



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE \_\_\_\_ OF \_\_\_\_

February 2016

Data Qualified?  
Yes / No

STORET Station Name: Blue Springs (Lake County) @ 50m DS of weir Date: 7/25/16  
(mm/dd/yyyy)

STORET Station ID: G1CED031 Latitude: 28.74861  
(Decimal Degrees)

WBID: 2035A1 RQ: 2016-07-25-33 ORG ID: 2IFCEN Longitude: -81.82722  
(Decimal Degrees)

Receiving Body of Water: Lake Harris Field ID: G1CED031 County: Lake

| Sampling Team Members |  | WQ Measurements | Sample Collection | Documentation | Preservation | Preservation Check |
|-----------------------|--|-----------------|-------------------|---------------|--------------|--------------------|
| Leif Boman            |  |                 |                   |               |              |                    |
| Katie Williams        |  |                 |                   |               |              |                    |

| Water Level: Dry / Low / Normal / High / Flooded |      |                  |                 |           |           | Matrix: Fresh / Marine / DI |                |                 |                    |            |
|--------------------------------------------------|------|------------------|-----------------|-----------|-----------|-----------------------------|----------------|-----------------|--------------------|------------|
| Meter ID# <u>Betty Boop</u>                      |      |                  |                 |           |           | Photos: Yes / No            |                |                 |                    |            |
| Time Zone                                        | Time | Sample Depth (m) | Total Depth (m) | DO (mg/L) | DO (%SAT) | pH                          | Salinity (ppt) | Secchi Disk (m) | Sp COND (µmhos/cm) | Temp. (C°) |
| EST                                              | 1300 | 0.2              | 0.4             | 4.4       | 53        | 7.8                         | 0.13           | 0.4(s)          | 285                | 24.6       |
| CEN                                              |      |                  |                 |           |           |                             |                |                 |                    |            |

Biological Samples Collected: None HA SCI LVS RPS LVI Other \_\_\_\_\_

| Parameter Suite              | Parameter Methods                                                                                                                                                                                                      | Preservation                                                | Acid Lot# | Expiration | pH Check                    |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|-----------|------------|-----------------------------|
| Preserved Nutrients          | <input type="checkbox"/> W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP                                                                                                                                                   | <input type="checkbox"/> Ice <input type="checkbox"/> H2SO4 |           |            | <input type="checkbox"/> <2 |
| Metals                       | <input type="checkbox"/> W-ICPMS <input type="checkbox"/> W-ICP                                                                                                                                                        | <input type="checkbox"/> Ice <input type="checkbox"/> HNO2  |           |            | <input type="checkbox"/> <2 |
| Filtered Nutrients           | <input type="checkbox"/> W-PO4-F <input type="checkbox"/> Field Filtered 0.45 µm Filter                                                                                                                                | <input type="checkbox"/> Ice                                |           |            |                             |
| Chlorophyll                  | <input type="checkbox"/> CHLSUITE-W                                                                                                                                                                                    | <input type="checkbox"/> Ice                                |           |            |                             |
| Physical/Aggregate (KIT A/C) | <input type="checkbox"/> Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-IC / W-COLOR / W-SO4-IC / W-TDS                                                                                                                   | <input type="checkbox"/> Ice                                |           |            |                             |
| Physical/Aggregate (KIT B/D) | <input type="checkbox"/> Alkalinity / W-F / W-TSS / TURBIDITY                                                                                                                                                          | <input type="checkbox"/> Ice                                |           |            |                             |
| Macroinvertebrates           | <input type="checkbox"/> MI-FW-QLDC                                                                                                                                                                                    | <input type="checkbox"/> Formalin                           |           |            |                             |
| Microbiology                 | <input type="checkbox"/> E Coli <input type="checkbox"/> F Coli <input type="checkbox"/> Enteroc <input type="checkbox"/> QPCR                                                                                         | <input type="checkbox"/> Ice                                |           |            |                             |
| Periphyton                   | <input type="checkbox"/> ALGAE-ID                                                                                                                                                                                      | <input type="checkbox"/> Ice                                |           |            |                             |
| Pesticides                   | <input type="checkbox"/> W-PSNP-TQ <input type="checkbox"/> W-AHERB-AA <input type="checkbox"/> W-PYR-AA-R<br><input type="checkbox"/> W-PC-AA-SF <input type="checkbox"/> W-UHERB-AA <input type="checkbox"/> W-GLYPH | <input type="checkbox"/> Ice <input type="checkbox"/> Other |           |            |                             |

Place Preservative Sticker(s) Here  
(If Available)

Notes:  
meter readings only. only  
bottle collected at this storet  
was for algal-ID from RPS.

Signature: KWilliams

Place Label Here  
(If Available)

Date: 7/25/16

Field Parameters Entered into LIMS: \_\_\_\_\_ (Initials/Date) \_\_\_\_\_  
Date Migrated to STORET: \_\_\_\_\_ (Initials/Date) \_\_\_\_\_  
Field Parameters QC in LIMS: \_\_\_\_\_ (Initials/Date) \_\_\_\_\_  
Field Sheets Scanned/Saved: \_\_\_\_\_ (Initials/Date) \_\_\_\_\_

## FDEP FORM FD 9000-3: PHYSICAL/CHEMICAL CHARACTERIZATION FIELD SHEET

SAMPLE ID \_\_\_\_\_ ORG ID 21FLCEN LATITUDE \_\_\_\_\_  
 COUNTY Lake STORET # G1CED031 LONGITUDE \_\_\_\_\_  
 DATE 7/25/14 TIME \_\_\_\_\_ SAMPLING AGENCY \_\_\_\_\_  
 SITE NAME Lake Blue Springs run 50m OS  
 FIELD ID/NAME G1CED031 RECEIVING BODY OF WATER Lake Harris

## RIPARIAN ZONE / STREAM FEATURES

|                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                              |  |                                                                                                      |  |  |                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>PREDOMINANT LAND-USE IN WATERSHED</b> (specify relative percent in each category):<br>Forest/Natural <input type="checkbox"/> Silviculture <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industry <input type="checkbox"/> Other (Specify) <u>park</u> |  |                                                                                                                                                                                                              |  |                                                                                                      |  |  | <b>Landscape Development Intensity Index (LDI)</b><br><input type="checkbox"/>                                                        |
| Local Watershed Erosion (select one): <input checked="" type="checkbox"/> None <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy<br>Local Watershed NPS Pollution: <input checked="" type="checkbox"/> No evidence <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy                         |  |                                                                                                                                                                                                              |  |                                                                                                      |  |  | <b>Typical Width (m) Depth (m)/Velocity (m/sec) Transect</b><br>10 m wide<br>10 m/s 10 m/s 10 m/s<br>0.4 m deep 0.4 m deep 0.4 m deep |
| <b>Width of Riparian Vegetation (m) on Each Buffer Side</b><br>Left Bank: <u>1</u> Right Bank: <u>1</u>                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                              |  | <b>Hydrologic Modification Score</b><br>(per FT 3101) <input type="checkbox"/>                       |  |  |                                                                                                                                       |
| <b>High Water Mark:</b> <u>0.3</u> + <u>0.4</u> = <u>0.7</u><br>(m) (above present water level) (present depth) (above bed)                                                                                                                                                                                                                                                                |  |                                                                                                                                                                                                              |  | <b>Artificially Impounded</b><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |  |  |                                                                                                                                       |
| <b>Artificially</b> <input type="checkbox"/> No <input type="checkbox"/> Mostly recovered, more sinuous<br><b>Channelized:</b> <input checked="" type="checkbox"/> Some recovery <input type="checkbox"/> Recent, severe                                                                                                                                                                   |  | <b>Canopy Cover %</b> <input type="checkbox"/> Open <input type="checkbox"/> Lightly Shaded (11-45%)<br><input type="checkbox"/> Heavily Shaded <input checked="" type="checkbox"/> Moderate Shaded (46-80%) |  |                                                                                                      |  |  |                                                                                                                                       |

## SEDIMENT / SUBSTRATE

| <b>Sediment Oils</b><br><input checked="" type="checkbox"/> Absent <input type="checkbox"/> Slight<br><input type="checkbox"/> Moderate <input type="checkbox"/> Profuse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            | <b>Sediment Odors</b><br><input checked="" type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum<br><input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic<br><input type="checkbox"/> Other (Specify): _____ |                                                                                                                                                                                                     | <b>Smothering of Substrates</b><br>Sand Smothering: None <input checked="" type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe <input type="checkbox"/><br>Silt Smothering: None <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe <input checked="" type="checkbox"/><br>Algae Smothering: None <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Severe <input type="checkbox"/> |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------|----------------------|-----------------------------------------|--|--|------------------------|--|--|--|-------------------------|--|--|--|--------------------------|--|--|--|------------------------|--|--|--|-----------|--|--|--|-------------------------|--|--|--|-------------|--|--|--|-------------|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|-----------|------------|---------|-------------|--------------|-----------------|----------------|------------|------|------------|-------------|------------|------------|-----------|------------|-------------|-------------------------------------|------|--|--|--|--|--|--|--|-----------------------------------------|---------|--|--|--|--|--|--|--|--|
| <b>SUBSTRATE TYPE</b><br>Assessment Tool: <input type="checkbox"/> SCI <input checked="" type="checkbox"/> RPS <input checked="" type="checkbox"/> LVS<br><input type="checkbox"/> LCI <input type="checkbox"/> BioRecon<br><table border="1"> <thead> <tr> <th></th> <th>% Coverage</th> <th>INVERT<br/># Times Sampled</th> <th>PERI<br/># Times Sampled</th> </tr> </thead> <tbody> <tr><td>Woody Debris (Snags)</td><td></td><td></td><td></td></tr> <tr><td>Undercut Banks / Roots</td><td></td><td></td><td></td></tr> <tr><td>Leaf Packs or Mat .....</td><td></td><td></td><td></td></tr> <tr><td>Aquatic Vegetation .....</td><td></td><td></td><td></td></tr> <tr><td>Rock or Shell Rubble..</td><td></td><td></td><td></td></tr> <tr><td>Sand.....</td><td></td><td></td><td></td></tr> <tr><td>Mud / Muck / Silt .....</td><td></td><td></td><td></td></tr> <tr><td>Other .....</td><td></td><td></td><td></td></tr> <tr><td>Other .....</td><td></td><td></td><td></td></tr> </tbody> </table> |            |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     | % Coverage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | INVERT<br># Times Sampled      | PERI<br># Times Sampled | Woody Debris (Snags) |                                         |  |  | Undercut Banks / Roots |  |  |  | Leaf Packs or Mat ..... |  |  |  | Aquatic Vegetation ..... |  |  |  | Rock or Shell Rubble.. |  |  |  | Sand..... |  |  |  | Mud / Muck / Silt ..... |  |  |  | Other ..... |  |  |  | Other ..... |  |  |  | <b>WATER QUALITY</b><br><table border="1"> <thead> <tr> <th></th> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> <th>SECCHI (M)</th> </tr> </thead> <tbody> <tr> <td>Top:</td> <td><u>0.3</u></td> <td><u>24.4</u></td> <td><u>7.8</u></td> <td><u>4.4</u></td> <td><u>53</u></td> <td><u>295</u></td> <td><u>0.13</u></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Mid:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><input checked="" type="checkbox"/> VOB</td> </tr> <tr> <td>Bottom:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> Meter ID: <u>Betty</u> TOTAL DEPTH <u>0.4</u> |  |  |  | Depth (M) | Temp. (°C) | pH (SU) | D.O. (MG/L) | D.O. Sat (%) | Cond. (UMHO/CM) | Salinity (PPT) | SECCHI (M) | Top: | <u>0.3</u> | <u>24.4</u> | <u>7.8</u> | <u>4.4</u> | <u>53</u> | <u>295</u> | <u>0.13</u> | <input checked="" type="checkbox"/> | Mid: |  |  |  |  |  |  |  | <input checked="" type="checkbox"/> VOB | Bottom: |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | % Coverage | INVERT<br># Times Sampled                                                                                                                                                                                                                                         | PERI<br># Times Sampled                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Woody Debris (Snags)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Undercut Banks / Roots                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |            |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Leaf Packs or Mat .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Aquatic Vegetation .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Rock or Shell Rubble..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |            |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Sand.....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Mud / Muck / Silt .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Other .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Other .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Depth (M)  | Temp. (°C)                                                                                                                                                                                                                                                        | pH (SU)                                                                                                                                                                                             | D.O. (MG/L)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | D.O. Sat (%)                   | Cond. (UMHO/CM)         | Salinity (PPT)       | SECCHI (M)                              |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Top:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <u>0.3</u> | <u>24.4</u>                                                                                                                                                                                                                                                       | <u>7.8</u>                                                                                                                                                                                          | <u>4.4</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <u>53</u>                      | <u>295</u>              | <u>0.13</u>          | <input checked="" type="checkbox"/>     |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Mid:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      | <input checked="" type="checkbox"/> VOB |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Bottom:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| <b>Water Odors</b> Normal <input checked="" type="checkbox"/> Petroleum <input type="checkbox"/><br>Sewage <input type="checkbox"/> Chemical <input type="checkbox"/> Other <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |                                                                                                                                                                                                                                                                   | <b>Water Surface Oils</b> Normal <input checked="" type="checkbox"/> Sheen <input type="checkbox"/><br>Globs <input type="checkbox"/> Slick <input type="checkbox"/> Other <input type="checkbox"/> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Water Sample Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br>Sample Preserved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br>Lot Number: _____ Exp: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |                                                                                                                                                                                                                                                                   | Color Tannic: <input type="checkbox"/> Green (Algae) <input type="checkbox"/><br>Clear <input checked="" type="checkbox"/> Other (Specify) <input type="checkbox"/>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| Algae Sample Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br>Sample Preserved? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>Lot Number: _____ Exp: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |                                                                                                                                                                                                                                                                   | Clarity Clear <input checked="" type="checkbox"/> Slightly Turbid <input type="checkbox"/><br>Turbid <input type="checkbox"/> Opaque <input type="checkbox"/>                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| <b>ABUNDANCE</b><br>Not Obs. Rare Common Abundant<br>Periphyton: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/><br>Fish: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/><br>Aquatic Plants: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/><br>Iron/Sulfur Bacteria: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                           |            |                                                                                                                                                                                                                                                                   | <b>System Type:</b> Stream <input checked="" type="checkbox"/> Lake <input type="checkbox"/> Wetland <input type="checkbox"/> Estuary <input type="checkbox"/> Other (Specify) <u>Spring</u>        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| <b>AMBIENT FIELD CONDITIONS / NOTES:</b><br><input checked="" type="checkbox"/> The antecedent hydrologic conditions have been met to my best knowledge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |
| <b>SAMPLING TEAM</b><br><u>KMW/LGB</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |            |                                                                                                                                                                                                                                                                   | <b>SIGNATURE</b><br><u>Killhamis</u>                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>DATE:</b><br><u>7/25/14</u> |                         |                      |                                         |  |  |                        |  |  |  |                         |  |  |  |                          |  |  |  |                        |  |  |  |           |  |  |  |                         |  |  |  |             |  |  |  |             |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |           |            |         |             |              |                 |                |            |      |            |             |            |            |           |            |             |                                     |      |  |  |  |  |  |  |  |                                         |         |  |  |  |  |  |  |  |  |



DEP Form FD 9000-5 Stream/River Habitat Assessment Field Sheet

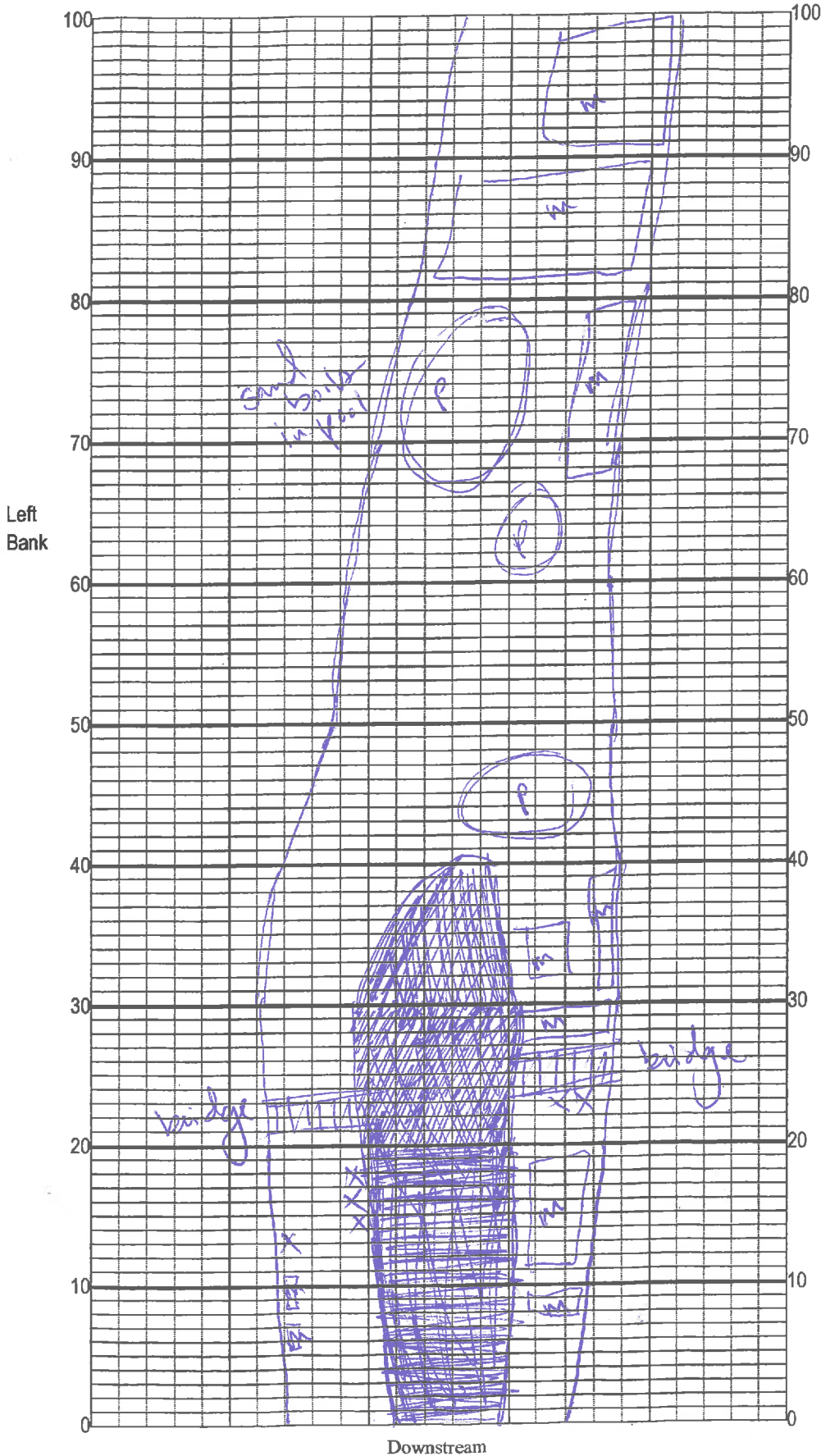
|                  |                     |                                                           |                                 |                                           |
|------------------|---------------------|-----------------------------------------------------------|---------------------------------|-------------------------------------------|
| SAMPLING AGENCY: |                     | STORET STATION NUMBER: <u>GICE0031</u><br><u>20020459</u> | DATE (MM/DD/YY): <u>7/25/14</u> | RECEIVING BODY OF WATER: <u>LK Harris</u> |
| REMARKS:         | COUNTY: <u>Lake</u> | LOCATION: <u>LK Blue Springs</u>                          | FIELD ID/NAME: <u>GICE0031</u>  |                                           |

| Habitat Parameter                                                               | Optimal                                                                                                                                                                                                           | Suboptimal                                                                                                                                                     | Marginal                                                                                                                                         | Poor                                                                                                                          |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Primary Habitat Components                                                      | Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock]                                                                                      | Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags)                                             | Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed                                              | One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered                            |
| Substrate Diversity <u>6</u>                                                    | 20 19 18 17 16                                                                                                                                                                                                    | 15 14 13 12 11                                                                                                                                                 | 10 9 8 7 <u>6</u>                                                                                                                                | 5 4 3 2 1                                                                                                                     |
| Substrate Availability <u>8</u>                                                 | Greater than 30% major productive habitat present at site<br>20 19 18 17 16                                                                                                                                       | 16% to 30% major productive habitat, by aerial extent<br>15 14 13 12 11                                                                                        | 6% to 15% major productive habitat<br><u>10</u> 9 <u>8</u> 7 6                                                                                   | Less than 5% major productive habitat<br>5 4 3 2 1                                                                            |
| Water Velocity <u>10</u>                                                        | Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec<br>≥0.33 0.31 0.29 0.27 >0.25<br>20 19 18 17 16                                                                                                    | Max. observed at typical transect: >0.1 to 0.25 m/sec<br>0.25 0.21 0.17 0.13 >0.1<br>15 14 13 12 11                                                            | Max. observed at typical transect: 0.05 to 0.1 m/sec<br>0.1 0.09 0.07 0.06 0.05<br>10 9 8 7 6                                                    | Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec<br><0.05 0.04 0.03 0.01 <0.01<br>5 4 3 2 1      |
| Habitat Smothering <u>6</u><br>-----<br>Primary Score <u>30</u>                 | Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae.<br>20 19 18 17 16                                                                                 | Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae.<br>15 14 13 12 11                              | Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth).<br>10 9 <u>8</u> 7 <u>6</u> | Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation.<br>5 4 3 2 1                            |
| Secondary Habitat Components                                                    | Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks.                                                                                                   | Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered.                                                   | Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area.                              | Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks. |
| Artificial Channelization <u>11</u>                                             | 20 19 18 17 16                                                                                                                                                                                                    | 15 14 13 12 11                                                                                                                                                 | 10 9 8 7 6                                                                                                                                       | 5 4 3 2 1                                                                                                                     |
| Bank Stability                                                                  | Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the root zone with few raw, eroded areas.                                                            | Only meets 2 of the 3 requirements for optimal bank stability.                                                                                                 | Only meets 1 of the 3 requirements for optimal bank stability.                                                                                   | Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas.                   |
| Right Bank <u>9</u><br>Left Bank <u>9</u>                                       | 10 9                                                                                                                                                                                                              | 8 7 6                                                                                                                                                          | 5 4                                                                                                                                              | 3 2 1                                                                                                                         |
| Riparian Buffer Zone Width                                                      | Width of vegetation greater than 18 m                                                                                                                                                                             | Width of vegetation >12 to 18m                                                                                                                                 | Width of vegetation 6 to 12 m. human activities close to system                                                                                  | Less than 6 m of buffer zone due to intensive human activities                                                                |
| Right Bank <u>2</u><br>Left Bank <u>2</u>                                       | 10 9                                                                                                                                                                                                              | 8 7 6                                                                                                                                                          | 5 4                                                                                                                                              | 3 <u>2</u> 1                                                                                                                  |
| Riparian Zone Vegetation Quality                                                | Over 80% of riparian surfaces consist of normal, expected plant community for given sunlight & habitat conditions (e.g., native plants; tree, shrub, and forbs represented, if appropriate). Minimal disturbance. | >50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. | 25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.       | Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).     |
| Right Bank <u>3</u><br>Left Bank <u>3</u><br>-----<br>Secondary Score <u>39</u> | 10 9                                                                                                                                                                                                              | 8 7 6                                                                                                                                                          | 5 4                                                                                                                                              | <u>3</u> 2 1                                                                                                                  |

69 TOTAL SCORE

|                      |                                |                             |
|----------------------|--------------------------------|-----------------------------|
| Date: <u>7/25/14</u> | Analyst: <u>Katie Williams</u> | Signature: <u>KWilliams</u> |
|----------------------|--------------------------------|-----------------------------|

DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Length of grid represents 100 m of stream (not linear meters).  
(Horizontal scale is double vertical scale, draw proportionately).

Location: Lk Blue Springs  
Date: 7/25/14  
Sampler: KWW

|                                                                                                                |                                                      |
|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 100 m: Latitude _____                                                                                          | Longitude _____                                      |
| 0 m: Latitude _____                                                                                            | Longitude _____                                      |
| Substrates: Code key, draw proportionate habitat abundance. %                                                  |                                                      |
| <input type="checkbox"/> Snags                                                                                 | _____                                                |
| <input type="checkbox"/> Roots/undercut banks                                                                  | _____                                                |
| <input type="checkbox"/> Leaf Packs (or mats)                                                                  | _____                                                |
| <input type="checkbox"/> Aquatic Macrophytes                                                                   | _____                                                |
| <input type="checkbox"/> island                                                                                | _____                                                |
| <input type="checkbox"/>                                                                                       | _____                                                |
| <input type="checkbox"/> Pools                                                                                 | total # observed = _____<br># range expected = _____ |
| Average width <u>10</u> m                                                                                      |                                                      |
| Average depth <u>0.5</u> m                                                                                     |                                                      |
| Velocity measured at _____ meter mark.                                                                         |                                                      |
| WQ & chemistry taken at _____ meter mark.                                                                      |                                                      |
| Habitat Smothering:<br>Note areas (on map) where sand or silt is smothering substrates, limiting habitability. |                                                      |
| Bank Stability:<br>Note areas (on map) with unstable, eroding banks.                                           |                                                      |
| Riparian Buffer Width:<br>Note areas (on map) where natural vegetation is altered or eliminated.               |                                                      |

Plants observed / other notes:

Lots of exotic plants -  
cyperus involucreatus,  
wedelia

# DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Lake Blue Springs County: Lake Date: 7/25/14 Investigators: KMW/LGB

Transect (m) Point 1=right 9=left Algal Thickness Rank (N-6, X) Estimated Canopy Cover

| Transect (m) | Point 1=right 9=left | Algal Thickness Rank (N-6, X) | Estimated | Canopy Cover |
|--------------|----------------------|-------------------------------|-----------|--------------|
| 0            | 1                    | 3                             |           |              |
|              | 2                    | X                             |           |              |
|              | 3                    |                               |           |              |
|              | 4                    |                               |           |              |
|              | 5                    |                               |           |              |
|              | 6                    |                               |           |              |
|              | 7                    |                               |           |              |
|              | 8                    |                               |           |              |
|              | 9                    | 4                             |           |              |
| 10           | 1                    | 4                             |           |              |
|              | 2                    | X                             |           |              |
|              | 3                    |                               |           |              |
|              | 4                    |                               |           |              |
|              | 5                    |                               |           |              |
|              | 6                    |                               |           |              |
|              | 7                    |                               |           |              |
|              | 8                    |                               |           |              |
|              | 9                    | 4                             |           |              |
| 20           | 1                    | 3                             |           |              |
|              | 2                    | X                             |           |              |
|              | 3                    |                               |           |              |
|              | 4                    |                               |           |              |
|              | 5                    |                               |           |              |
|              | 6                    |                               |           |              |
|              | 7                    |                               |           |              |
|              | 8                    |                               |           |              |
|              | 9                    | 3                             |           |              |
| 30           | 1                    | 3N                            |           |              |
|              | 2                    | X                             |           |              |
|              | 3                    |                               |           |              |
|              | 4                    |                               |           |              |
|              | 5                    |                               |           |              |
|              | 6                    |                               |           |              |
|              | 7                    |                               |           |              |
|              | 8                    |                               |           |              |
|              | 9                    | 4                             |           |              |
| 40           | 1                    | 3N                            |           |              |
|              | 2                    | X                             |           |              |
|              | 3                    |                               |           |              |
|              | 4                    |                               |           |              |
|              | 5                    |                               |           |              |
|              | 6                    |                               |           |              |
|              | 7                    |                               |           |              |
|              | 8                    |                               |           |              |
|              | 9                    | 3N                            |           |              |
| 50           | 1                    | 4                             |           |              |
|              | 2                    | X                             |           |              |
|              | 3                    |                               |           |              |
|              | 4                    |                               |           |              |
|              | 5                    |                               |           |              |
|              | 6                    |                               |           |              |
|              | 7                    |                               |           |              |
|              | 8                    |                               |           |              |
|              | 9                    | 4                             |           |              |

STORET Station Number: G1E0031

Secchi depth 0.4 (s)  
Estimated?

# points ranked 4-6 10  
total points assessed 22  
% points ranked 4-6 40

Check accompanying data collected at same site/date.  
Algal mat sample ☒  
Linear Veg Survey ☒  
Habitat Assessment ☒  
SCI/Biorecon ☒  
Water sample ☒  
RQ- 2014-07-25-33

| Algal Thickness Rank |                                         |
|----------------------|-----------------------------------------|
| N                    | rough, no algae, slimy, algae up to 1mm |
| 3                    | >1mm - 6mm                              |
| 4                    | >6mm - 20mm                             |
| 5                    | >20mm - 10 cm                           |
| 6                    | >10 cm                                  |

- cannot walk creek, too silty, will sink. can see to bottom entire way but cannot estimate well enough  
- cannot get densimeter readings due to above

Record "N" and check "Estimated" for points deeper than the Secchi depth; algae are presumed absent. Check "Estimated" if thickness estimated for deep points which can be seen but not reached.  
Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank.  
Record canopy cover as the number of small densimeter quadrants (out of 96) that HAVE canopy cover. Measure facing upstream at point 4, 5, or 6.  
Collect algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.