

## Comparative Study of Kosciusko County Lake Water Quality

*Supplemental Report for Lake Papakeeche*

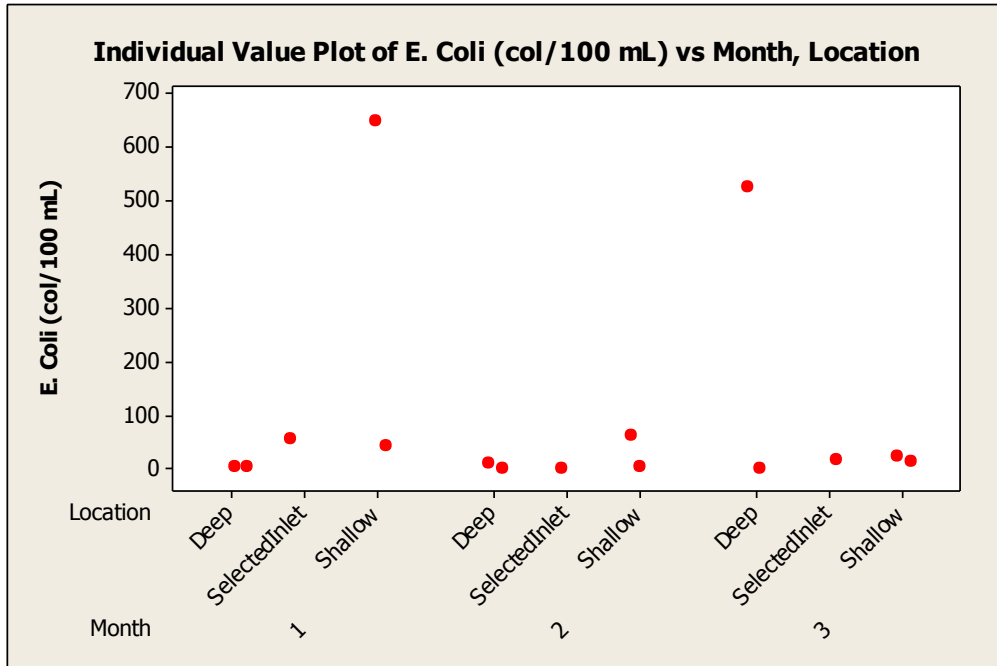
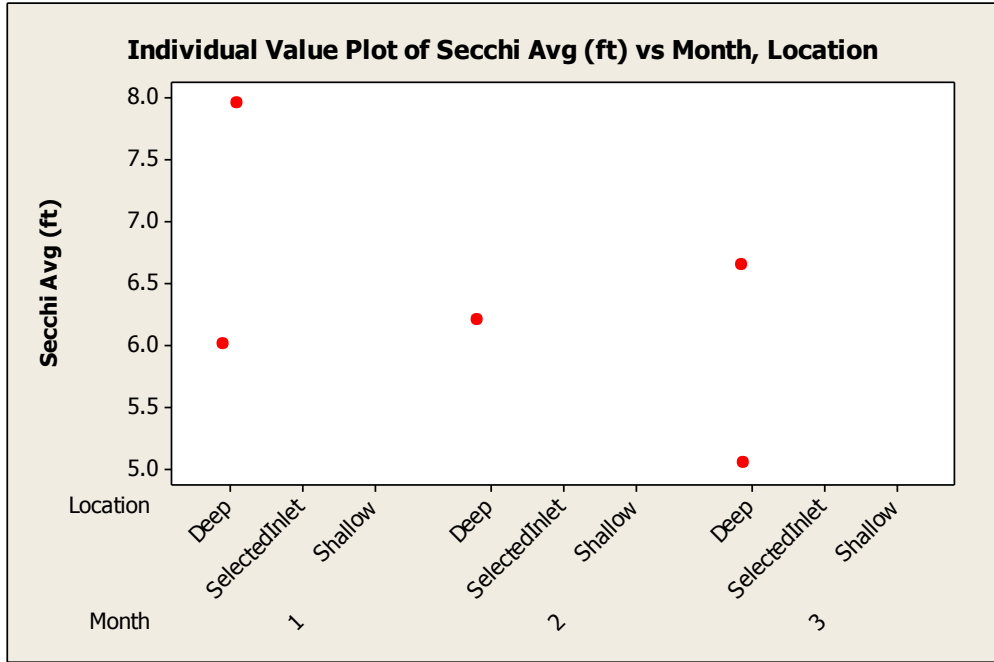
This report is intended to supplement the *Comparative Study of Kosciusko County Lake Water Quality* report. In particular, maps of sampling locations, graphical presentations of individual water quality measurements, and raw data are given. Average measurements and comparisons can be found in the full *Comparative Study* report.

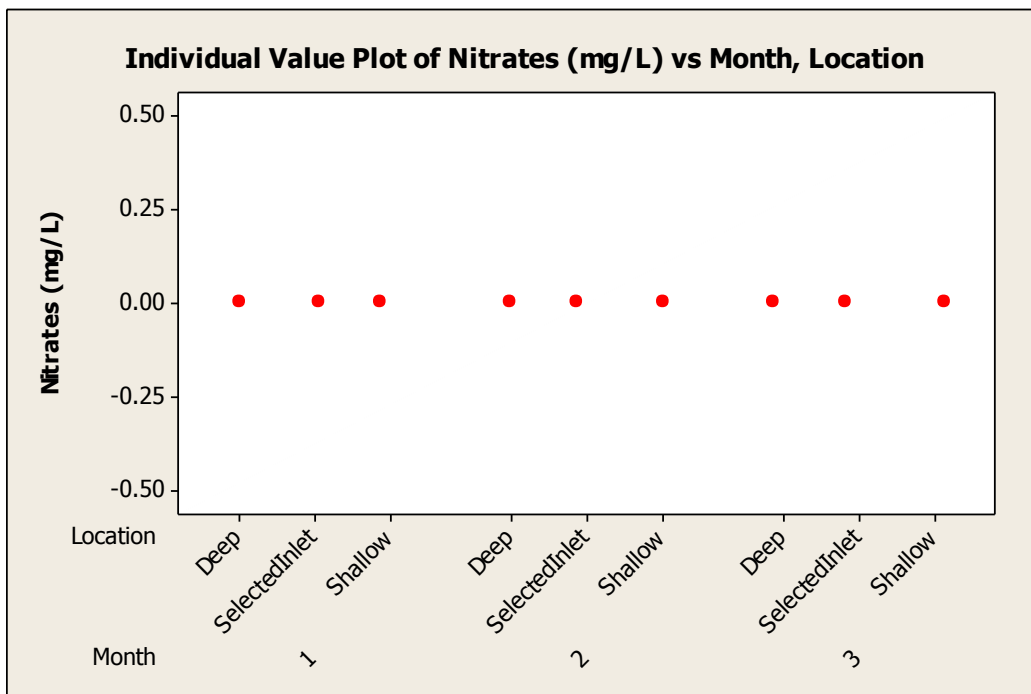
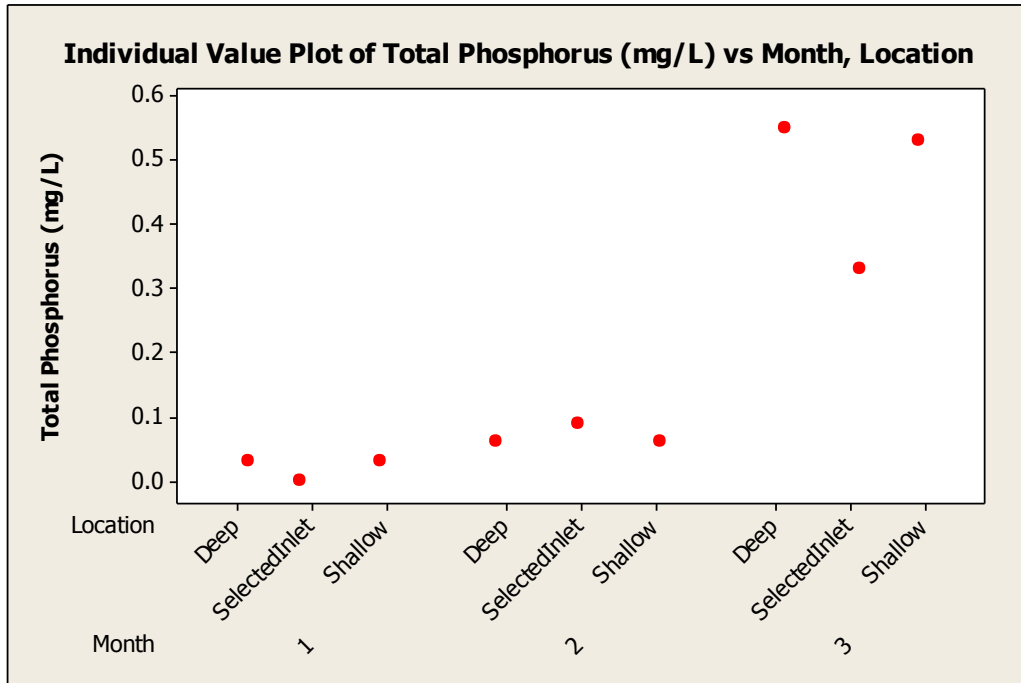
Raw data for Lake Papakeeche can be found at the end of this report.

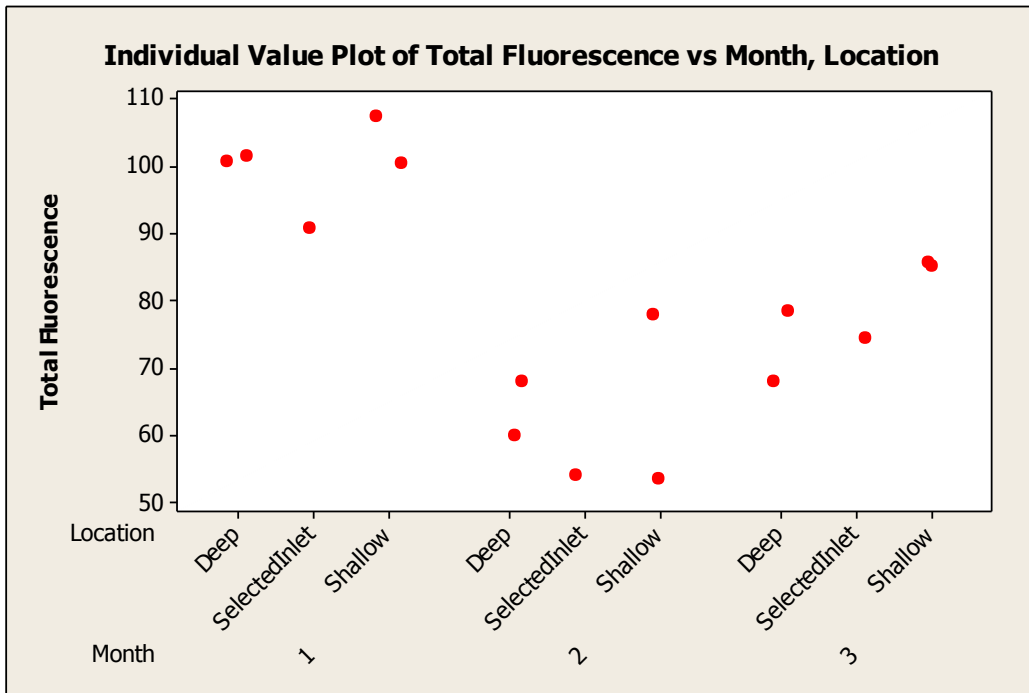
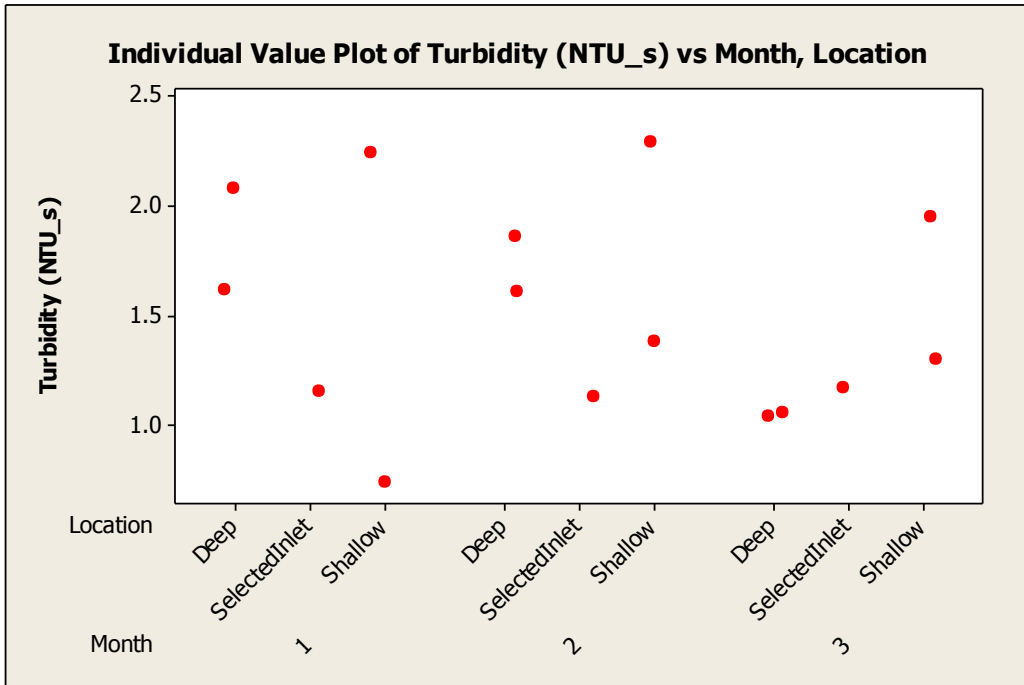
### Sampling Locations on Lake Papakeeche

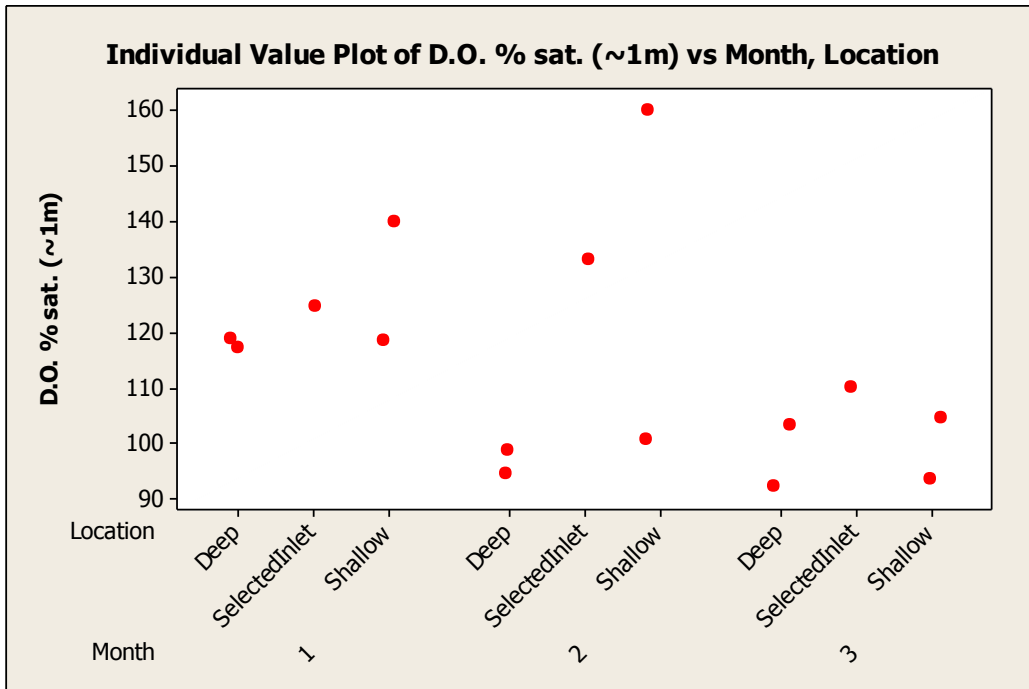
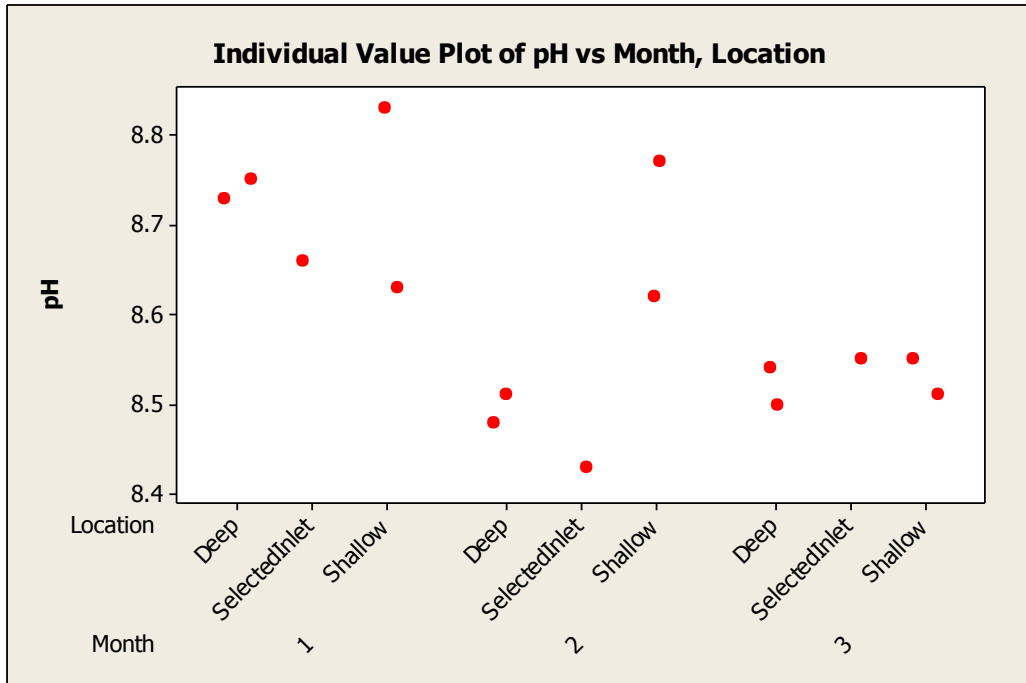


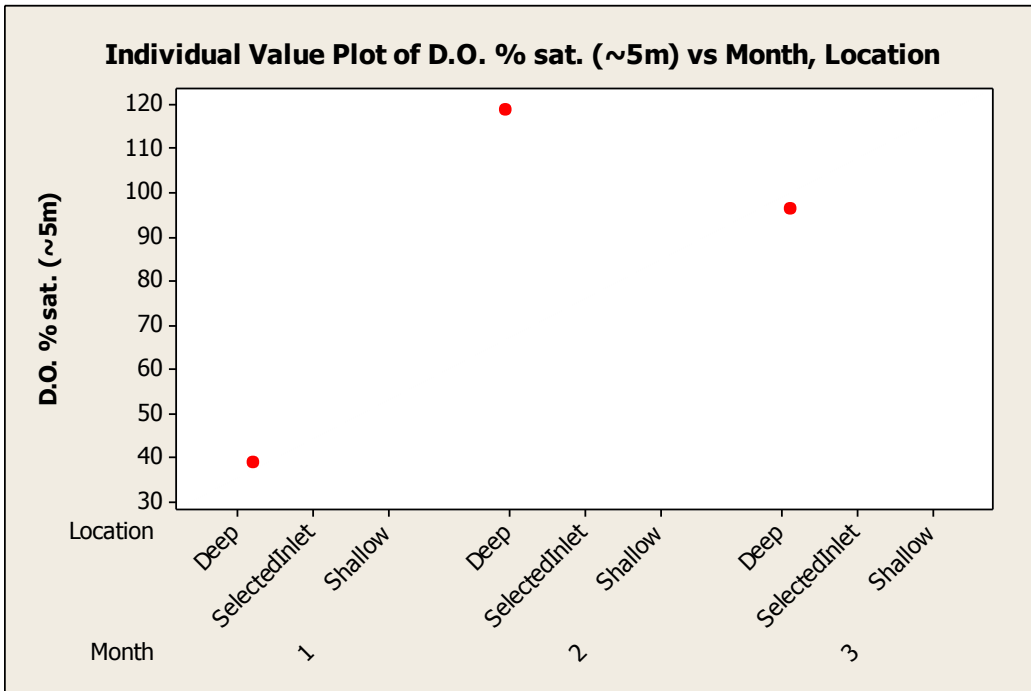
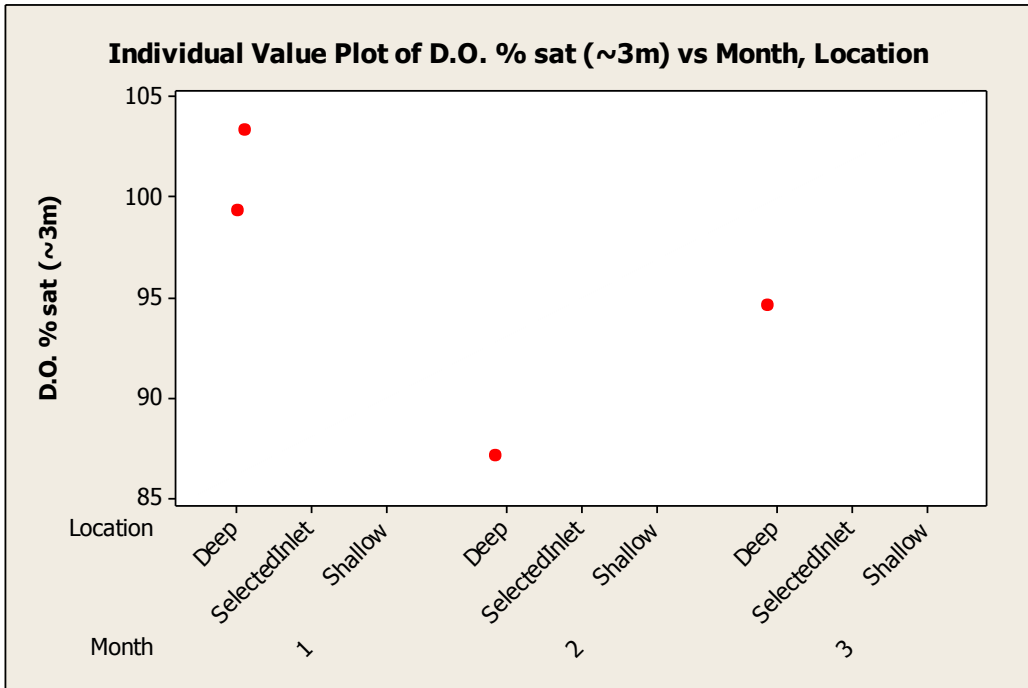
**Graphical Presentation of Individual Water Quality Measurements for Lake Papakeechee**











## Raw Data for Lake Papakeeche

| Site   | GPS Location             | Date      | Time  | Time (hr) | Current Weather | Past Weather | E. Coli (col/100 mL) | Total Phosphorus (mg/L) |
|--------|--------------------------|-----------|-------|-----------|-----------------|--------------|----------------------|-------------------------|
| 21-1-1 | N41 22.394 W85<br>40.184 | 6/27/2007 | 19:27 | 19.45     | overcast        | showers      | 3                    | 0.03                    |
| 21-1-2 | N41 22.286 W85<br>40.103 | 6/27/2007 | 19:34 | 19.5667   | overcast        | showers      | 4.1                  |                         |
| 21-1-3 | N41 22.537 W85<br>40.098 | 6/27/2007 | 19:13 | 19.2167   | overcast        | showers      | 648.8                | 0.03                    |
| 21-1-4 | N41 22.176 W85<br>40.141 | 6/27/2007 | 20:00 | 20        | overcast        | showers      | 42.6                 |                         |
| 21-1-5 | N41 22.037 W85<br>39.917 | 6/27/2007 | 19:50 | 19.8333   | overcast        | showers      | 56.5                 | <0.03                   |
| 21-2-1 | N41 22.393 W85<br>40.553 | 7/16/2007 | 12:11 | 12.1833   | clear/sunny     | clear/sunny  | 8.3                  | 0.06                    |
| 21-2-2 | N41 22.147 W85<br>39.940 | 7/16/2007 | 12:54 | 12.9      | clear/sunny     | clear/sunny  | 0                    |                         |
| 21-2-3 | N41 22.317 W85<br>40.629 | 7/16/2007 | 12:17 | 12.2833   | clear/sunny     | clear/sunny  | 62                   | 0.06                    |
| 21-2-4 | N41 22.440 W85<br>40.462 | 7/16/2007 | 12:01 | 12.0167   | clear/sunny     | clear/sunny  | 4.1                  |                         |
| 21-2-5 | N41 22.038 W85<br>39.930 | 7/16/2007 | 12:42 | 12.7      | clear/sunny     | clear/sunny  | 1                    | 0.09                    |
| 21-3-1 | N41 22.178 W85<br>39.941 | 8/7/2007  | 14:01 | 14.0167   | clear/sunny     | storm        | 1                    | 0.55                    |
| 21-3-2 | N41 22.392 W85<br>40.281 | 8/7/2007  | 13:44 | 13.7333   | clear/sunny     | storm        | 524                  |                         |
| 21-3-3 | N41 22.295 W85<br>40.369 | 8/7/2007  | 13:50 | 13.8333   | clear/sunny     | storm        | 14                   | 0.53                    |
| 21-3-4 | N41 22.540 W85<br>40.233 | 8/7/2007  | 13:34 | 13.5667   | clear/sunny     | storm        | 22                   |                         |
| 21-3-5 | N41 22.034 W85<br>39.919 | 8/7/2007  | 14:09 | 14.15     | clear/sunny     | storm        | 17                   | 0.33                    |

| Site   | Nitrates<br>(mg/L) | Turbidity<br>(NTU_s) | Total<br>Flourescence | pH   | Depth<br>(m) | D.O. %<br>sat.<br>(~1m) | D.O. %<br>sat<br>(~3m) | D.O. %<br>sat.<br>(~5m) |
|--------|--------------------|----------------------|-----------------------|------|--------------|-------------------------|------------------------|-------------------------|
| 21-1-1 | <0.1               | 2.084                | 100.7                 | 8.75 | 8            | 118.7                   | 103.4                  | 38.5                    |
| 21-1-2 |                    | 1.619                | 101.4                 | 8.73 | 3.3          | 117                     | 99.3                   |                         |
| 21-1-3 | <0.1               | 2.244                | 100.4                 | 8.83 | 0.7          | 139.8                   |                        |                         |
| 21-1-4 |                    | 0.744                | 107.2                 | 8.63 | 1.8          | 118.5                   |                        |                         |
| 21-1-5 | <0.1               | 1.158                | 90.82                 | 8.66 | 0.9          | 124.6                   |                        |                         |
| 21-2-1 | <0.1               | 1.866                | 67.82                 | 8.51 | 2.4          | 98.7                    |                        |                         |
| 21-2-2 |                    | 1.609                | 59.8                  | 8.48 | 9            | 94.5                    | 87.1                   | 118.8                   |
| 21-2-3 | <0.1               | 2.299                | 77.8                  | 8.77 | 0.6          | 159.7                   |                        |                         |
| 21-2-4 |                    | 1.382                | 53.52                 | 8.62 | 1.3          | 100.5                   |                        |                         |
| 21-2-5 | <0.1               | 1.134                | 53.94                 | 8.43 | 0.7          | 133                     |                        |                         |
| 21-3-1 | <0.1               | 1.044                | 67.98                 | 8.5  | 10           | 92.4                    | 94.6                   | 96.2                    |
| 21-3-2 |                    | 1.059                | 78.46                 | 8.54 | 2.6          | 103.3                   |                        |                         |
| 21-3-3 | <0.1               | 1.305                | 85.59                 | 8.51 | 0.7          | 93.6                    |                        |                         |
| 21-3-4 |                    | 1.956                | 84.98                 | 8.55 | 0.5          | 104.6                   |                        |                         |
| 21-3-5 | <0.1               | 1.172                | 74.47                 | 8.55 | 0.7          | 110                     |                        |                         |

| Site   | Temp.<br>C (~1m) | Temp.<br>C (~3m) | Temp.<br>C (~5m) | Secchi<br>down<br>(ft) | Secchi<br>up (ft) | Secchi<br>Avg (ft) | Secchi<br>hit | Air<br>Temp.<br>C |
|--------|------------------|------------------|------------------|------------------------|-------------------|--------------------|---------------|-------------------|
| 21-1-1 | 27.8             | 25.1             | 17.7             | 6.1                    | 5.9               | 6                  |               |                   |
| 21-1-2 | 27.7             | 25.2             |                  | 8.1                    | 7.8               | 7.95               |               |                   |
| 21-1-3 | 28.9             |                  |                  |                        |                   |                    | x             |                   |
| 21-1-4 | 27.7             |                  |                  |                        |                   |                    | x             |                   |
| 21-1-5 | 28.1             |                  |                  |                        |                   |                    | x             |                   |
| 21-2-1 | 25.5             |                  |                  | 6.4                    | 6                 | 6.2                |               | 28                |
| 21-2-2 | 25.7             | 25.3             | 16               |                        |                   |                    |               | 28                |
| 21-2-3 | 26.2             |                  |                  |                        |                   |                    | x             | 29.5              |
| 21-2-4 | 25.6             |                  |                  |                        |                   |                    | x             | 27.2              |
| 21-2-5 | 26.2             |                  |                  |                        |                   |                    | x             | 28.1              |
| 21-3-1 | 29               | 28               | 26.6             | 6.7                    | 6.6               | 6.65               |               | 32.5              |
| 21-3-2 | 28.7             |                  |                  | 5.1                    | 5                 | 5.05               |               | 34.2              |
| 21-3-3 | 29.4             |                  |                  |                        |                   |                    | x             | 32.8              |
| 21-3-4 | 29.8             |                  |                  |                        |                   |                    | x             | 34.6              |
| 21-3-5 | 29.2             |                  |                  |                        |                   |                    | x             | 31.5              |