



# FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End  
of Day CCV  
Yes / No

**WIN Station Name:** Jumper Creek Swamp @ 475 **Date:** 12/2/2020  
**WIN/Field ID:** G4SW0112 **WBID:** 1360A **ENR:** **Latitude:** 28.6961  
**County:** SUMTER **Org ID:** 21FLTPA **Longitude:** -82.1091  
**Receiving Body of Water:** Withlacoochee **RQ:** 2020-12-07-16

| Sampling Team Members               |              | WQ Measurements | Sample Collection | Documentation | Preservation | Preservation Check |
|-------------------------------------|--------------|-----------------|-------------------|---------------|--------------|--------------------|
| <input checked="" type="checkbox"/> | Ben Paswater | x               | x                 | x             |              |                    |
| <input checked="" type="checkbox"/> | Judy Ashton  | x               | x                 | x             | x            | x                  |
| <input type="checkbox"/>            |              |                 |                   |               |              |                    |
| <input type="checkbox"/>            |              |                 |                   |               |              |                    |

| Sampling Equipment                                   |                                         |
|------------------------------------------------------|-----------------------------------------|
| <input checked="" type="checkbox"/> Sample Container | <input type="checkbox"/> Carboy         |
| <input type="checkbox"/> Dipper                      | <input type="checkbox"/> Van Dorn       |
| <input type="checkbox"/> Syringe                     | <input type="checkbox"/> Pole           |
| Depth measured with: Secchi                          |                                         |
| Secchi Equipment ID: Secchi #3                       |                                         |
| 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 |

|                                                                                                                                                                                                                                                                                                         |  |                   |  |              |  |                                  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------|--|--------------|--|----------------------------------|--|--|--|--|--|
| <b>Water Level:</b> <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Low <input type="checkbox"/> High <input type="checkbox"/> Dry <input type="checkbox"/> Pooled <input type="checkbox"/> Flooded                                                                                 |  |                   |  |              |  | <b>Meter ID#</b> SWD             |  |  |  |  |  |
| <b>Photos:</b> YES                                                                                                                                                                                                                                                                                      |  | <b>Flow:</b> FLOW |  | <b>Tide:</b> |  | <b>Tide Times:</b><br>High: Low: |  |  |  |  |  |
| <b>Biological Samples Collected:</b> <input type="checkbox"/> None <input checked="" type="checkbox"/> HA <input checked="" type="checkbox"/> SCI <input checked="" type="checkbox"/> RPS <input type="checkbox"/> Algae ID <input checked="" type="checkbox"/> LVS <input type="checkbox"/> LVI Other: |  |                   |  |              |  |                                  |  |  |  |  |  |
| <b>SBIO ID Numbers:</b>                                                                                                                                                                                                                                                                                 |  |                   |  |              |  |                                  |  |  |  |  |  |
| <b>Notes:</b>                                                                                                                                                                                                                                                                                           |  |                   |  |              |  |                                  |  |  |  |  |  |

## Duplicate Sample

|                                   |                  |                      |              |
|-----------------------------------|------------------|----------------------|--------------|
| <b>Time Zone:</b> EST             | <b>Time:</b> N/A | <b>Field ID:</b> N/A | (WIN ID_DUP) |
| <b>WIN DMT Activity ID:</b> _____ |                  |                      |              |

## Blank

|                         |                  |                          |                       |
|-------------------------|------------------|--------------------------|-----------------------|
| <b>Time Zone:</b> _____ | <b>Time:</b> N/A | <b>Field ID:</b> N/A     | (Blank Type_DDMMYYYY) |
| <b>DI Source:</b> N/A   |                  | <b>Location:</b> N/A     |                       |
| <b>DI Type:</b> N/A     |                  | <b>Equipment ID:</b> N/A |                       |

LIMS EVENT ID: \_\_\_\_\_ WIN Import ID: \_\_\_\_\_  
Enter Field Parameters, Verify Station ID In LIMS DMT: \_\_\_\_\_ QC Station ID, Field Parameters In LIMS DMT: \_\_\_\_\_  
(Initials/Date) (Initials/Date)  
Scan/Save Field Sheets \_\_\_\_\_ Migrate Data to WIN: \_\_\_\_\_ Verify Data In WIN: \_\_\_\_\_  
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2020-12-07-16

Customer: WQAP

Project ID: SMP

Collected By: Ben Paswater, Judy Ashton

Field Report Prepared By: Ben Paswater

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G4SW0112

Location: Jumper Creek Swamp @ 475

Comments:

Matrix: Fresh

(Check one)

☒ GRAB☐ COMPOSITE

| Date      | Time         | DO (mg/L) | DO (%SAT) | Temp. (C°) | pH   | Sample Depth (m) | Secchi Disk (m)                                  | Total Depth (m) | Sp COND (µmhos/cm) | Salinity (PPTH) |
|-----------|--------------|-----------|-----------|------------|------|------------------|--------------------------------------------------|-----------------|--------------------|-----------------|
| 12/2/2020 | 14:00<br>EST | 9.43      | 95.9      | 16.2       | 7.02 | 0.3              | 1<br><input checked="" type="checkbox"/> VOB (S) | 1               | 371.7              | 0.18            |

Central Lab please use top row for login purposes

|  |     |  |  |  |  |  |  |  |  |  |
|--|-----|--|--|--|--|--|--|--|--|--|
|  | EST |  |  |  |  |  |  |  |  |  |
|--|-----|--|--|--|--|--|--|--|--|--|

| Parameter Suite                    | Parameter Methods                                                                                                                                                             | Preservation                                                                       | pH Check                               | # Bottles sent to Lab | Bottle Group |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------|-----------------------|--------------|
| Preserved Nutrients (P-500ML)      | <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 checked="" type="checkbox"/> <2 | 1                     | A            |
|                                    | Lot # Exp:                                                                                                                                                                    |                                                                                    |                                        |                       |              |
| Metals (P-500ML)                   | <input checked="" type="checkbox"/> W-ICPMS <input checked="" type="checkbox"/> W-ICP <input checked="" type="checkbox"/> W-HARD                                              | <input checked="" type="checkbox"/> Ice <input checked="" type="checkbox"/> HNO3*  | <input checked="" type="checkbox"/> <2 | 1                     | A            |
|                                    | Lot # Exp:                                                                                                                                                                    |                                                                                    |                                        |                       |              |
| Filtered Nutrients (P125ML)        | <input checked="" type="checkbox"/> W-PO4-F <input checked="" type="checkbox"/> Field Filtered 0.45 µm Filter                                                                 | <input checked="" type="checkbox"/> Ice                                            |                                        | 1                     | A            |
|                                    | Filter Lot #                                                                                                                                                                  |                                                                                    |                                        |                       |              |
|                                    | Syringe Lot #                                                                                                                                                                 |                                                                                    |                                        |                       |              |
| Chlorophyll (BP-1L)                | <input checked="" type="checkbox"/> CHLSUITE-W                                                                                                                                | <input checked="" type="checkbox"/> Ice                                            |                                        | 1                     | A            |
| Physical/Aggregate (Fresh) (P-1L)  | <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                                            |                                        | 1                     | A            |
| Physical/Aggregate (Marine) (P-1L) | <input type="checkbox"/> Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY                                                                                                       | <input type="checkbox"/> Ice                                                       |                                        |                       |              |
| Macroinvertebrates (PJ-2L)         | <input checked="" type="checkbox"/> MI-FW-QLDC                                                                                                                                | <input checked="" type="checkbox"/> Formalin                                       |                                        | 2                     |              |
| Periphyton (PT-50ML)               | <input type="checkbox"/> ALGAE-ID                                                                                                                                             | <input type="checkbox"/> Ice                                                       |                                        |                       |              |
| Microbiology (Contract Lab Bottle) | <input checked="" type="checkbox"/> E Coli <input type="checkbox"/> F Coli <input type="checkbox"/> Enterococci<br><input type="checkbox"/> Contract Lab                      | <input checked="" type="checkbox"/> Ice                                            |                                        | 1                     | A            |
| Molecular (QPCR-P-500ML)           | <input type="checkbox"/> PCR-HF183 <input type="checkbox"/> PCR-BacR <input type="checkbox"/> PCR-DG3<br><input type="checkbox"/> PCR-GULL2 <input type="checkbox"/> PCR-GFD  | <input type="checkbox"/> Ice                                                       |                                        |                       |              |
| Tracers (BG-500ML)                 | <input type="checkbox"/> W-E8321-DI <input type="checkbox"/> W-E8321-MS                                                                                                       | <input type="checkbox"/> Ice                                                       |                                        |                       |              |
| Pesticides (BG-500ML) (BG-1L)      | <input checked="" type="checkbox"/> W-E8321-DI <input checked="" type="checkbox"/> WE8321-MS <input checked="" type="checkbox"/> W-PSNP-TQ <input type="checkbox"/> W-CT-CL-R | <input checked="" type="checkbox"/> Ice                                            |                                        | 5                     | A            |
|                                    | <input type="checkbox"/> W-PCL-SQ-R <input type="checkbox"/> W-CARB-AA ( 5 ml of MCAA** Buffer Solution)                                                                      |                                                                                    |                                        |                       |              |
|                                    |                                                                                                                                                                               | <input type="checkbox"/> Ice                                                       |                                        |                       |              |

Name:  
Ben Paswater  
Judy Ashton

Signature:

Date:

12/02/2020

\*2.0 ml of Preservative used unless noted otherwise.

\*\*MCAA: Monochloroacetic acid buffer solution



Site Name:

Jumper Creek Swamp @ 475

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

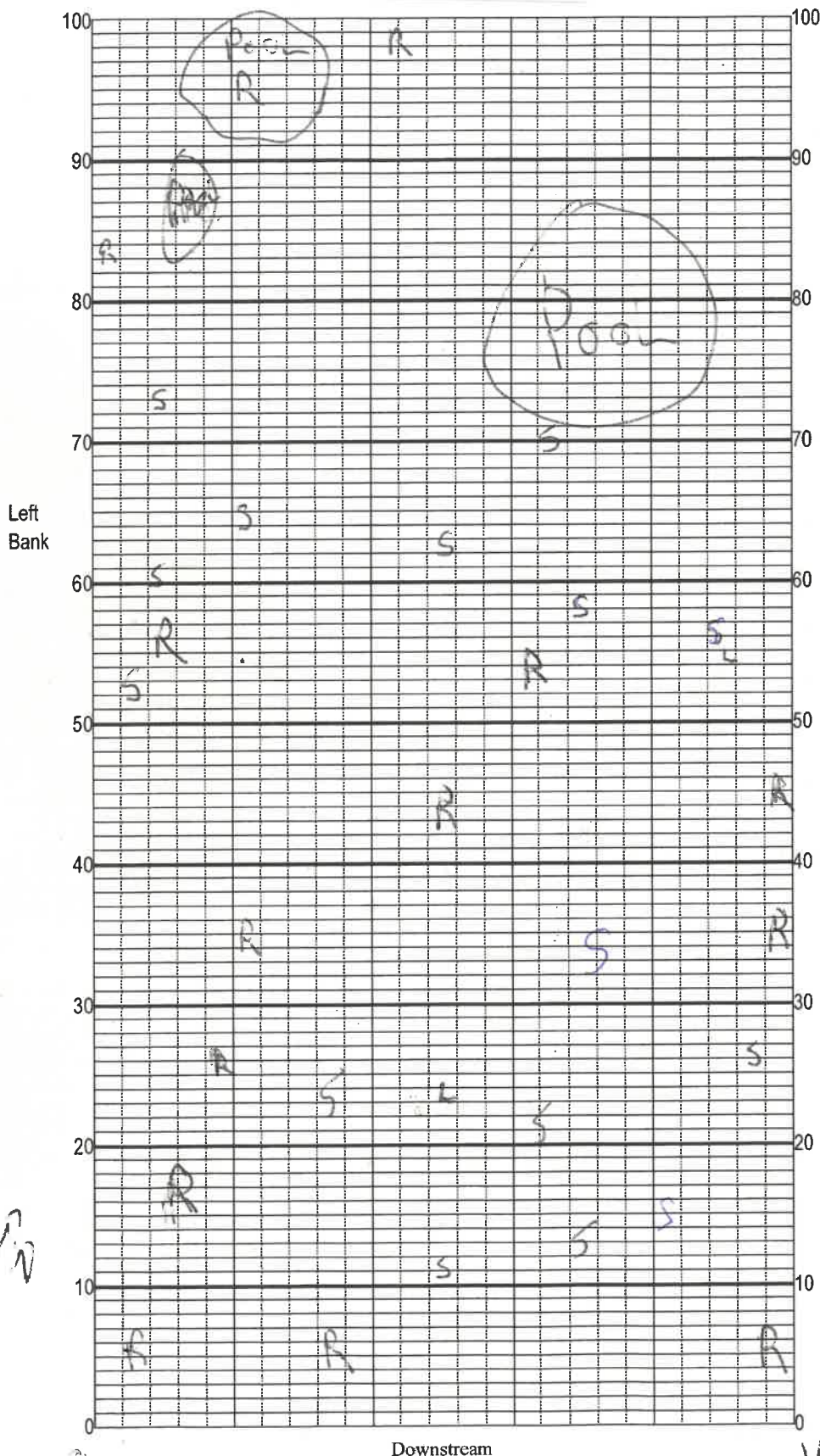
Location:

Date:

12/2/2020

Sampler:

Ben P. Swater



100 m: Latitude \_\_\_\_\_  
Longitude \_\_\_\_\_  
0 m: Latitude \_\_\_\_\_  
Longitude \_\_\_\_\_

Substrates: Code key, draw proportionate habitat abundance. %

|                                       |                      |                                                |
|---------------------------------------|----------------------|------------------------------------------------|
| <input checked="" type="checkbox"/> S | Snags                | 1.5                                            |
| <input checked="" type="checkbox"/> R | Roots/undercut banks | 2.3                                            |
| <input checked="" type="checkbox"/> L | Leaf Packs (or mats) | few                                            |
| <input type="checkbox"/>              | Aquatic Macrophytes  | _____                                          |
| <input type="checkbox"/>              | ROCKS                | _____                                          |
| <input type="checkbox"/>              | _____                | _____                                          |
| <input checked="" type="checkbox"/> 3 | Pools                | total # observed = 3<br># range expected = 3-4 |

Average width 4 mAverage depth .5 mVelocity measured at 0, 50, 100 meter mark.WQ & chemistry taken at 0 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:

S = 38 1.5%  
R = 58 2.3%

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



21FLTPA

LATITUDE

LONGITUDE

Site Name: Jumper Creek Swamp @ 475

1300

SAMPLING AGENCY FDEP SW ROC

## RIPARIAN ZONE / STREAM FEATURES

|                                                                                                                                                                                                                                                                                                                                              |              |               |              |                                                                                                                                                                                                              |            |          |                 |                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------|-----------------|----------------------------------------------------------------------------|
| <b>PREDOMINANT LAND-USE IN WATERSHED</b> (specify relative percent in each category):                                                                                                                                                                                                                                                        |              |               |              |                                                                                                                                                                                                              |            |          |                 | <b>Landscape Development Intensity Index (LDI)</b>                         |
| Forest/Natural                                                                                                                                                                                                                                                                                                                               | Silviculture | Field/Pasture | Agricultural | Residential                                                                                                                                                                                                  | Commercial | Industry | Other (Specify) |                                                                            |
| 40                                                                                                                                                                                                                                                                                                                                           |              | 10            | 10           | 20                                                                                                                                                                                                           | 10         | 10       |                 |                                                                            |
| Local Watershed Erosion (select one): <input type="checkbox"/> None <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy<br>Local Watershed NPS Pollution: <input type="checkbox"/> No evidence <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy |              |               |              |                                                                                                                                                                                                              |            |          |                 | <b>Typical Width (m) Depth (m)/Velocity (m/sec) Transect</b><br>4.0 m wide |
| <b>Width of Riparian Vegetation (m) on Each Buffer Side</b><br>Left Bank: 7.8m Right Bank: 7.8m                                                                                                                                                                                                                                              |              |               |              | <b>Hydrologic Modification Score</b><br>(per FT 3101)                                                                                                                                                        |            |          |                 | .33 m/s .33 m/s .33 m/s                                                    |
| <b>High Water Mark:</b> 0.5 + 0.8 = 1.3<br>(m) (above present water level) (present depth) (above bed)                                                                                                                                                                                                                                       |              |               |              | <b>Artificially Impounded</b><br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                         |            |          |                 | .3 m deep .5 m deep .5 m deep                                              |
| <b>Artificially</b> <input checked="" type="checkbox"/> No <input type="checkbox"/> Mostly recovered, more sinuous<br><b>Channelized:</b> <input type="checkbox"/> Some recovery <input type="checkbox"/> Recent, severe                                                                                                                     |              |               |              | <b>Canopy Cover %</b> <input type="checkbox"/> Open <input type="checkbox"/> Lightly Shaded (11-45%)<br><input 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 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 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 checked="" type="checkbox"/> LVS<br><input type="checkbox"/> LCI <input type="checkbox"/> BioRecon                                                                                                                                                                                                                                                                                                                                                          |  |  | <b>WATER QUALITY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
| Woody Debris (Snags) 1.5 7<br>Undercut Banks / Roots 2.3 7<br>Leaf Packs or Mat ..... 4<br>Aquatic Vegetation ..... 1<br>Rock or Shell Rubble.....<br>Sand..... 1<br>Mud / Muck / Silt .....<br>Other .....<br>Other .....                                                                                                                                                                                                                                                                                                                                                                   |  |  | Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M)<br>Top: .....<br>Mid: .....<br>Bottom: 0.3 16.2 7.02 9.43 95.9 371.7 0.18<br>Meter ID: .....<br>Water Odors 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 type="checkbox"/> No<br>Sample Preserved? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Lot Number: ..... Exp: .....<br><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>ABUNDANCE</b><br>Not Obs. Rare Common Abundant<br>Periphyton: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/><br>Fish: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/><br>Aquatic Plants: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/><br>Iron/Sulfur Bacteria: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |  |  | <b>Water Surface Oils</b> Normal <input checked="" type="checkbox"/> Sheen <input type="checkbox"/><br>Globs <input type="checkbox"/> Slick <input type="checkbox"/> Other <input type="checkbox"/><br><b>Color</b> Tannic <input checked="" type="checkbox"/> Green (Algae) <input type="checkbox"/><br>Clear <input type="checkbox"/> Other (Specify) <input type="checkbox"/><br><b>Clarity</b> Clear <input checked="" type="checkbox"/> Slightly Turbid <input type="checkbox"/><br>Turbid <input type="checkbox"/> Opaque <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
| <b>AMBIENT FIELD CONDITIONS / NOTES:</b><br><input checked="" type="checkbox"/> The antecedent hydrologic conditions have been met to my best knowledge.                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |

SAMPLING TEAM

J. ASHTON, B. PASWATER

SIGNATURE

DATE:

12-2-20





Site Name: Jumper Creek Swamp @ 475

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

Investigators: J. A. Hutton

County:

STORET Station Number: see label

| Transect (m) | Point 1=right 9=left | Algal Thickness Rank (N-6, X) | Estimated | Canopy Cover | Transect (m) | Point 1=right 9=left | Algal Thickness Rank (N-6, X) | Estimated | Canopy Cover |
|--------------|----------------------|-------------------------------|-----------|--------------|--------------|----------------------|-------------------------------|-----------|--------------|
| 0            | 1                    | N                             |           |              | 60           | 1                    | N                             |           |              |
|              | 2                    | N                             |           |              |              | 2                    | N                             |           |              |
|              | 3                    | N                             |           |              |              | 3                    | N                             |           |              |
|              | 4                    | N                             |           |              |              | 4                    | N                             |           |              |
|              | 5                    | N                             |           | 18           |              | 5                    | N                             |           | 70           |
|              | 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                             |           | 90           |              | 5                    | N                             |           | 92           |
|              | 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                             |           | 96           |              | 5                    | N                             |           | 89           |
|              | 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                             |           | 96           |              | 5                    | N                             |           | 70           |
|              | 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                             |           | 88           |              | 5                    | N                             |           | 30           |
|              | 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                             |           |              |
|              | 6                    | N                             |           |              |              | 6                    | N                             |           |              |
|              | 7                    | N                             |           |              |              | 7                    | N                             |           |              |
|              | 8                    | N                             |           |              |              | 8                    | N                             |           |              |
|              | 9                    | N                             |           |              |              | 9                    | N                             |           |              |

 Secchi depth 0.8  
 Estimated? No

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

Check accompanying data collected at same site/date.

Algal mat sample

Linear Veg Survey

Habitat Assessment

SCI/Biorecon

Water sample

RQ- 2020-12-07-16

## 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 9000-32: LINEAR VEGETATION SURVEY FIELD

Site Name: Jumper Creek Swamp @ 475

County:

Waterbody: See Sticker

Date: 12-2-20

Signature:

Comments:

Analyst:

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. **BOLD is exotic invasive**

| HERBACEOUS SPECIES                                             | Meter Mark |       |       |       |       |       |       |       |       |        | Specimen collected (check) | HERBACEOUS SPECIES                   | Meter Mark |       |       |       |       |       |       |       |       |        | Specimen collected (check) |
|----------------------------------------------------------------|------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|----------------------------|--------------------------------------|------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|----------------------------|
|                                                                | 0-10       | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |                            |                                      | 0-10       | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |                            |
| <b>Alternanthera philoxeroides</b>                             |            |       |       |       |       |       |       |       |       |        |                            | <b>Micranthemum glomeratum</b>       |            |       |       |       |       |       |       |       |       |        |                            |
| Bacopa caroliniana (Lemon)                                     |            |       |       |       |       |       |       |       |       |        |                            | <b>Micranthemum umbrosum</b>         |            |       |       |       |       |       |       |       |       |        |                            |
| Bacopa monnieri                                                |            |       |       |       |       |       |       |       |       |        |                            | <b>Myriophyllum aquaticum</b>        |            |       |       |       |       |       |       |       |       |        |                            |
| Bidens mitis                                                   |            |       |       |       |       |       |       |       |       |        |                            | Najas guadelupensis                  |            |       |       |       |       |       |       |       |       |        |                            |
| Boehmeria cylindrica                                           |            |       |       |       |       |       |       |       |       |        |                            | Nitella sp.                          |            |       |       |       |       |       |       |       |       |        |                            |
| Centella asiatica                                              |            |       |       |       |       |       |       |       |       |        |                            | Nuphar luteum                        |            |       |       |       |       |       |       |       |       |        |                            |
| Ceratophyllum demersum                                         |            |       |       |       |       |       |       |       |       |        |                            | Orontium aquaticum                   |            |       |       |       |       |       |       |       |       |        |                            |
| Chara sp.                                                      |            |       |       |       |       |       |       |       |       |        |                            | Panicum hemitomon                    |            |       |       |       |       |       |       |       |       |        |                            |
| Cicuta maculata                                                |            |       |       |       |       |       |       |       |       |        |                            | <b>Panicum repens</b>                | X          |       |       |       |       |       |       |       |       |        |                            |
| Cladium jamaicense                                             |            |       |       |       |       |       |       |       |       |        |                            | Panicum rigidulum                    |            |       |       |       |       |       |       |       |       |        |                            |
| <b>Colocasia esculenta</b>                                     |            |       |       |       |       |       |       |       |       |        |                            | <b>Pistia stratioides</b>            |            |       |       |       |       |       |       |       |       |        |                            |
| Commelina diffusa                                              |            |       |       |       |       |       |       |       |       |        |                            | Polygonum glabra                     |            |       |       |       |       |       |       |       |       |        |                            |
| Commelina virginica                                            |            |       |       |       |       |       |       |       |       |        |                            | Polygonum hydropiperoides            |            |       |       |       |       |       |       |       |       |        |                            |
| Crinum americanum                                              |            |       |       |       |       |       |       |       |       |        |                            | Polygonum punctatum                  |            |       |       |       |       |       |       |       |       |        |                            |
| Cyperus                                                        |            |       |       |       |       |       |       |       |       |        |                            | Pontedaria cordata                   |            |       |       |       |       |       |       |       |       |        |                            |
| Diodia virginiana                                              |            |       |       |       |       |       |       |       |       |        |                            | Potamogeton illinoensis              |            |       |       |       |       |       |       |       |       |        |                            |
| <b>Eichhornia crassipes</b>                                    |            |       |       |       |       |       |       |       |       |        |                            | <b>Ruellia simplex (Mex Petunia)</b> |            |       |       |       |       |       |       |       |       |        |                            |
| Eleocharis (wispy viviparous)                                  |            |       |       |       |       |       |       |       |       |        |                            | Sacciolepis striata                  |            |       |       |       |       |       |       |       |       |        |                            |
| Fontinalis sp. (Aquatic Moss)                                  |            |       |       |       |       |       |       |       |       |        |                            | Sagittaria kurziana                  |            |       |       |       |       |       |       |       |       |        |                            |
| Fraxinus caroliniana                                           |            |       |       |       |       |       |       |       |       |        |                            | Sagittaria lancifolia                |            |       |       |       |       |       |       |       |       |        |                            |
| <b>Hydrilla verticillata</b>                                   |            |       |       |       |       |       |       |       |       |        |                            | Sagittaria latifolia                 |            |       |       |       |       |       |       |       |       |        |                            |
| Hydrocotyle sp.                                                |            |       |       |       |       |       |       |       |       |        |                            | <b>Salvinia minima</b>               |            |       |       |       |       |       |       |       |       |        |                            |
| <b>Hygrophila polysperma</b>                                   |            |       |       |       |       |       |       |       |       |        |                            | Samolus parviflora                   |            |       |       |       |       |       |       |       |       |        |                            |
| <b>Hymenachne amplexicaulis</b>                                |            |       |       |       |       |       |       |       |       |        |                            | Saururus cernuus                     |            |       |       |       |       |       |       |       |       |        |                            |
| Hymenocallis                                                   |            |       |       |       |       |       |       |       |       |        |                            | Sparganium americanum                |            |       |       |       |       |       |       |       |       |        |                            |
| Lachnanthes caroliniana                                        |            |       |       |       |       |       |       |       |       |        |                            | Schoenoplectus americanus            |            |       |       |       |       |       |       |       |       |        |                            |
| <b>Landoltia punctata</b>                                      |            |       |       |       |       |       |       |       |       |        |                            | Sphagneticola trilobata (Wedelia)    |            |       |       |       |       |       |       |       |       |        |                            |
| Lemna sp.                                                      |            |       |       |       |       |       |       |       |       |        |                            | Typha sp.                            |            |       |       |       |       |       |       |       |       |        |                            |
| <b>Limnophila sessiflora</b>                                   |            |       |       |       |       |       |       |       |       |        |                            | <b>Urochloa mutica (Brachiaria)</b>  |            |       |       |       |       |       |       |       |       |        |                            |
| Ludwigia leptocarpa                                            |            |       |       |       |       |       |       |       |       |        |                            | Vallisneria americana                |            |       |       |       |       |       |       |       |       |        |                            |
| Ludwigia palustris                                             |            |       |       |       |       |       |       |       |       |        |                            | Zizania aquatica                     |            |       |       |       |       |       |       |       |       |        |                            |
| <b>Ludwigia peruviana</b>                                      |            |       |       |       |       |       |       |       |       |        |                            | <i>Rhynchospora corniculata</i>      |            |       |       |       |       |       |       |       |       |        |                            |
| Ludwigia repens                                                |            |       |       |       |       |       |       |       |       |        |                            |                                      |            |       |       |       |       |       |       |       |       |        |                            |
| Luziola fluitans                                               |            |       |       |       |       |       |       |       |       |        |                            |                                      |            |       |       |       |       |       |       |       |       |        |                            |
| If no Dominant or Co-Dominant were selected, Indicate with "X" |            |       |       |       |       |       |       |       |       |        |                            |                                      |            |       |       |       |       |       |       |       |       |        |                            |
| Indicate % cover macrophytes per section                       |            |       |       |       |       |       |       |       |       |        |                            |                                      |            |       |       |       |       |       |       |       |       |        |                            |
| 0-5% Macrophyte Coverage                                       | X          | X     | X     | X     | X     | X     | X     | X     | X     | X      |                            |                                      |            |       |       |       |       |       |       |       |       |        |                            |
| >5 and ≤10% Macrophyte Coverage                                |            |       |       |       |       |       |       |       |       |        |                            |                                      |            |       |       |       |       |       |       |       |       |        |                            |
| >10 and ≤25% Macrophyte Coverage                               |            |       |       |       |       |       |       |       |       |        |                            |                                      |            |       |       |       |       |       |       |       |       |        |                            |
| >25 and ≤50% Macrophyte Coverage                               |            |       |       |       |       |       |       |       |       |        |                            |                                      |            |       |       |       |       |       |       |       |       |        |                            |
| > 50% Macrophyte Coverage                                      |            |       |       |       |       |       |       |       |       |        |                            |                                      |            |       |       |       |       |       |       |       |       |        |                            |





## Swamp/River Habitat Assessment Field Sheet

Site Name: Jumper Creek Swamp @ 475

STORET STATION NUMBER:

DATE (MM/DD/YY):

RECEIVING BODY OF WATER:

Gulf of Mexico

REMARKS:

COUNTY:

Sumter

LOCATION:

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 <u>10</u>               | 20 19 18 17 16                                                                                                                                                                                                    | 15 14 13 12 11                                                                                                                                                 | <u>10</u> 9 8 7 6                                                                                                                          | 5 4 3 2 1                                                                                                                     |
| Substrate Availability <u>5</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><u>5</u> 4 3 2 1                                                                     |
| Water Velocity <u>20</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><u>20</u> 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>15</u>                | Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae.                                                                                                   | Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae.                                                | Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth).                       | Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation.                                         |
| Primary Score <u>50</u>                     | 20 19 18 17 16                                                                                                                                                                                                    | <u>15</u> 14 13 12 11                                                                                                                                          | 10 9 8 7 6                                                                                                                                 | 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>18</u>         | 20 19 <u>18</u> 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> <u>9</u><br>Left Bank   | 10 <u>9</u> <u>LR</u>                                                                                                                                                                                             | 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> <u>10</u><br>Left Bank | <u>10</u> 9 <u>LR</u>                                                                                                                                                                                             | 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>10</u> <u>10</u><br>Left Bank | <u>10</u> 9 <u>LR</u>                                                                                                                                                                                             | 8 7 6                                                                                                                                                          | 5 4                                                                                                                                        | 3 2 1                                                                                                                         |
| Secondary Score <u>76</u>                   | 10 9                                                                                                                                                                                                              | 8 7 6                                                                                                                                                          | 5 4                                                                                                                                        | 3 2 1                                                                                                                         |

TOTAL SCORE

126

|                 |                       |                         |
|-----------------|-----------------------|-------------------------|
| Date: 12/2/2020 | Analyst: Ben Paswater | Signature: Ben Paswater |
|-----------------|-----------------------|-------------------------|