



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE 1 OF 1

Data Qualified?

Yes / No

October 2016

STORET Station Name: Long Branch @ 0.7 mi. DS of CR 13 Date: 11/7/14  
STORET Station ID: 2011325 WBID: 3030 Latitude: 28.53508477  
County: Orange RQ-2016-11-07-80 ORG ID: \_\_\_\_\_ Longitude: -81.1094701  
Receiving Body of Water: Econlockhatchee Field ID: G2CE0036

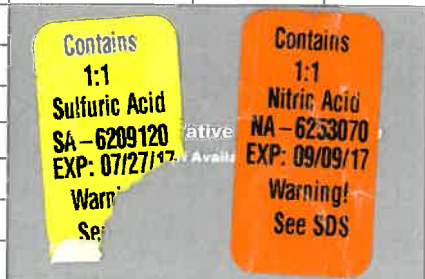
| Sampling Team Members |  |  |  |  | WQ Measurements | Sample Collection | Documentation | Preservation | Preservation Check |
|-----------------------|--|--|--|--|-----------------|-------------------|---------------|--------------|--------------------|
| Leif Boman            |  |  |  |  |       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

| Sampling Equipment                                   |                                             |                               |
|------------------------------------------------------|---------------------------------------------|-------------------------------|
| <input checked="" type="checkbox"/> Sample Container | <input type="checkbox"/> Van Dorn           | <input type="checkbox"/> Pole |
| <input type="checkbox"/> Carboy                      | <input checked="" type="checkbox"/> Syringe |                               |
| <input type="checkbox"/> Dipper                      | <input type="checkbox"/> Other              |                               |
| Equipment ID                                         |                                             |                               |

| Collection Method                           |                                         |  |
|---------------------------------------------|-----------------------------------------|--|
| <input checked="" type="checkbox"/> Wading  | <input type="checkbox"/> Via Boat       |  |
| <input type="checkbox"/> From Shore         | <input type="checkbox"/> Canoe/Kayak    |  |
| <input type="checkbox"/> Other (note below) | <input type="checkbox"/> Electric Motor |  |
|                                             | <input type="checkbox"/> Gasoline Motor |  |

| Water Level: Dry / Low / <u>Normal</u> / High / Flooded |             |                  |                 |            |           | Matrix: <u>Fresh</u> / Marine / DI |                |                 |                    |             |  |
|---------------------------------------------------------|-------------|------------------|-----------------|------------|-----------|------------------------------------|----------------|-----------------|--------------------|-------------|--|
| Meter ID# <u>Betty/11C</u> Photos: Yes / <u>NO</u>      |             |                  |                 |            |           | Tide Falling: Yes / No / <u>NA</u> |                |                 |                    |             |  |
| 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°)  |  |
| <u>EST</u>                                              | <u>1305</u> | <u>0.3</u>       | <u>0.3</u>      | <u>3.2</u> | <u>35</u> | <u>7.0</u>                         | <u>0.18</u>    | <u>0.3(s)</u>   | <u>367</u>         | <u>20.4</u> |  |
| CEN                                                     |             | <u>0.2</u>       |                 |            |           |                                    |                |                 |                    |             |  |

| Biological Samples Collected: None <u>HA</u> <u>SCI</u> LVS <u>RPS</u> LVI Other |                                                                                                                               |  |  |  |  |                                                                                   |           |            |                             |  |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|-----------------------------------------------------------------------------------|-----------|------------|-----------------------------|--|
| Parameter Suite                                                                  | Parameter Methods                                                                                                             |  |  |  |  | Preservation                                                                      | Acid Lot# | Expiration | pH Check                    |  |
| Preserved Nutrients                                                              | <input checked="" type="checkbox"/> W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP                                               |  |  |  |  | <input checked="" type="checkbox"/> Ice <input checked="" type="checkbox"/> H2SO4 |           |            | <input type="checkbox"/> <2 |  |
| Metals                                                                           | <input checked="" type="checkbox"/> W-ICPMS <input checked="" type="checkbox"/> W-ICP                                         |  |  |  |  | <input checked="" type="checkbox"/> Ice <input checked="" type="checkbox"/> HNO3  |           |            | <input type="checkbox"/> <2 |  |
| Filtered Nutrients                                                               | <input checked="" type="checkbox"/> W-PO4-F <input checked="" type="checkbox"/> Field Filtered 0.45 µm Filter                 |  |  |  |  | <input checked="" type="checkbox"/> Ice                                           |           |            |                             |  |
| Chlorophyll                                                                      | <input checked="" type="checkbox"/> CHLSUITE-W                                                                                |  |  |  |  | <input checked="" type="checkbox"/> Ice                                           |           |            |                             |  |
| Physical/Aggregate (Fresh)                                                       | <input checked="" type="checkbox"/> Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS               |  |  |  |  | <input checked="" type="checkbox"/> Ice                                           |           |            |                             |  |
| Physical/Aggregate (Marine)                                                      | <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"/> Entero <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                    |  |  |  |  | <input type="checkbox"/> Ice                                                      |           |            |                             |  |
|                                                                                  | <input type="checkbox"/> W-PC-AA-SF <input type="checkbox"/> W-UHERB-AA <input type="checkbox"/> W-GLYPH                      |  |  |  |  | <input type="checkbox"/> Other                                                    |           |            |                             |  |



|                                  |  |                                     |                      |            |  |
|----------------------------------|--|-------------------------------------|----------------------|------------|--|
| Notes: <u>5208</u>               |  | Long Branch @ 0.7 miles DS of CR 13 |                      | G2CE0036   |  |
|                                  |  |                                     |                      | Field ID ↑ |  |
|                                  |  | RQ-2016-11-07-80                    |                      | STORET ↓   |  |
|                                  |  | Date: 11/7/16                       |                      | 20011325   |  |
| Signature: <u>Katie Williams</u> |  |                                     | Date: <u>11/7/14</u> |            |  |

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

## 19.60

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

|                                    |                          |                                          |                                    |                                                     |
|------------------------------------|--------------------------|------------------------------------------|------------------------------------|-----------------------------------------------------|
| SAMPLING AGENCY:<br><u>21 FLOW</u> |                          | STORET STATION NUMBER:<br><u>2001325</u> | DATE (MM/DD/YY):<br><u>11/7/14</u> | RECEIVING BODY OF WATER:<br><u>Econlock Hatchee</u> |
| REMARKS:                           | COUNTY:<br><u>Orange</u> | LOCATION:<br><u>Long Branch</u>          | FIELD ID/NAME:<br><u>G2CE0036</u>  |                                                     |

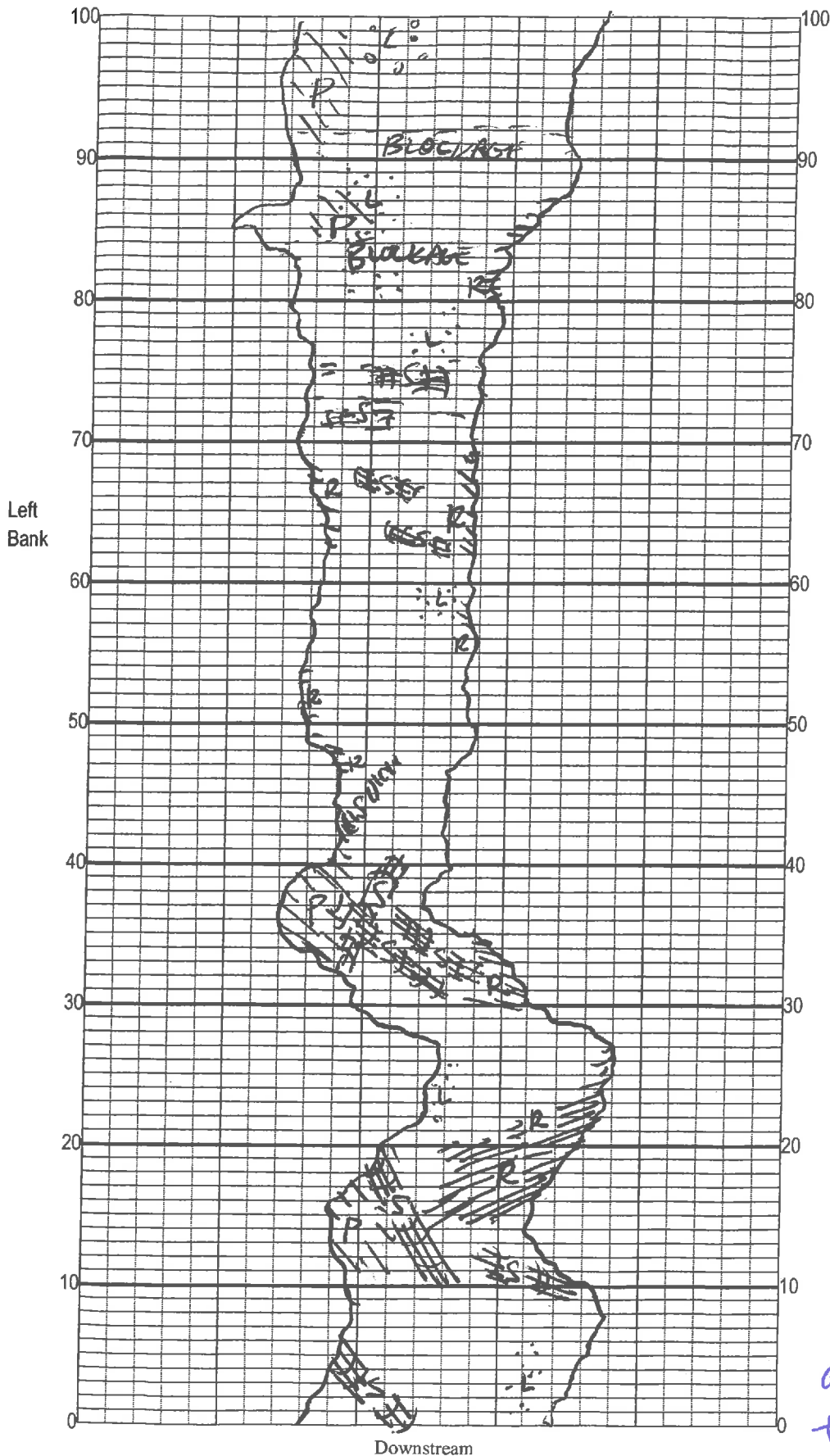
| Habitat Parameter                                                             | Optimal                                                                                                                                                                                                           | Suboptimal                                                                                                                                                     | 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>10</u>                                                 | 20 19 18 17 16                                                                                                                                                                                                    | 15 14 13 12 11                                                                                                                                                 | 10 9 8 7 6                                                                                                                                 | 5 4 3 2 1                                                                                                                     |
| Substrate Availability <u>7</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>10 9 8 7 6                                                                                           | Less than 5% major productive habitat<br>5 4 3 2 1                                                                            |
| Water Velocity <u>12</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>18</u><br>-----<br>Primary Score <u>47</u><br><u>45</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 8 7 6         | 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>20</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>10</u><br>Left Bank <u>10</u>                                   | 10 9                                                                                                                                                                                                              | 8 7 6                                                                                                                                                          | 5 4                                                                                                                                        | 3 2 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>9</u><br>Left Bank <u>9</u>                                     | 10 9                                                                                                                                                                                                              | 8 7 6                                                                                                                                                          | 5 4                                                                                                                                        | 3 2 1                                                                                                                         |
| Secondary Score <u>76</u>                                                     |                                                                                                                                                                                                                   |                                                                                                                                                                |                                                                                                                                            |                                                                                                                               |

121 123

**TOTAL SCORE**

|                      |                         |                           |
|----------------------|-------------------------|---------------------------|
| Date: <u>11/7/14</u> | Analyst: <u>KMW/LGB</u> | Signature: <u>Kullman</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: Long Branch  
Date: 11/2/14  
Sampler: LGB, KMW

|                                                                                                                |                                                      |
|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 100 m: Latitude _____                                                                                          | Longitude _____                                      |
| 0 m: Latitude _____                                                                                            | Longitude _____                                      |
| Substrates: Code key, draw proportionate habitat abundance. %                                                  |                                                      |
|                             | Snags _____                                          |
|                             | Roots/undercut banks _____                           |
|                             | Leaf Packs (or mats) _____                           |
|                             | Aquatic Macrophytes _____                            |
|                             | _____                                                |
|                             | _____                                                |
|                            | total # observed = _____<br># range expected = _____ |
| Average width <u>2</u> m                                                                                       |                                                      |
| Average depth <u>.4</u> m                                                                                      |                                                      |
| Velocity measured at <u>70</u> meter mark.                                                                     |                                                      |
| WQ & chemistry taken at <u>0</u> 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:

*Sarurus, Hydrocotyl*  
*Psychotria, urena lobata,*  
*acer rubrum, liquidambar,*  
*taxodium, nyssa, sabal*  
*palmetto, Toxicodendron,*  
*polygonum, quercus*

Revision Date: March 1, 2014

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

SAMPLE ID \_\_\_\_\_ ORG ID 2IFCEN LATITUDE \_\_\_\_\_  
 COUNTY Orange STORET # 20011325 LONGITUDE \_\_\_\_\_  
 DATE 11/7/14 TIME \_\_\_\_\_ SAMPLING AGENCY \_\_\_\_\_  
 SITE NAME Long Branch @ 7 mi. DS of CR13  
 FIELD ID/NAME GZCE0036 RECEIVING BODY OF WATER Econlockhatchee

## RIPARIAN ZONE / STREAM FEATURES

|                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  |                                                                                                                                                                                                       |  |                                                                                |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------|--|
| <b>PREDOMINANT LAND-USE IN WATERSHED</b> (specify relative percent in each category):<br>Forest/Natural <input type="checkbox"/> <u>60</u> Silviculture <input type="checkbox"/> Field/Pasture <input type="checkbox"/> <u>40</u> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industry <input type="checkbox"/> Other (Specify) <input type="checkbox"/> |  |  |  |  |  |                                                                                                                                                                                                       |  | <b>Landscape Development Intensity Index (LDI)</b><br><input type="checkbox"/> |  |
| Local Watershed Erosion (select one): <input type="checkbox"/> None <input checked="" type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy<br>Local Watershed NPS Pollution: <input type="checkbox"/> No evidence <input checked="" type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy                                                          |  |  |  |  |  | Typical Width (m) Depth (m)/Velocity (m/sec) Transect<br><u>2</u> m wide                                                                                                                              |  |                                                                                |  |
| Width of Riparian Vegetation (m) on Each Buffer Side<br>Left Bank: <u>718</u> Right Bank: <u>718</u>                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  | Hydrologic Modification Score (per FT 3101) <input checked="" type="checkbox"/>                                                                                                                       |  |                                                                                |  |
| High Water Mark: <u>0.3</u> + <u>0.2</u> = <u>0.5</u><br>(m) (above present water level) (present depth) (above bed)                                                                                                                                                                                                                                                                                                        |  |  |  |  |  | Artificially Impounded <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                            |  |                                                                                |  |
| Artificially <input checked="" type="checkbox"/> No <input type="checkbox"/> Mostly recovered, more sinuous<br>Channelized: <input type="checkbox"/> Some recovery <input type="checkbox"/> Recent, severe                                                                                                                                                                                                                  |  |  |  |  |  | Canopy Cover % <input type="checkbox"/> Open <input type="checkbox"/> Lightly Shaded (11-45%)<br><input checked="" type="checkbox"/> Heavily Shaded <input 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 type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum<br><input type="checkbox"/> Chemical <input checked="" type="checkbox"/> Anaerobic<br><input type="checkbox"/> Other (Specify): _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  | <b>Smothering of Substrates</b><br>Sand Smothering: None <input type="checkbox"/> Slight <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Severe <input type="checkbox"/><br>Silt Smothering: None <input type="checkbox"/> Slight <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Severe <input type="checkbox"/><br>Algae Smothering: None <input checked="" type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe <input type="checkbox"/> |  |  |
| <b>SUBSTRATE TYPE</b><br>Assessment Tool: <input checked="" type="checkbox"/> SCI <input checked="" type="checkbox"/> RPS <input type="checkbox"/> LVS<br><input type="checkbox"/> LCI <input type="checkbox"/> BioRecon                                                                                                                                                                                                                                                                                                                                                          |  |  | <b>WATER QUALITY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
| % Coverage<br>Woody Debris (Snags) <u>7</u><br>Undercut Banks / Roots <u>7</u><br>Leaf Packs or Mats <u>3</u><br>Aquatic Vegetation <u>3</u><br>Rock or Shell Rubble <u>3</u><br>Sand <u>3</u><br>Mud / Muck / Silt <u>3</u><br>Other <u>3</u><br>Other <u>3</u>                                                                                                                                                                                                                                                                                                                  |  |  | Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M)<br>Top: <u>0.2</u> <u>20.4</u> <u>7.0</u> <u>3.2</u> <u>35</u> <u>367</u> <u>0.18</u><br>Mid: <u>0.3</u> <u>20.4</u> <u>7.0</u> <u>3.2</u> <u>35</u> <u>367</u> <u>0.18</u><br>Bottom: <u>0.3</u> <u>20.4</u> <u>7.0</u> <u>3.2</u> <u>35</u> <u>367</u> <u>0.18</u><br>Meter ID: <u>Bottymic</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
| <b>ABUNDANCE</b><br>Not Obs. Rare Common Abundant<br>Periphyton: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br>Fish: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br>Aquatic Plants: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br>Iron/Sulfur Bacteria: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |  |  | <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"/><br>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: _____<br>Algae Sample Taken? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>Sample Preserved? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>Lot Number: _____ Exp: _____<br><b>Water Surface Oils</b> Normal <input checked="" type="checkbox"/> Sheen <input type="checkbox"/><br>Globbs <input type="checkbox"/> Slick <input type="checkbox"/> Other <input type="checkbox"/><br>Color Tannic <input type="checkbox"/> Green (Algae) <input type="checkbox"/><br>Clear <input checked="" type="checkbox"/> Other (Specify) <input type="checkbox"/><br>Clarity Clear <input checked="" type="checkbox"/> Slightly Turbid <input type="checkbox"/><br>Turbid <input type="checkbox"/> Opaque <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) <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                           |  |  | <b>AMBIENT FIELD CONDITIONS / NOTES:</b><br><u>Hurricane Matthew approx. 1 month prior to SCI. Water levels have stabilized.</u><br><input type="checkbox"/> The antecedent hydrologic conditions have been met to my best knowledge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
| <b>SAMPLING TEAM</b><br><u>LGB, KMW</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  | <b>SIGNATURE</b><br><u>KWilliams</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  | <b>DATE</b><br><u>11/7/14</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |



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

|                          |  |  |  |  |                                       |  |                      |  |                                 |  |
|--------------------------|--|--|--|--|---------------------------------------|--|----------------------|--|---------------------------------|--|
| Site: <u>Long Branch</u> |  |  |  |  | County: <u>Orange</u>                 |  | Date: <u>11/7/16</u> |  | Investigators: <u>Kmull/LGB</u> |  |
|                          |  |  |  |  | STORET Station Number: <u>2001325</u> |  |                      |  |                                 |  |

| Transect (m) | Point<br>1=right<br>9=left | Algal Thickness Rank<br>(N-6, X) | Estimated | Canopy Cover | Transect (m) | Point<br>1=right<br>9=left | Algal Thickness Rank<br>(N-6, X) | Estimated | Canopy Cover |
|--------------|----------------------------|----------------------------------|-----------|--------------|--------------|----------------------------|----------------------------------|-----------|--------------|
| 0            | 1                          | N                                |           |              | 60           | 1                          | N                                |           |              |
|              | 2                          | N                                |           |              |              | 2                          | N                                |           |              |
|              | 3                          | N                                |           |              |              | 3                          | N                                |           |              |
|              | 4                          | N                                |           |              |              | 4                          | N                                |           |              |
|              | 5                          | N                                |           | 94           |              | 5                          | N                                |           | 90           |
|              | 6                          | N                                |           |              |              | 6                          | N                                |           |              |
|              | 7                          | N                                |           |              |              | 7                          | N                                |           |              |
|              | 8                          | N                                |           |              |              | 8                          | N                                |           |              |
|              | 9                          | N                                |           |              |              | 9                          | N                                |           |              |
| 10           | 1                          | N                                |           |              | 70           | 1                          | N                                |           |              |
|              | 2                          | N                                |           |              |              | 2                          | N                                |           |              |
|              | 3                          | N                                |           |              |              | 3                          | N                                |           |              |
|              | 4                          | N                                |           |              |              | 4                          | N                                |           |              |
|              | 5                          | N                                |           | 84           |              | 5                          | N                                |           | 94           |
|              | 6                          | N                                |           |              |              | 6                          | N                                |           |              |
|              | 7                          | N                                |           |              |              | 7                          | N                                |           |              |
|              | 8                          | N                                |           |              |              | 8                          | N                                |           |              |
|              | 9                          | N                                |           |              |              | 9                          | N                                |           |              |
| 20           | 1                          | N                                |           |              | 80           | 1                          | N                                |           |              |
|              | 2                          | N                                |           |              |              | 2                          | N                                |           |              |
|              | 3                          | N                                |           |              |              | 3                          | N                                |           |              |
|              | 4                          | N                                |           |              |              | 4                          | N                                |           |              |
|              | 5                          | N                                |           | 86           |              | 5                          | N                                |           | 90           |
|              | 6                          | N                                |           |              |              | 6                          | N                                |           |              |
|              | 7                          | N                                |           |              |              | 7                          | N                                |           |              |
|              | 8                          | N                                |           |              |              | 8                          | N                                |           |              |
|              | 9                          | N                                |           |              |              | 9                          | N                                |           |              |
| 30           | 1                          | N                                |           |              | 90           | 1                          | N                                |           |              |
|              | 2                          | N                                |           |              |              | 2                          | N                                |           |              |
|              | 3                          | N                                |           |              |              | 3                          | N                                |           |              |
|              | 4                          | N                                |           |              |              | 4                          | N                                |           |              |
|              | 5                          | N                                |           | 91           |              | 5                          | N                                |           | 82           |
|              | 6                          | N                                |           |              |              | 6                          | N                                |           |              |
|              | 7                          | N                                |           |              |              | 7                          | N                                |           |              |
|              | 8                          | N                                |           |              |              | 8                          | N                                |           |              |
|              | 9                          | N                                |           |              |              | 9                          | N                                |           |              |
| 40           | 1                          | N                                |           |              | 100          | 1                          | N                                |           |              |
|              | 2                          | N                                |           |              |              | 2                          | N                                |           |              |
|              | 3                          | N                                |           |              |              | 3                          | N                                |           |              |
|              | 4                          | N                                |           |              |              | 4                          | N                                |           |              |
|              | 5                          | N                                |           | 96           |              | 5                          | N                                |           | 80           |
|              | 6                          | N                                |           |              |              | 6                          | N                                |           |              |
|              | 7                          | N                                |           |              |              | 7                          | N                                |           |              |
|              | 8                          | N                                |           |              |              | 8                          | N                                |           |              |
|              | 9                          | N                                |           |              |              | 9                          | N                                |           |              |
| 50           | 1                          | N                                |           |              |              | 1                          | N                                |           |              |
|              | 2                          | N                                |           |              |              | 2                          | N                                |           |              |
|              | 3                          | N                                |           |              |              | 3                          | N                                |           |              |
|              | 4                          | N                                |           |              |              | 4                          | N                                |           |              |
|              | 5                          | N                                |           | 84           |              | 5                          | N                                |           |              |
|              | 6                          | N                                |           |              |              | 6                          | N                                |           |              |
|              | 7                          | N                                |           |              |              | 7                          | N                                |           |              |
|              | 8                          | N                                |           |              |              | 8                          | N                                |           |              |
|              | 9                          | N                                |           |              |              | 9                          | N                                |           |              |

|              |        |
|--------------|--------|
| Secchi depth | 0.3(s) |
| Estimated?   |        |

|                       |    |
|-----------------------|----|
| # points ranked 4-6   | 0  |
| total points assessed | 99 |
| % points ranked 4-6   | 0  |

|                                                      |   |
|------------------------------------------------------|---|
| Check accompanying data collected at same site/date. |   |
| Algal mat sample                                     |   |
| Linear Veg Survey                                    |   |
| Habitat Assessment                                   | ✓ |
| SCI/Biorecon                                         | ✓ |
| Water sample                                         | ✓ |
| RQ- 2016-11-07-80                                    |   |

| 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                                  |

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 densiometer 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%.