

75473

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

Site: Mill Creek 1000 ft N. of  
209A

County: CLAY

Date: 06-21-18

Investigators: J. Yarnish, P. O'Connor

STORET Station Number:

2003 0573

| 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                                | ~         | 96           |              | 5                          | N                                | ~         | 96           |
|              | 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                                | ~         | 96           |              | 5                          | N                                | ~         | 96           |
|              | 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                          | X                                | ~         |              |
|              | 4                          | N                                | ~         | 96           |              | 4                          | X                                | ~         |              |
|              | 5                          | N                                | ~         | 96           |              | 5                          | X                                | ~         | 96           |
|              | 6                          | N                                | ~         |              |              | 6                          | X                                | ~         |              |
|              | 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                                | ~         | 96           |              | 5                          | N                                | ~         | 96           |
|              | 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                                | ~         | 96           |
|              | 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                                | ~         | 96           |              | 5                          | N                                | ~         | 96           |
|              | 6                          | N                                | ~         |              |              | 6                          | N                                | ~         |              |
|              | 7                          | N                                | ~         |              |              | 7                          | N                                | ~         |              |
|              | 8                          | N                                | ~         |              |              | 8                          | N                                | ~         |              |
|              | 9                          | N                                | ~         |              |              | 9                          | N                                | ~         |              |

Secchi depth 0.65  
Estimated?# points ranked 4-6 0  
total points assessed  
% points ranked 4-6

Check accompanying data collected at same site/date.

Algal mat sample

Linear Veg Survey

Habitat Assessment

SCI/Biorecon

Water sample

RQ-

## 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 &gt;20%.

DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID \_\_\_\_\_ ORG ID 21FLA LATITUDE \_\_\_\_\_  
 COUNTY CLAY STORET # 20030573 LONGITUDE \_\_\_\_\_  
 DATE 06-21-18 TIME \_\_\_\_\_ SAMPLING AGENCY DEAR NEB ROC  
 SITE NAME mill Cr 1000 ft. N. of 209A  
 FIELD ID/NAME \_\_\_\_\_ RECEIVING BODY OF WATER BLACK Creek

RIPARIAN ZONE / STREAM FEATURES

Meter ID: \_\_\_\_\_

|                                                                                                                                                                                                                                                                                                                                                                    |  |  |                                                                                                                                                                                                       |  |  |                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--------------------------------------------------------------------------------------------------------------------------|
| <b>PREDOMINANT LAND-USE IN WATERSHED</b> (specify relative percent in each category): <u>RR</u> <u>MINING</u><br>Forest/Natural <u>40</u> Silviculture _____ Field/Pasture _____ Agricultural _____ Residential <u>10</u> Commercial <u>10</u> <u>Industry</u> Other (Specify) <u>40</u>                                                                           |  |  |                                                                                                                                                                                                       |  |  | <b>Landscape Development Intensity Index (LDI)</b><br>_____                                                              |
| Local Watershed Erosion (select one): <input type="checkbox"/> None <input type="checkbox"/> Slight <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy<br>Local Watershed NPS Pollution: <input type="checkbox"/> No evidence <input type="checkbox"/> Slight <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Heavy |  |  |                                                                                                                                                                                                       |  |  | <b>Typical Width (m) Depth (m)/Velocity (m/sec) Transect</b><br><u>21</u> m wide<br><u>0.18</u> m/s<br><u>0.6</u> m deep |
| <b>Width of Riparian Vegetation (m) on Each Buffer Side</b><br>Left Bank: <u>12</u> Right Bank: <u>18</u>                                                                                                                                                                                                                                                          |  |  | <b>Hydrologic Modification Score</b> (per FT 3101) _____                                                                                                                                              |  |  |                                                                                                                          |
| <b>High Water Mark:</b> <u>1.4</u> + <u>0.6</u> = <u>2.0</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 type="checkbox"/> Absent <input checked="" 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 type="checkbox"/> Slight <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Severe <input type="checkbox"/><br>Silt Smothering: None <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input checked="" 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 type="checkbox"/> RPS <input type="checkbox"/> LVS<br><input type="checkbox"/> LCI <input type="checkbox"/> BioRecon                                                                                                                                                                                                                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                   | <b>WATER QUALITY</b><br>Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M)<br>Top: _____<br>Mid: <u>0.3</u> <u>25.2</u> <u>6.87</u> <u>6.14</u> <u>74.6</u> <u>147</u> <u>0.07</u> <u>0.65</u><br>Bottom: _____<br>System Type: Stream <input checked="" type="checkbox"/> Lake <input type="checkbox"/> Wetland <input type="checkbox"/> Estuary <input type="checkbox"/> Other (Specify) _____                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| Woody Debris (Snags) <u>6.5</u> <u>7</u><br>Undercut Banks / Roots <u>3.5</u> <u>7</u><br>Leaf Packs or Mat _____<br>Aquatic Vegetation _____<br>Rock or Shell Rubble _____<br>Sand <u>7.0</u> <u>6</u><br>Mud / Muck / Silt _____<br>Other _____<br>Other _____                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                   | <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 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 type="checkbox"/> No<br>Lot Number: _____ Exp: _____ |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| <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 type="checkbox"/> <input checked="" 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 type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> |  |                                                                                                                                                                                                                                                                   | <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 checked="" type="checkbox"/> Green (Algae) <input type="checkbox"/><br>Clear <input type="checkbox"/> Other (Specify) _____<br>Clarity Clear <input type="checkbox"/> Slightly Turbid <input checked="" type="checkbox"/><br>Turbid <input type="checkbox"/> Opaque <input type="checkbox"/>                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| <b>AMBIENT FIELD CONDITIONS / NOTES:</b><br>Hydrologic Disturbance Scoring <input type="checkbox"/> 1-2 <input type="checkbox"/> 3-4 <input type="checkbox"/> 5-6 <input type="checkbox"/> 7-8 <input type="checkbox"/> 9-10<br><input checked="" type="checkbox"/> The antecedent hydrologic conditions have been met to my best knowledge.                                                                                                                                                                                                                                      |  |                                                                                                                                                                                                                                                                   | SAMPLING TEAM <u>J. Parrish, P O'Connor</u> SIGNATURE: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |

|                                         |              |                         |
|-----------------------------------------|--------------|-------------------------|
| Waterbody: Mill Cr 1000 ft. N of SR200A | County: CLAY | Storet Number: 20030573 |
|-----------------------------------------|--------------|-------------------------|

Storet Number: 20030573

**Signature:**

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m<sup>2</sup> of taxa present). Note in the boxes below if no dominant are selected, and note total macrophyte abundance rank for each section. Only the most common taxa are listed, so use blank spaces for additional taxa names.

Revision Date: March 1, 2014

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

20030573

209A

Location: Mill cr. 1000 ft N of  
Date: 8/21/16  
Sampler: JPI/PD

100 m: Latitude 30.0662  
Longitude 81.7568  
0 m: Latitude  
Longitude

| Substrates: Code key, draw proportionate habitat abundance. | %                                        |
|-------------------------------------------------------------|------------------------------------------|
| Snags                                                       | 6.5                                      |
| Roots/undercut banks                                        | 3.5                                      |
| Leaf Packs (or mats)                                        |                                          |
| Aquatic Macrophytes                                         |                                          |
|                                                             |                                          |
|                                                             |                                          |
| Pools                                                       | total # observed =<br># range expected = |

Average width \_\_\_\_\_ m  
Average depth \_\_\_\_\_ m

Velocity measured at 0.50, 100 meter mark.

WQ & chemistry taken at \_\_\_\_\_ meter mark.

Habitat Smothering:  
Note areas (on map) where sand or silt is smothering substrates, limiting habitability.

Bank Stability:  
Note areas (on map) with unstable, eroding banks.

Riparian Buffer Width:  
Note areas (on map) where natural vegetation is altered or eliminated.

Plants observed / other notes:

<2 M of Macrophytes was observed while doing the LVS? YES or NO ~18m

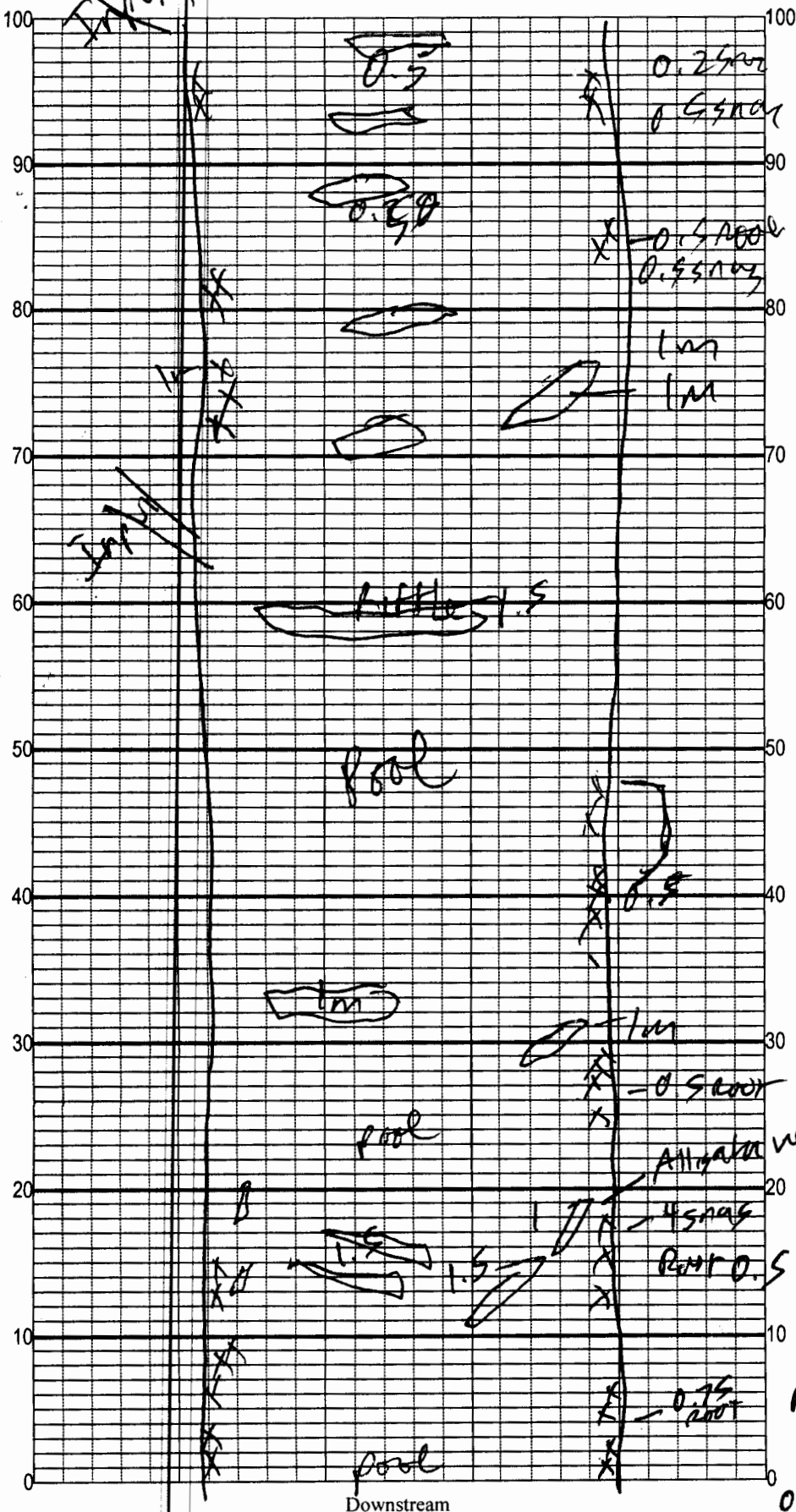
Snag = 4 + 2 + 1.5 + 1 + 1 = 6.5

Root = 1.75 + 0.5 + 0.5 + 1.5 + 2 = 3.5

0.15

2m wide

Left Bank



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

4 = 2%  
6 = 3%

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

78473

|                            |                 |                                            |                              |                                      |
|----------------------------|-----------------|--------------------------------------------|------------------------------|--------------------------------------|
| SAMPLING AGENCY:<br>NE ROC |                 | STORET STATION NUMBER:<br>20030573         | DATE (MM/DD/YY):<br>06-21-18 | RECEIVING BODY OF WATER:<br>Black Cr |
| REMARKS:                   | COUNTY:<br>CLAY | LOCATION:<br>mill cr 1000 ft<br>N. of 209A | FIELD ID/NAME:               |                                      |

| 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 9                                                                            | 20 19 18 17 16                                                                                                                                                                                                            | 15 14 13 12 11                                                                                                                                                          | 10 9 8 7 6                                                                                                                                        | 5 4 3 2 1                                                                                                                          |
| Substrate Availability 9                                                                         | 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 13                                                                                | 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 13<br>-----<br>Primary Score 44                                               | 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 18                                                                     | 20 19 18 17 16                                                                                                                                                                                                            | 15 14 13 12 11                                                                                                                                                          | 10 9 8 7 6                                                                                                                                        | 5 4 3 2 1                                                                                                                          |
| Bank Stability 8<br>Right Bank 8<br>Left Bank 2                                                  | 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.<br>10 9                                                            | Only meets 2 of the 3 requirements for optimal bank stability.<br>8 7 6                                                                                                 | Only meets 1 of the 3 requirements for optimal bank stability.<br>5 4                                                                             | Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas.<br>3 2 1               |
| Riparian Buffer Zone Width 9<br>Right Bank 9<br>Left Bank 6                                      | Width of vegetation greater than 18 m<br>10 9                                                                                                                                                                             | Width of vegetation >12 to 18m<br>8 7 6                                                                                                                                 | Width of vegetation 6 to 12 m. human activities close to system<br>5 4                                                                            | Less than 6 m of buffer zone due to intensive human activities<br>3 2 1                                                            |
| Riparian Zone Vegetation Quality 8<br>Right Bank 8<br>Left Bank 6<br>-----<br>Secondary Score 62 | 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.<br>10 9 | >50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed.<br>8 7 6 | 25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.<br>5 4 | Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).<br>3 2 1 |

TOTAL SCORE

|               |                     |                       |
|---------------|---------------------|-----------------------|
| Date: 6/21/18 | Analyst: Jerry Pann | Signature: Jerry Pann |
|---------------|---------------------|-----------------------|



# FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

Data Qualified?  
Yes / No

January 2018

WIN Station Name: Mill Cr. 1000ft N. of SR 209 off CR 209A Date: 6/21/2018

WIN/ Field ID: 20030573 WBID: 2423 Latitude: 30.06594 (mm/dd/yyyy) (Decimal Degrees)

County: clay ORG ID: 21FLA Longitude: 81.78694 (Decimal Degrees)

Receiving Body of Water: Black Cr. RQ-2018-26-18-38

| Sampling Team Members |  |  |  |  | WQ Measurements | Sample Collection | Documentation | Preservation | Preservation Check |
|-----------------------|--|--|--|--|-----------------|-------------------|---------------|--------------|--------------------|
| <u>Plamash</u>        |  |  |  |  |                 |                   |               |              |                    |
| <u>P. O'Connor</u>    |  |  |  |  |                 |                   |               |              |                    |

| Sampling Equipment                                   |                                   |                               |
|------------------------------------------------------|-----------------------------------|-------------------------------|
| <input checked="" type="checkbox"/> Sample Container | <input type="checkbox"/> Van Dorn | <input type="checkbox"/> Pole |
| <input type="checkbox"/> Carboy                      | <input type="checkbox"/> Syringe  |                               |
| <input type="checkbox"/> Dipper                      | <input type="checkbox"/> Other    |                               |
| Depth Measured with <u>YSI TI</u>                    |                                   |                               |
| Equipment ID <u>Ortho 49</u>                         |                                   |                               |

| Collection Method                          |                                         |  |
|--------------------------------------------|-----------------------------------------|--|
| <input checked="" type="checkbox"/> Wading | <input type="checkbox"/> Canoe/Kayak    |  |
| <input type="checkbox"/> From Shore        | <input type="checkbox"/> Electric Motor |  |
| <input type="checkbox"/> Other             | <input type="checkbox"/> Gasoline Motor |  |

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded Meter ID# YSI TY Matrix: Fresh / Marine / DI

Photos: Yes / No Flow: No Flow / Interstitial / Flowing / NA Tide: Rising/ Falling/ Slack/ NA Tide Times: High Low

| Time Zone | Time | Total Depth (m) | Sample Depth (m) | Secchi Disk (m) | DO (mg/L) | DO (%SAT) | pH   | Salinity (PPT) | Sp COND (umhos/cm) | Temp. (C°) |
|-----------|------|-----------------|------------------|-----------------|-----------|-----------|------|----------------|--------------------|------------|
| EST       | 9:10 | 0.6             | 0.3              | 0.65            | 6.14      | 74.6      | 6.87 | 0.07           | 147                | 25.2       |
| CEN       |      |                 |                  |                 |           |           |      |                |                    |            |

Biological Samples Collected: None HA SC RPS Algae ID LVS LVI Other:

SBIO ID Numbers: SBIO-ID: HA-ID: RPS-ID: Macrophyte-ID: LIMS#:

| Parameter Suite             | Parameter Methods                                                                                                                                                                                                                                                                                                                                                           | Preservation                                                                      | Lot#      | Expiration | pH Check                               |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------|------------|----------------------------------------|
| Preserved Nutrients         | <input checked="" type="checkbox"/> W-NH3 / <input checked="" type="checkbox"/> W-NO2NO3 / <input checked="" type="checkbox"/> W-TKN / <input checked="" type="checkbox"/> W-TOC / <input checked="" type="checkbox"/> W-S-A-TP                                                                                                                                             | <input checked="" type="checkbox"/> Ice <input checked="" type="checkbox"/> H2SO4 | 7341020   | 12/7/18    | <input checked="" 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 um Filter                                                                                                                                                                                                                                                               | <input checked="" type="checkbox"/> Ice                                           | R7HA24539 |            |                                        |
| Chlorophyll                 | <input checked="" type="checkbox"/> CHLSUITE-W                                                                                                                                                                                                                                                                                                                              | <input checked="" type="checkbox"/> Ice                                           |           |            |                                        |
| Physical/Aggregate (Fresh)  | <input checked="" type="checkbox"/> Alkalinity / <input checked="" type="checkbox"/> W-F / <input checked="" type="checkbox"/> W-TSS / <input checked="" type="checkbox"/> TURBIDITY / <input checked="" type="checkbox"/> W-Cl-IC / <input checked="" type="checkbox"/> W-COLOR / <input checked="" type="checkbox"/> W-SO4-IC / <input checked="" type="checkbox"/> W-TDS | <input checked="" type="checkbox"/> Ice                                           |           |            |                                        |
| Physical/Aggregate (Marine) | <input type="checkbox"/> Alkalinity / <input type="checkbox"/> W-F / <input type="checkbox"/> W-TSS / <input type="checkbox"/> TURBIDITY                                                                                                                                                                                                                                    | <input type="checkbox"/> Ice                                                      |           |            |                                        |
| Macroinvertebrates          | <input checked="" type="checkbox"/> MI-FW-QLDC                                                                                                                                                                                                                                                                                                                              | <input checked="" type="checkbox"/> Formalin                                      |           |            |                                        |
| Periphyton                  | <input type="checkbox"/> ALGAE-ID                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/> Ice                                                      |           |            |                                        |
| Microbiology                | <input checked="" type="checkbox"/> E Coli <input type="checkbox"/> F Coli <input type="checkbox"/> Enterococci                                                                                                                                                                                                                                                             | <input checked="" type="checkbox"/> Ice                                           |           |            |                                        |
| Molecular                   | <input type="checkbox"/> PCR-FILTER <input type="checkbox"/> PCR-HF183 <input type="checkbox"/> PCR-BacR <input type="checkbox"/> PCR-GULL2 <input type="checkbox"/> PCR-GFD                                                                                                                                                                                                | <input type="checkbox"/> Ice                                                      |           |            |                                        |
| Tracers                     | <input type="checkbox"/> W-SUC-AA-R <input type="checkbox"/> W-UHERB-AA <input type="checkbox"/> W-AHERB-AA                                                                                                                                                                                                                                                                 | <input type="checkbox"/> Ice                                                      |           |            |                                        |
| Pesticides                  | <input type="checkbox"/> W-PSNP-TQ <input type="checkbox"/> W-UHERB-AA <input type="checkbox"/> W-AHERB-AA <input type="checkbox"/> W-CARB-AA <input type="checkbox"/> W-PCL-SQ-R <input type="checkbox"/> W-PYR-AA-R <input type="checkbox"/> W-GLYPH <input type="checkbox"/> W-SUC-AA-R                                                                                  | <input type="checkbox"/> Ice <input type="checkbox"/> Other                       |           |            |                                        |

Notes: \_\_\_\_\_

Field ID: \_\_\_\_\_ Win ID: 20030573

Mill Log Cr Approx 1000ft N of SR 209 off CR 209A

Signature: B = P = Date: 7/12/18

Enter Field Parameters, Verify Station ID In LIMS DMT: 7/12/18 QC Station ID, Field Parameters In LIMS DMT: 87 7/12/18

Scan/Save Field Sheets BD 7/12/18 Migrate Data to WIN: \_\_\_\_\_ Verify Data In WIN: \_\_\_\_\_