# REFUGE'S ENHANCED WATER QUALITY PROGRAM
# MONTHLY SAMPLING

*July through September, 2015 Data Update*
Submitted October 15, 2015

*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** **Jul-15**
**Enhanced Water Quality Monitoring Network**

| Site | Sample Date | Full(F), Partial(P), None(N), Reanalyzer (R) | Depth[1] | Total Depth[2] | DCS[3] | Alkalinity | Calcium Dissolved | Carbon, Dissolved Organic | Carbon, Total Organic | Chloride | Conductivity (Field) | Nitrate + Nitrite as Nitrogen | Nitrogen, Total Kjeldahl | Ortho-phosphate as Phosphorus | Oxygen, Dissolved (Field) | pH (Field) | Phosphorus, Total | Silica | Solids, Total Dissolv | Solids, Total Suspended (TSS) | Sulfate | Temperature (Field) | Turbidity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Units | meter | meter | meter | mg/l | mg/l | mg/l | mg/l | mg/l | µMHSO/cm | mg/l | mg/l | mg/l | mg/l | pH units | mg/l | mg/l | mg/l | mg/l | mg/l | DEG C | NTU |
| A101 | | N | | | | | | | | | | | | | | | | | | | | | |
| A102 | | N | | | | | | | | | | | | | | | | | | | | | |
| A103 | | N | | | | | | | | | | | | | | | | | | | | | |
| A104 | 07/14/15 | F | >1M | >1M | >1M | 148 | 45 | 24 | 23 | 121 | 768 | 0.074 | 1.5 | 0.006 | 5.4 | 7.8 | 0.025 | 8.9 | 450 | U | 33.9 | 30.8 | 2.8 |
| A105 | | N | | | | | | | | | | | | | | | | | | | | | |
| A106 | | N | | | | | | | | | | | | | | | | | | | | | |
| A107 | | N | | | | | | | | | | | | | | | | | | | | | |
| A108 | | N | | | | | | | | | | | | | | | | | | | | | |
| A109 | | N | | | | | | | | | | | | | | | | | | | | | |
| A110 | | N | | | | | | | | | | | | | | | | | | | | | |
| A111 | | N | | | | | | | | | | | | | | | | | | | | | |
| A112 | | N | | | | | | | | | | | | | | | | | | | | | |
| A113 | | N | | | | | | | | | | | | | | | | | | | | | |
| A114 | | N | | | | | | | | | | | | | | | | | | | | | |
| A115 | 07/14/15 | F | >1M | >1M | >1M | 139 | 41 | 24 | 24 | 89 | 631 | 0.023 | 1.3 | 0.016 | 4.9 | 7.7 | 0.015 | 11.0 | 372 | U | 27.9 | 30.3 | 1.3 |
| A117 | | N | | | | | | | | | | | | | | | | | | | | | |
| A118 | | N | | | | | | | | | | | | | | | | | | | | | |
| A119 | | N | | | | | | | | | | | | | | | | | | | | | |
| A120 | | N | | | | | | | | | | | | | | | | | | | | | |
| A122 | | N | | | | | | | | | | | | | | | | | | | | | |
| A124 | | N | | | | | | | | | | | | | | | | | | | | | |
| A126 | | N | | | | | | | | | | | | | | | | | | | | | |
| A127 | | N | | | | | | | | | | | | | | | | | | | | | |
| A128 | | N | | | | | | | | | | | | | | | | | | | | | |
| A129 | 07/14/15 | F | >1M | >1M | >1M | 150 | 52 | 23 | 22 | 197 | 1041 | 0.059 | 1.4 | 0.004 | 3.3 | 7.6 | 0.017 | 6.9 | 577 | U | 42.9 | 30.9 | 1.9 |
| A130 | | N | | | | | | | | | | | | | | | | | | | | | |
| A131 | | N | | | | | | | | | | | | | | | | | | | | | |
| A132 | 07/14/15 | F | >1M | >1M | >1M | 161 | 53 | 22 | 22 | 206 | 1113 | 0.116 | 1.4 | 0.004 | 3.0 | 7.5 | 0.016 | 7.7 | 622 | U | 46.4 | 31.1 | 2.0 |
| A133 | | N | | | | | | | | | | | | | | | | | | | | | |
| A134 | | N | | | | | | | | | | | | | | | | | | | | | |
| A135 | 07/14/15 | F | >1M | >1M | >1M | 150 | 49 | 24 | 24 | 199 | 1051 | 0.085 | 1.5 | 0.005 | 3.4 | 7.6 | 0.018 | 7.3 | 592 | U | 41.1 | 31.3 | 2.6 |
| A136 | | N | | | | | | | | | | | | | | | | | | | | | |
| A137 | | N | | | | | | | | | | | | | | | | | | | | | |
| A138 | | N | | | | | | | | | | | | | | | | | | | | | |
| A139 | | N | | | | | | | | | | | | | | | | | | | | | |
| A140 | | N | | | | | | | | | | | | | | | | | | | | | |
| A141 | | N | | | | | | | | | | | | | | | | | | | | | |
| Total | | 37 | | | | | | | | | | | | | | | | | | | | | |
| Full | | 5 | | | | | | | | | | | | | | | | | | | | | |
| Partial | | 0 | | | | | | | | | | | | | | | | | | | | | |
| None | | 32 | | | | | | | | | | | | | | | | | | | | | |

(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.
*The analyte was detected in both the sample and the associated method blank*

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** **Aug-15**
**Enhanced Water Quality Monitoring Network**

| Site | Sample Date | Full(F), Partial(P), None(N), Reanalyzer (R) | Depth[1] | Total Depth[2] | DCS[3] | Alkalinity | Calcium Dissolved | Carbon, Dissolved Organic | Carbon, Total Organic | Chloride | Conductivity (Field) | Nitrate + Nitrite as Nitrogen | Nitrogen, Total Kjeldahl | Ortho-phosphate as Phosphorus | Oxygen, Dissolved (Field) | pH (Field) | Phosphorus, Total | Silica | Solids, Total Dissolv | Solids, Total Suspended (TSS) | Sulfate | Temperature (Field) | Turbidity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Units | meter | meter | meter | mg/l | mg/l | mg/l | mg/l | mg/l | µMHSO/cm | mg/l | mg/l | mg/l | mg/l | pH units | mg/l | mg/l | mg/l | mg/l | mg/l | DEG C | NTU |
| A101 | | N | | | | | | | | | | | | | | | | | | | | | |
| A102 | | N | | | | | | | | | | | | | | | | | | | | | |
| A103 | | N | | | | | | | | | | | | | | | | | | | | | |
| A104 | 08/12/15 | F | >1M | >1M | >1M | 152 | 50 | 17 | 18 | 119 | 746 | U | 1.3 | 0.002 | 5.9 | 7.9 | 0.020 | 9.0 | 438 | U | 29.8 | 32.5 | 1.7 |
| A105 | | N | | | | | | | | | | | | | | | | | | | | | |
| A106 | | N | | | | | | | | | | | | | | | | | | | | | |
| A107 | | N | | | | | | | | | | | | | | | | | | | | | |
| A108 | | N | | | | | | | | | | | | | | | | | | | | | |
| A109 | 08/11/15 | P | 0.05 | 0.10 | 0.21 | | | | | 22 | 178 | | | | 4.0 | 6.6 | 0.012 | | | U | 1.3 | 29.6 | |
| A110 | 08/11/15 | P | 0.05 | 0.10 | 0.13 | | | | | 23 | 135 | | | | 4.4 | 6.3 | 0.004 | | | U | 0.8 | 28.5 | |
| A111 | | N | | | | | | | | | | | | | | | | | | | | | |
| A112 | | N | | | | | | | | | | | | | | | | | | | | | |
| A113 | | N | | | | | | | | | | | | | | | | | | | | | |
| A114 | | N | | | | | | | | | | | | | | | | | | | | | |
| A115 | 08/12/15 | F | >1M | >1M | >1M | 156 | 49 | 22 | 22 | 163 | 924 | 0.072 | 1.7 | 0.003 | 5.2 | 7.9 | 0.018 | 9.0 | 546 | U | 39.4 | 31.8 | 1.0 |
| A117 | | N | | | | | | | | | | | | | | | | | | | | | |
| A118 | | N | | | | | | | | | | | | | | | | | | | | | |
| A119 | 08/12/15 | P | 0.10 | 0.24 | 0.24 | | | | | 34 | 217 | | | | 4.4 | 6.5 | 0.015 | | | U | 0.8 | 34.3 | |
| A120 | 08/12/15 | P | 0.07 | 0.15 | 0.27 | | | | | 35 | 208 | | | | 5.3 | 6.5 | 0.011 | | | U | U | 31.8 | |
| A122 | | N | | | | | | | | | | | | | | | | | | | | | |
| A124 | | N | | | | | | | | | | | | | | | | | | | | | |
| A126 | 08/12/15 | P | 0.09 | 0.18 | 0.19 | | | | | 34 | 246 | | | | 5.0 | 6.5 | 0.009 | | | U | 2.9 | 29.2 | |
| A127 | 08/12/15 | P | 0.07 | 0.13 | 0.20 | | | | | 21 | 128 | | | | 7.1 | 6.6 | 0.015 | | | U | U | 29.6 | |
| A128 | | N | | | | | | | | | | | | | | | | | | | | | |
| A129 | 08/12/15 | F | >1M | >1M | >1M | 95 | 48 | 25 | 26 | 85 | 625 | 0.015 | 1.7 | 0.005 | 2.2 | 6.9 | 0.051 | 7.9 | 394 | U | 75.1 | 29.6 | 1.6 |
| A130 | 08/10/15 | F | 0.10 | 0.20 | 0.22 | 85 | 32 | 34 | 34 | 66 | 358 | U | 2.0 | 0.002 | 2.2 | 6.6 | 0.014 | 12.2 | 288 | U | 13 | 28.6 | 1.3 |
| A131 | 08/10/15 | P | 0.09 | 0.19 | 0.27 | | | | | 37 | 220 | | | | 3.5 | 6.9 | 0.008 | | | U | 1.4 | 28.6 | |
| A132 | 08/12/15 | F | >1M | >1M | >1M | 128 | 49 | 19 | 20 | 103 | 666 | U | 1.5 | 0.006 | 3.9 | 7.3 | 0.042 | 8.5 | 408 | U | 40.9 | 30.5 | 1.4 |
| A133 | 08/10/15 | P | 0.07 | 0.14 | 0.20 | | | | | 90 | 520 | | | | 1.0 | 6.4 | 0.036 | | | U | 21.7 | 26.0 | |
| A134 | 08/10/15 | P | 0.07 | 0.15 | 0.20 | | | | | 56 | 371 | | | | 2.8 | 6.6 | 0.017 | | | U | 8.4 | 28.6 | |
| A135 | 08/12/15 | F | >1M | >1M | >1M | 160 | 52 | 17 | 18 | 127 | 767 | 0.012 | 1.3 | 0.003 | 5.0 | 7.6 | 0.025 | 10.7 | 451 | U | 29.9 | 31.7 | 1.4 |
| A136 | | N | | | | | | | | | | | | | | | | | | | | | |
| A137 | | N | | | | | | | | | | | | | | | | | | | | | |
| A138 | | N | | | | | | | | | | | | | | | | | | | | | |
| A139 | | N | | | | | | | | | | | | | | | | | | | | | |
| A140 | | N | | | | | | | | | | | | | | | | | | | | | |
| A141 | 08/12/15 | F | >1M | >1M | >1M | 66 | 19 | 21 | 21 | 36 | 265 | U | 1.4 | 0.003 | 2.5 | 6.8 | 0.017 | 12.9 | 184 | U | 1.4 | 31.5 | 0.5 |
| Total | | 37 | | | | | | | | | | | | | | | | | | | | | |
| Full | | 7 | | | | | | | | | | | | | | | | | | | | | |
| Partial | | 9 | | | | | | | | | | | | | | | | | | | | | |
| None | | 21 | | | | | | | | | | | | | | | | | | | | | |

(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.
*The analyte was detected in both the sample and the associated method blank*

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Data from June 2004 to May 2006 available on DBHYDRO:
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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** **Sep-15**
**Enhanced Water Quality Monitoring Network**

| Site | Sample Date | Full(F), Partial(P), None(N), Reanalyzer (R) | Depth[1] | Total Depth[2] | DCS[3] | Alkalinity | Calcium Dissolved | Carbon, Dissolved Organic | Carbon, Total Organic | Chloride | Conductivity (Field) | Nitrate + Nitrite as Nitrogen | Nitrogen, Total Kjeldahl | Ortho-phosphate as Phosphorus | Oxygen, Dissolved (Field) | pH (Field) | Phosphorus, Total | Silica | Solids, Total Dissolv | Solids, Total Suspended (TSS) | Sulfate | Temperature (Field) | Turbidity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Units | meter | meter | meter | mg/l | mg/l | mg/l | mg/l | mg/l | µMHSO/cm | mg/l | mg/l | mg/l | mg/l | pH units | mg/l | mg/l | mg/l | mg/l | mg/l | DEG C | NTU |
| A101 | 09/08/15 | F | 0.10 | 0.20 | 0.27 | 155 | 48 | 22 | 23 | 87 | 617 | U | 1.5 | *0.011* | 1.4 | 6.9 | 0.046 | 16.9 | 446 | U | 9.7 | 26.6 | 0.6 |
| A102 | 09/08/15 | P | 0.12 | 0.14 | 0.17 | | | | | 78 | 507 | | | | 2.4 | 6.7 | *0.032* | | | U | 34.9 | 29.2 | |
| A103 | 09/08/15 | P | 0.08 | 0.17 | 0.19 | | | | | 20 | 143 | | | | 3.5 | 6.5 | *0.028* | | | U | 1.8 | 28.8 | |
| A104 | 09/09/15 | F | >1M | >1M | >1M | 157 | 54 | 14 | 15 | 94 | 676 | U | 1.0 | *0.003* | 2.5 | 7.4 | 0.024 | 12.4 | 402 | U | 27 | 29.9 | 1.3 |
| A105 | 09/08/15 | F | 0.12 | 0.25 | 0.31 | 138 | 46 | 30 | 31 | 124 | 747 | 0.810 | 1.8 | *0.010* | 1.8 | 6.8 | 0.044 | 20.2 | 516 | U | 22.4 | 29.9 | 0.8 |
| A106 | 09/08/15 | F | 0.10 | 0.21 | 0.23 | 110 | 38 | 32 | 32 | 96 | 584 | 0.380 | 2.0 | *0.005* | 3.0 | 6.7 | *0.024* | 12.6 | 434 | U | 13.9 | 29.9 | 1.6 |
| A107 | 09/08/15 | P | 0.06 | 0.11 | 0.15 | | | | | 20 | 146 | | | | 3.8 | 6.6 | *0.013* | | | U | 1 | 28.4 | |
| A108 | 09/08/15 | P | 0.06 | 0.12 | 0.18 | | | | | 19 | 171 | | | | 6.7 | 6.7 | *0.012* | | | U | U | 31.1 | |
| A109 | 09/09/15 | F | 0.18 | 0.30 | 0.41 | 36 | 9 | 15 | 14 | 10 | 114 | U | 0.9 | U | 2.7 | 6.6 | 0.013 | 6.1 | 130 | U | 1.2 | 29.8 | 0.6 |
| A110 | 09/09/15 | F | 0.09 | 0.19 | 0.31 | 27 | 8 | 17 | 17 | 14 | 106 | U | 1.3 | *0.003* | 3.6 | 6.5 | 0.013 | 4.4 | 91 | U | U | 29.8 | 1.6 |
| A111 | 09/09/15 | F | 0.15 | 0.30 | 0.37 | 32 | 8 | 19 | 18 | 13 | 133 | 0.002 | 1.2 | *0.006* | 3.3 | 6.5 | 0.019 | 5.0 | 98 | U | 0.8 | 30.1 | 1.3 |
| A112 | 09/09/15 | F | 0.15 | 0.30 | 0.38 | 39 | 11 | 18 | 18 | 17 | 144 | U | 1.1 | *0.004* | 2.8 | 6.6 | 0.014 | 5.8 | 110 | U | 1.1 | 29.2 | 0.8 |
| A113 | 09/09/15 | P | 0.09 | 0.19 | 0.30 | | | | | 17 | 120 | | | | 6.2 | 6.7 | 0.014 | | | U | U | 31.6 | |
| A114 | 09/09/15 | F | 0.12 | 0.25 | 0.37 | 24 | 6 | 18 | 19 | 13 | 101 | U | 1.2 | *0.005* | 4.2 | 6.4 | 0.013 | 3.8 | 86 | U | U | 31.4 | 0.9 |
| A115 | 09/09/15 | F | >1M | >1M | >1M | 171 | 53 | 22 | 22 | 118 | 819 | 0.019 | 1.5 | *0.007* | 2.9 | 7.5 | 0.027 | 20.5 | 500 | U | 44.6 | 30.1 | 1.0 |
| A117 | 09/10/15 | F | 0.12 | 0.25 | 0.34 | 132 | 38 | 24 | 25 | 91 | 604 | U | 1.4 | *0.006* | 0.9 | 6.8 | *0.025* | 16.8 | 399 | U | 22.2 | 29.5 | 1.0 |
| A118 | 09/10/15 | F | 0.16 | 0.32 | 0.43 | 78 | 20 | 21 | 21 | 41 | 305 | U | 1.2 | *0.004* | 2.6 | 6.7 | *0.015* | 12.8 | 245 | U | 4 | 29.8 | 0.6 |
| A119 | 09/10/15 | F | 0.14 | 0.28 | 0.40 | 34 | 10 | 18 | 19 | 17 | 131 | U | 1.3 | *0.004* | 1.8 | 6.3 | 0.011 | 8.5 | 135 | U | 0.7 | 29.8 | 1.1 |
| A120 | 09/10/15 | F | 0.17 | 0.34 | 0.42 | 22 | 7 | 17 | 18 | 20 | 116 | U | 1.3 | *0.004* | 3.0 | 6.3 | *0.010* | 5.8 | 112 | U | U | 29.8 | 1.2 |
| A122 | 09/10/15 | F | 0.16 | 0.32 | 0.39 | 126 | 39 | 24 | 26 | 79 | 545 | U | 1.3 | *0.005* | 1.7 | 6.8 | *0.018* | 12.6 | 371 | U | 14.9 | 29.0 | 0.9 |
| A124 | 09/09/15 | F | 0.10 | 0.21 | 0.29 | 41 | 14 | 21 | 21 | 52 | 278 | U | 1.3 | *0.021* | 0.3 | 6.2 | 0.050 | 8.9 | 193 | U | 3.5 | 28.3 | 1.4 |
| A126 | 09/10/15 | F | 0.17 | 0.34 | 0.41 | 128 | 43 | 15 | 16 | 72 | 515 | U | 1.0 | *0.004* | 1.8 | 6.7 | *0.013* | 9.4 | 345 | U | 14.8 | 27.9 | 0.7 |
| A127 | 09/10/15 | F | 0.18 | 0.36 | 0.38 | 23 | 8 | 21 | 22 | 16 | 105 | U | 1.7 | *0.003* | 3.8 | 6.6 | *0.010* | 5.6 | 126 | U | U | 29.7 | 1.2 |
| A128 | 09/09/15 | P | 0.09 | 0.19 | 0.31 | | | | | 14 | 95 | | | | 5.6 | 6.3 | 0.011 | | | U | U | 31.3 | |
| A129 | 09/09/15 | F | >1M | >1M | >1M | 169 | 66 | 12 | 12 | 88 | 685 | 0.016 | 0.8 | *0.007* | 2.7 | 7.4 | 0.017 | 10.5 | 401 | U | 28.1 | 29.7 | 1.2 |
| A130 | 09/07/15 | F | 0.16 | 0.31 | 0.38 | 78 | 26 | 32 | 33 | 54 | 349 | *0.005* | 1.7 | *0.003* | 1.6 | 6.8 | *0.023* | 9.3 | 251 | U | 2.3 | 27.8 | 0.8 |
| A131 | 09/07/15 | F | 0.15 | 0.29 | 0.34 | 43 | 15 | 32 | 31 | 30 | 202 | U | 1.9 | *0.006* | 2.7 | 7.1 | *0.013* | 6.9 | 172 | U | 1.1 | 28.8 | 0.6 |
| A132 | 09/09/15 | F | >1M | >1M | >1M | 175 | 70 | 11 | 12 | 85 | 683 | 0.015 | 0.8 | *0.005* | 4.7 | 7.5 | 0.019 | 9.9 | 392 | U | 28.6 | 30.5 | 2.0 |
| A133 | 09/07/15 | F | 0.12 | 0.24 | 0.39 | 117 | 38 | 18 | 18 | 71 | 489 | U | 1.1 | *0.003* | 1.3 | 6.9 | *0.029* | 10.5 | 308 | U | 9 | 27.7 | 1.1 |
| A134 | 09/07/15 | F | 0.15 | 0.39 | 0.42 | 114 | 39 | 18 | 18 | 71 | 493 | U | 1.2 | *0.003* | 1.9 | 7.0 | *0.016* | 10.6 | 298 | U | 10.4 | 29.2 | 0.6 |
| A135 | 09/09/15 | F | >1M | >1M | >1M | 176 | 68 | 12 | 13 | 89 | 699 | 0.010 | 0.9 | *0.007* | 4.0 | 7.4 | 0.017 | 11.2 | 401 | 6 | 29.8 | 30.2 | 2.4 |
| A136 | 09/07/15 | F | 0.14 | 0.28 | 0.49 | 140 | 49 | 15 | 15 | 74 | 553 | *0.003* | 1.1 | U | 1.3 | 7.0 | 0.032 | 10.2 | 339 | U | 16.2 | 28.7 | 1.2 |
| A137 | 09/07/15 | F | 0.17 | 0.34 | 0.41 | 124 | 40 | 20 | 20 | 76 | 524 | U | 1.3 | U | 3.5 | 7.0 | *0.019* | 12.0 | 330 | U | 10.6 | 29.6 | 0.5 |
| A138 | 09/07/15 | F | 0.15 | 0.30 | 0.36 | 45 | 20 | 34 | 35 | 45 | 264 | *0.002* | 2.2 | U | 4.4 | 6.8 | *0.017* | 12.0 | 212 | U | 4.5 | 30.3 | 1.0 |
| A139 | 09/07/15 | F | 0.11 | 0.22 | 0.29 | 14 | 9 | 34 | 34 | 15 | 101 | U | 2.1 | U | 6.9 | 6.5 | *0.012* | 1.2 | 130 | U | 1.5 | 30.2 | 1.5 |
| A140 | 09/08/15 | F | 0.11 | 0.23 | 0.27 | 109 | 37 | 23 | 23 | 82 | 512 | U | 1.5 | *0.006* | 1.4 | 6.8 | *0.021* | 13.8 | 373 | U | 8.6 | 27.5 | 0.6 |
| A141 | 09/10/15 | F | >1M | >1M | >1M | 121 | 35 | 21 | 23 | 85 | 546 | U | 1.3 | *0.005* | 1.4 | 6.8 | *0.013* | 12.6 | 374 | U | 18.4 | 29.1 | 0.5 |
| Total | | 37 | | | | | | | | | | | | | | | | | | | | | |
| Full | | 31 | | | | | | | | | | | | | | | | | | | | | |
| Partial | | 6 | | | | | | | | | | | | | | | | | | | | | |
| 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.
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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**

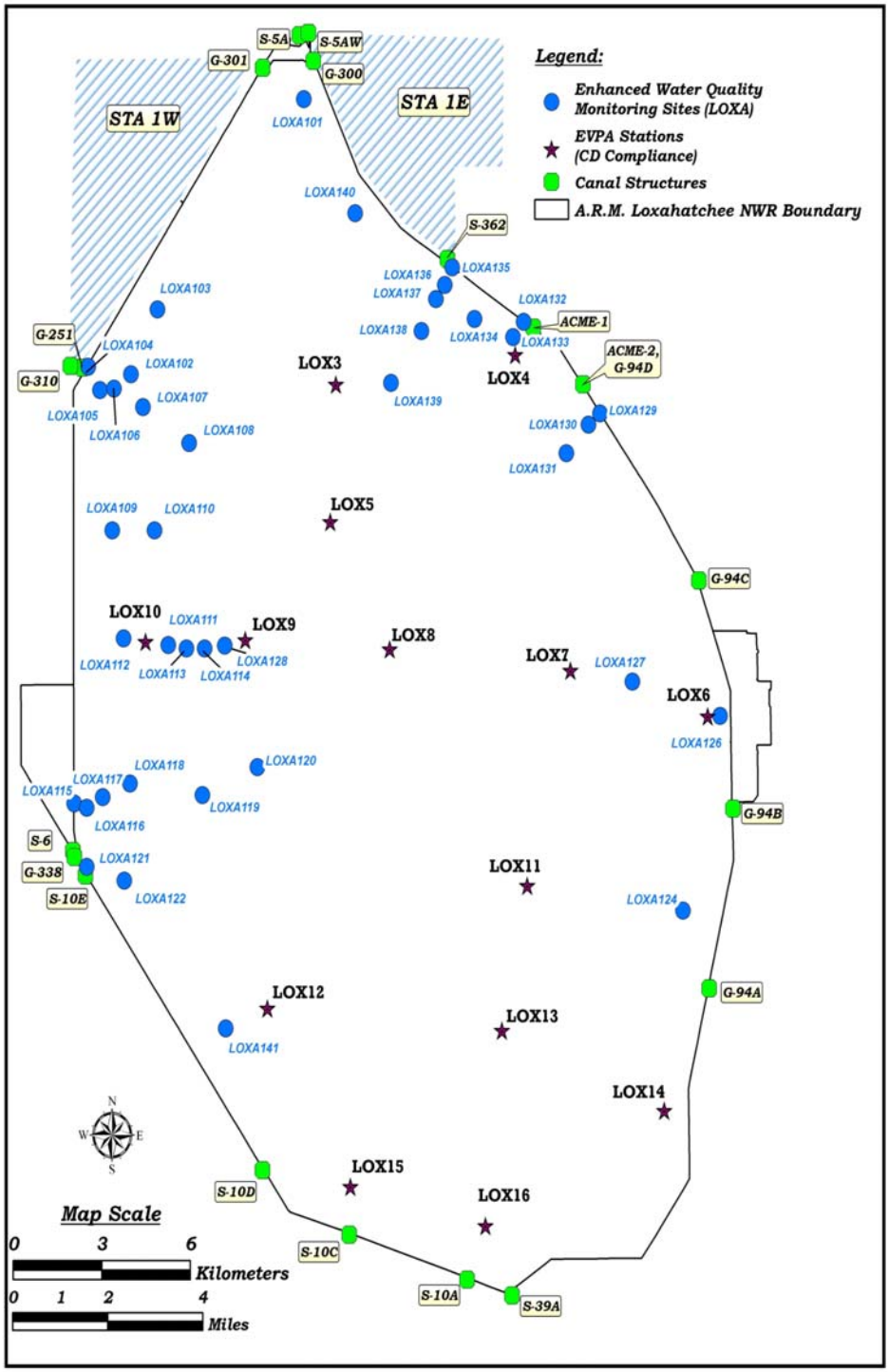
Parameter Information:

| Parameter | Units | Analysis Method | MDL |
|---|---|---|---|
| Alkalinity as $CaCO_3$, Total | mg/L | 310.1 | 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:**



## 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