | 2 | 0.0 |
| Turbidity | Park | Interior | NTU | 2.18 | 3.08 | 0.50 | 1.10 | 2.10 | 0.30 | 15.0 | 75 | 0 | 0.0 |
| Un-Ionized Ammonia | Refuge | Inflow | mg/L | 0.0029 | 0.0022 | 0.00099 | 0.0024 | 0.0045 | 0.000038 | 0.0083 | 70 | 3 | 7.1 |
| Un-Ionized Ammonia | Refuge | Rim | mg/L | 0.0017 | 0.0012 | 0.00047 | 0.0017 | 0.0023 | 0.00025 | 0.0045 | 22 | 0 | 0.0 |
| Un-Ionized Ammonia | Refuge | Interior | mg/L | 0.0004 | 0.0024 | 0.000018 | 0.0001 | 0.00016 | 0.0000003 | 0.033 | 187 | 1 | 19.3 |
| Un-Ionized Ammonia | Refuge | Outflow | mg/L | 0.0017 | 0.0016 | 0.00064 | 0.0013 | 0.0025 | 0.00010 | 0.0068 | 55 | 3 | 0.0 |
| Un-Ionized Ammonia | WCA-2 | Inflow | mg/L | 0.0063 | 0.012 | 0.0012 | 0.0022 | 0.0039 | 0.000049 | 0.059 | 98 | 7 | 2.0 |
| Un-Ionized Ammonia | WCA-2 | Interior | mg/L | 0.0012 | 0.0037 | 0.00027 | 0.00049 | 0.0009 | 0.0000006 | 0.041 | 154 | 6 | 3.2 |
| Un-Ionized Ammonia | WCA-2 | Outflow | mg/L | 0.0021 | 0.0026 | 0.00083 | 0.0014 | 0.0024 | 0.00010 | 0.016 | 68 | 8 | 2.9 |
| Un-Ionized Ammonia | WCA-3 | Inflow | mg/L | 0.0024 | 0.0029 | 0.00079 | 0.0015 | 0.0026 | 0.000098 | 0.023 | 204 | 13 | 7.8 |
| Un-Ionized Ammonia | WCA-3 | Interior | mg/L | 0.00046 | 0.0006 | 0.00015 | 0.00026 | 0.00049 | 0.0000011 | 0.0040 | 164 | 5 | 12.2 |
| Un-Ionized Ammonia | WCA-3 | Outflow | mg/L | 0.0011 | 0.0017 | 0.00019 | 0.00043 | 0.0011 | 0.000026 | 0.0082 | 146 | 4 | 9.6 |
| Un-Ionized Ammonia | Park | Inflow | mg/L | 0.0014 | 0.0018 | 0.00021 | 0.00063 | 0.0022 | 0.000026 | 0.0081 | 163 | 4 | 8.6 |
| Un-Ionized Ammonia | Park | Interior | mg/L | 0.0011 | 0.0017 | 0.00032 | 0.00058 | 0.0012 | 0.000054 | 0.012 | 75 | 0 | 12.0 |