



# FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?  
Yes / No

WIN Station Name: Pirate Canal @ Burnt Store Rd

Date: 05/08/2019

WIN/ Field ID: G2SD0037

WBID: 2082A

Latitude: 26.802825

(Decimal Degrees)

County: Charlotte

ORG ID: \_\_\_\_\_

Longitude: -82.033597

(Decimal Degrees)

Receiving Body of Water: Charlotte Harbor

RQ- 2019-05-08-73

| Sampling Team Members                                                                                                            |             |                                                                                                                                                                                                                                 |                  |                 | WQ Measurements                                         | Sample Collection                       | Documentation                                                                     | Preservation                        | Preservation Check                  | Sampling Equipment                         |                                   |                               |  |  |                                          |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|---------------------------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------------|-----------------------------------|-------------------------------|--|--|------------------------------------------|--|--|--|--|
| <u>Nicole Reistad</u><br><u>Kirby Wolfe</u><br><u>Maryann Dugan, Gary Snorek</u>                                                 |             |                                                                                                                                                                                                                                 |                  |                 | <input checked="" type="checkbox"/>                     | <input checked="" type="checkbox"/>     | <input checked="" type="checkbox"/>                                               | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input 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>Secchi disk</u>     |                                   |                               |  |  |                                          |  |  |  |  |
| Equipment ID <u>3312B</u>                                                                                                        |             |                                                                                                                                                                                                                                 |                  |                 | Collection Method                                       |                                         |                                                                                   |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
|                                                                                                                                  |             |                                                                                                                                                                                                                                 |                  |                 | <input checked="" type="checkbox"/> Wading              | <input type="checkbox"/> Canoe/Kayak    |                                                                                   |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
|                                                                                                                                  |             |                                                                                                                                                                                                                                 |                  |                 |                                                         | <input type="checkbox"/> Electric Motor |                                                                                   |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
|                                                                                                                                  |             |                                                                                                                                                                                                                                 |                  |                 |                                                         | <input type="checkbox"/> Gasoline Motor |                                                                                   |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Water Level: <u>Dry</u> / Pooled / Low / Normal / High / Flooded                                                                 |             |                                                                                                                                                                                                                                 |                  |                 | Meter ID# <u>SNEK</u>                                   |                                         |                                                                                   |                                     |                                     | Matrix: <u>Fresh</u> / Marine / DI         |                                   |                               |  |  |                                          |  |  |  |  |
| Photos: <u>Yes</u> / No                                                                                                          |             |                                                                                                                                                                                                                                 |                  |                 | Flow: <u>No Flow</u> / Intestinal / <u>Flowing</u> / NA |                                         |                                                                                   |                                     |                                     | Tide: <u>Rising</u> / Falling / Slack / NA |                                   |                               |  |  | Tide Times: High <u>NA</u> Low <u>NA</u> |  |  |  |  |
| Time Zone                                                                                                                        | Time        | Total Depth (m)                                                                                                                                                                                                                 | Sample Depth (m) | Secchi Disk (m) | DO (mg/L)                                               | DO (%SAT)                               | pH                                                                                | Salinity (PPTH)                     | Sp COND (µmhos/cm)                  | Temp. (C°)                                 |                                   |                               |  |  |                                          |  |  |  |  |
| <u>EST</u>                                                                                                                       | <u>1120</u> | <u>0.4</u>                                                                                                                                                                                                                      | <u>0.2</u>       | <u>0.4</u>      | <u>5.42</u>                                             | <u>69.3</u>                             | <u>7.53</u>                                                                       | <u>0.30</u>                         | <u>612</u>                          | <u>27.4</u>                                |                                   |                               |  |  |                                          |  |  |  |  |
| <u>CEN</u>                                                                                                                       |             |                                                                                                                                                                                                                                 |                  |                 |                                                         |                                         |                                                                                   |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Biological Samples Collected: <u>None</u> <u>HA</u> <u>SCI</u> <u>RPS</u> <u>Algae ID</u> <u>LVS</u> <u>LVI</u> Other: _____     |             |                                                                                                                                                                                                                                 |                  |                 |                                                         |                                         |                                                                                   |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| SBIO ID Numbers: SBIO-ID: <u>79685</u> HA-ID: <u>15954</u> RPS-ID: <u>9339</u> Macrophyte-ID: <u>11315</u> LIMS#: <u>2085163</u> |             |                                                                                                                                                                                                                                 |                  |                 |                                                         |                                         |                                                                                   |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Parameter Suite                                                                                                                  |             | Parameter Methods                                                                                                                                                                                                               |                  |                 |                                                         |                                         | Preservation                                                                      |                                     | Lot#                                | Expiration                                 | pH Check                          |                               |  |  |                                          |  |  |  |  |
| Preserved Nutrients                                                                                                              |             | <input checked="" type="checkbox"/> W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP                                                                                                                                                 |                  |                 |                                                         |                                         | <input checked="" type="checkbox"/> Ice <input checked="" type="checkbox"/> H2SO4 |                                     | <u>SA8344070</u>                    | <u>12/10/19</u>                            | <u>&lt;2</u>                      |                               |  |  |                                          |  |  |  |  |
| Metals                                                                                                                           |             | <input checked="" type="checkbox"/> W-ICPMS <input checked="" type="checkbox"/> W-ICP                                                                                                                                           |                  |                 |                                                         |                                         | <input checked="" type="checkbox"/> Ice <input checked="" type="checkbox"/> HNO3  |                                     | <u>NA8344050</u>                    | <u>12/10/19</u>                            | <u>&lt;2</u>                      |                               |  |  |                                          |  |  |  |  |
| Filtered Nutrients                                                                                                               |             | <input checked="" type="checkbox"/> W-PO4-F <input checked="" type="checkbox"/> Field Filtered 0.45 µm Filter                                                                                                                   |                  |                 |                                                         |                                         | <input checked="" type="checkbox"/> Ice                                           |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Chlorophyll                                                                                                                      |             | <input checked="" type="checkbox"/> CHL-SUITE-W                                                                                                                                                                                 |                  |                 |                                                         |                                         | <input checked="" type="checkbox"/> Ice                                           |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Physical/Aggregate (Fresh)                                                                                                       |             | <input checked="" type="checkbox"/> Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-IC / W-COLOR / W-SO4-IC / W-TDS                                                                                                                 |                  |                 |                                                         |                                         | <input checked="" type="checkbox"/> Ice                                           |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Physical/Aggregate (Marine)                                                                                                      |             | <input type="checkbox"/> Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY                                                                                                                                                         |                  |                 |                                                         |                                         | <input type="checkbox"/> Ice                                                      |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Macroinvertebrates                                                                                                               |             | <input type="checkbox"/> MI-FW-QLDC                                                                                                                                                                                             |                  |                 |                                                         |                                         | <input type="checkbox"/> Formalin                                                 |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Periphyton                                                                                                                       |             | <input type="checkbox"/> ALGAE-ID                                                                                                                                                                                               |                  |                 |                                                         |                                         | <input type="checkbox"/> Ice                                                      |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Microbiology                                                                                                                     |             | <input type="checkbox"/> E Coli <input type="checkbox"/> F Coli <input type="checkbox"/> Enterococci                                                                                                                            |                  |                 |                                                         |                                         | <input type="checkbox"/> Ice                                                      |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Molecular                                                                                                                        |             | <input type="checkbox"/> PCR-FILTER <input type="checkbox"/> PCR-BacR <input type="checkbox"/> PCR-GULL2 <input type="checkbox"/> PCR-HF183 <input type="checkbox"/> PCR-DG3 <input type="checkbox"/> PCR-GPD                   |                  |                 |                                                         |                                         | <input type="checkbox"/> Ice                                                      |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Tracers                                                                                                                          |             | <input checked="" type="checkbox"/> W-E8321-DI <input checked="" type="checkbox"/> W-E8321-MS                                                                                                                                   |                  |                 |                                                         |                                         | <input checked="" type="checkbox"/> Ice                                           |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Pesticides                                                                                                                       |             | <input checked="" type="checkbox"/> W-PSNP-TQ <input type="checkbox"/> W-CT-CL-R <input type="checkbox"/> W-E8321-DI <input type="checkbox"/> W-PCL-SQ-R <input type="checkbox"/> W-E8321-MS <input type="checkbox"/> W-CAR8-AA |                  |                 |                                                         |                                         | <input checked="" type="checkbox"/> Ice                                           |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Phytoplankton                                                                                                                    |             | <input type="checkbox"/> DTY-QN-C <input type="checkbox"/> PKD-QN-C                                                                                                                                                             |                  |                 |                                                         |                                         | <input type="checkbox"/> Ice                                                      |                                     |                                     |                                            |                                   |                               |  |  |                                          |  |  |  |  |
| Notes:                                                                                                                           |             |                                                                                                                                                                                                                                 |                  |                 |                                                         |                                         |                                                                                   |                                     |                                     |                                            | Field ID/WIN ID                   |                               |  |  |                                          |  |  |  |  |
|                                                                                                                                  |             |                                                                                                                                                                                                                                 |                  |                 |                                                         |                                         |                                                                                   |                                     |                                     |                                            | Location                          |                               |  |  |                                          |  |  |  |  |
|                                                                                                                                  |             |                                                                                                                                                                                                                                 |                  |                 |                                                         |                                         |                                                                                   |                                     |                                     |                                            | <u>Pirate Canal @ Burnt Store</u> |                               |  |  |                                          |  |  |  |  |
|                                                                                                                                  |             |                                                                                                                                                                                                                                 |                  |                 |                                                         |                                         |                                                                                   |                                     |                                     |                                            | Date: <u>05/08/2019</u>           |                               |  |  |                                          |  |  |  |  |

LIMS EVENT ID: WQAP-2019-05-09-05

WIN Import ID: \_\_\_\_\_

Enter Field Parameters, Verify Station ID In LIMS DMT: YPR 05/24/19

QC Station ID, Field Parameters In LIMS DMT: \_\_\_\_\_

Scan/Save Field Sheets YPR 05/24/19

Migrate Data to WIN: \_\_\_\_\_

Verify Data In WIN: \_\_\_\_\_

(Initials/Date)

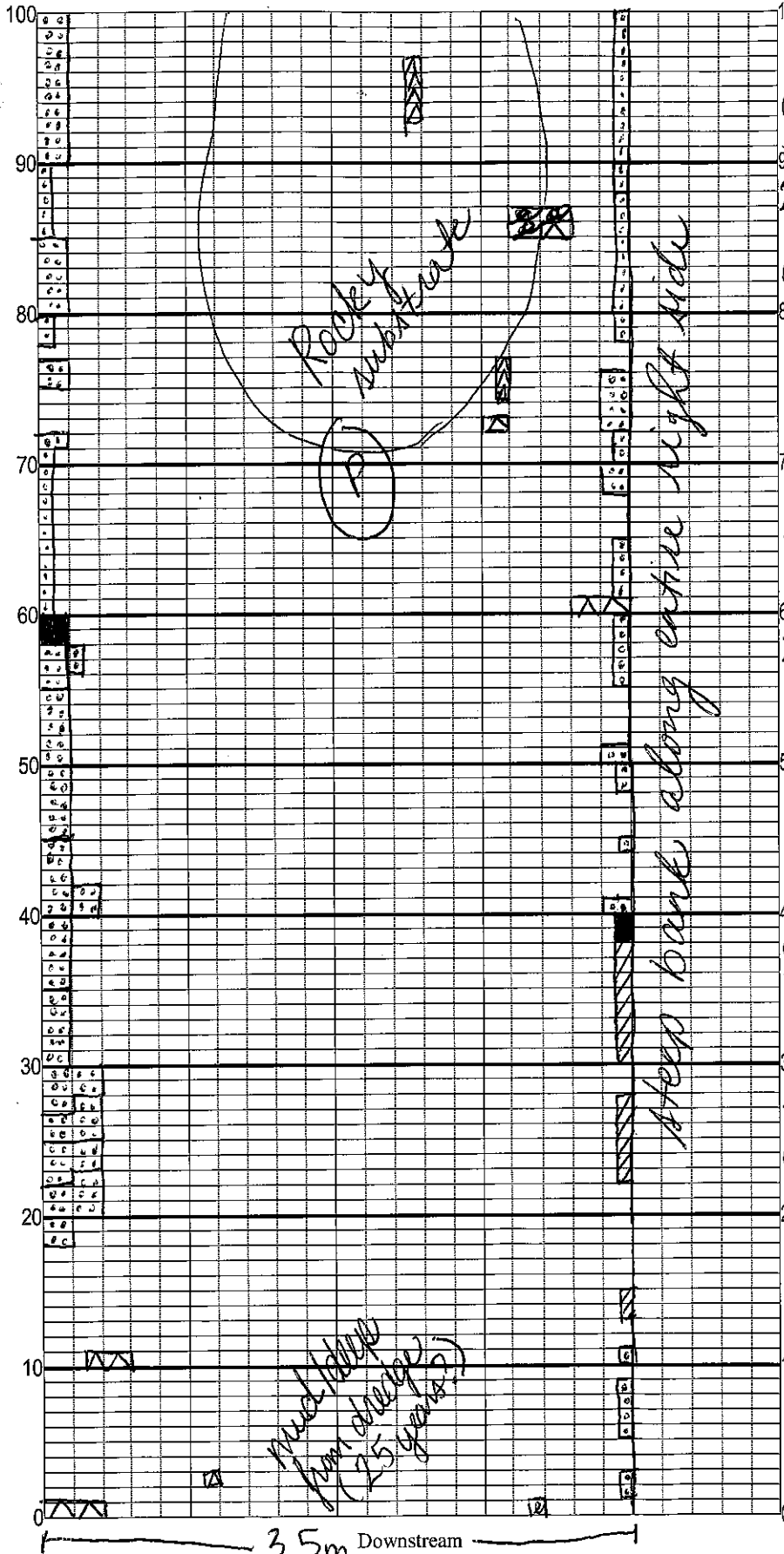
(Initials/Date)

(Initials/Date)

Location

PirateCanal @BurntStore

Left Bank



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

0.4 A Date: \_\_\_\_\_  
3.0 AM Sampler: Nicole Reistad  
2.5 AM  
0.2 A  
0.6 S  
0.5 A  
2.1 AM  
1.8 AM  
0.4 A  
2.5 AM  
2.9 AM  
0.8 R  
2.0 AM  
4.0 AM  
0.6 B  
0.5 AM  
0.2 R  
0.3 A  
0.5 A  
0.6 AM  
0.1 S

100 m: Latitude 26.8028233  
Longitude -82.0333343  
0 m: Latitude 26.8026117  
Longitude -82.0342171

Substrates: Code key, draw proportionate habitat abundance. %

|  |                      |                                                |
|--|----------------------|------------------------------------------------|
|  | Snags                | 0.20                                           |
|  | Roots/undercut banks | 0.46                                           |
|  | Leaf Packs (or mats) | 0                                              |
|  | Aquatic Macrophytes  | 6.3                                            |
|  | Rocks                | 0.66                                           |
|  | Pools                | total # observed = 1<br># range expected = 2-4 |

Average width 4.0 m 3.5  
Average depth 0.5 m  
Velocity measured at 0 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: Om = 20s  
0.05m/s  
TOTALS:  
S 0.7m  
R 1.6m  
L 0  
AM 21.9m  
A 2.3m  
100m = 8s

DEP

Location

G2SD0037

ment Field Sheet

SAMPLING AGENCY:

4DEP-SOROC

PirateCanal @BurntStore

DATE (MM/DD/YY):

05/08/19

RECEIVING BODY OF WATER:

Charlotte Harbor

REMARKS:

COUNTY:

Lee

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>7</u>                                                    | 20 19 18 17 16                                                                                                                                                                                                    | 15 14 13 12 11                                                                                                                                                 | 10 9 8 (7) 6                                                                                                                               | 5 4 3 2 1                                                                                                                     |
| Substrate Availability <u>6</u>                                                 | Greater than 30% major productive habitat present at site<br>20 19 18 17 16                                                                                                                                       | 16% to 30% major productive habitat, by aerial extent<br>15 14 13 12 11                                                                                        | 6% to 15% major productive habitat<br>10 9 8 7 (6)                                                                                         | Less than 5% major productive habitat<br>5 4 3 2 1                                                                            |
| Water Velocity <u>1/8</u><br>NR                                                 | 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 NR<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>8</u><br>-----<br>Primary Score <u>27</u><br>NR           | 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 or straightening 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>4</u>                                              | 20 19 18 17 16                                                                                                                                                                                                    | 15 14 13 12 11                                                                                                                                                 | 10 9 8 7 6                                                                                                                                 | 5 (4) 3 2 1                                                                                                                   |
| Bank Stability                                                                  | Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the woody 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 woody root zone with raw, eroded areas.             |
| Right Bank <u>4</u><br>Left Bank <u>5</u>                                       | 10 9                                                                                                                                                                                                              | 8 7 6                                                                                                                                                          | L R<br>(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>4</u><br>Left Bank <u>9</u>                                       | 10 (9)                                                                                                                                                                                                            | 8 7 6                                                                                                                                                          | 5 (4) R                                                                                                                                    | 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>4</u><br>Left Bank <u>4</u><br>-----<br>Secondary Score <u>34</u> | 10 9                                                                                                                                                                                                              | 8 7 6                                                                                                                                                          | 5 (4) L, R                                                                                                                                 | 3 2 1                                                                                                                         |

63 TOTAL SCORE

Date:

05/08/2019

Analyst:

Nicole Reistad, Gary Snorek

Signature:

[Signature]

# NFP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

Field ID/WIN ID



G2SD0037

LATITUDE 26.802825

LONGITUDE -82.033597

SAMPLING AGENCY FDEP-SOROC

SAMPLE ID

COUNTY Charlotte

DATE 05/08/2019

S NAME

Location

PirateCanal @BurntStore

FIELD ID/NAME

RECEIVING BODY OF WATER

Charlotte Harbor

## RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category):

Forest/Natural 85 Silviculture Field/Pasture 5 Agricultural Residential 10 Commercial Industry Other (Specify)

Landscape Development Intensity Index (LDI)

Local Watershed Erosion (select one): ☐ None ☒ Slight ☐ Moderate ☐ Heavy

Local Watershed NPS Pollution: ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side

Left Bank: 18.18 Right Bank: 6

Hydrologic Modification Score (per FT 3101)

High Water Mark: (m) (above present water level) + (present depth) (above bed) =

Artificially Impounded

☒ Yes ☐ No

Artificially ☐ No ☐ Mostly recovered, more sinuous

Channelized: ☒ Some recovery ☐ Recent, severe

Canopy Cover %

☐ Open

☐ Lightly Shaded (11-45%)

☐ Heavily Shaded

☒ Moderate Shaded (46-80%)

Typical Width (m) Depth (m)/Velocity (m/sec) Transect

3.5 m wide

m/s 0.07 m/s m/s

0.2 m deep 0.4 m deep 0.2 m deep

## SEDIMENT / SUBSTRATE

Sediment Oils

☒ Absent ☐ Slight ☐ Moderate ☐ Profuse

Sediment Odors

☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify):

Smothering of Substrates

Sand Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐  
Silt Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐  
Algae Smothering: None ☒ Slight ☐ Moderate ☐ Severe ☐

BSTRATE TYPE

Assessment Tool: ☐ SCI ☐ RPS ☐ LVS

☐ LCI ☐ BioRecon

INVERT PERI  
% Coverage # Times Sampled # Times Sampled

Woody Debris (Snags) ☐ ☐ ☐  
Undercut Banks / Roots ☐ ☐ ☐  
Leaf Packs or Mat ☐ ☐ ☐  
Aquatic Vegetation ☐ ☐ ☐  
Rock or Shell Rubble ☐ ☐ ☐  
Sand ☐ ☐ ☐  
Mud / Muck / Silt ☐ ☐ ☐  
Other ☐ ☐ ☐  
Other ☐ ☐ ☐

WATER QUALITY

Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M)  
Top: 0.2 27.4 7.53 5.42 69.3 612 0.30 0.4  
Mid: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☒ VOB  
Bottom: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐  
TOTAL DEPTH 0.4

Meter ID:

SNEK

Water Odors Normal ☒ Petroleum ☐  
Sewage ☐ Chemical ☐ Other ☐

Water Surface Oils Normal ☒ Sheen ☐  
Globs ☐ Slick ☐ Other ☐

Water Sample Taken? ☒ Yes ☐ No

Sample Preserved? ☒ Yes ☐ No

Lot Number: SA8341070 Exp: 12/10/19

Color Tannic ☒ Green (Algae) ☐  
Clear ☐ Other (Specify) ☐

Algae Sample Taken? ☒ Yes ☐ No

Sample Preserved? ☒ Yes ☐ No

Lot Number: Exp:

Clarity Clear ☒ Slightly Turbid ☐  
Turbid ☐ Opaque ☐

ABUNDANCE

Not Obs. Rare Common Abundant

Periphyton: ☐ ☒ ☐ ☐

Fish: ☐ ☐ ☒ ☐

Aquatic Plants: ☐ ☐ ☒ ☐

1/Sulfur Bacteria: ☒ ☐ ☐ ☐

System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐

AMBIENT FIELD CONDITIONS / NOTES:

☒ The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM

Nicole Reistad, Kirby Wolfe, Maryann Dugan, Gary Snorek

SIGNATURE:

DATE:

05/24/2019

## 9000-25 Rapid Periphyton Survey Field Sheet

Location: Pirate Canal County: Charlotte Date: 05/08/19 Investigators: Gary Snorek, Nicole Reistad

STORET Station Number: G2SD0037

| 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                          | 3                                |           |              | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1                          | N                                |           |              |
|              | 2                          | N                                |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2                          |                                  |           |              |
|              | 3                          | N                                |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3                          |                                  |           |              |
|              | 4                          | N                                |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4                          |                                  |           |              |
|              | 5                          | N                                |           | 29           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 5                          |                                  |           | 94           |
|              | 6                          | N                                |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 6                          |                                  |           |              |
|              | 7                          | N                                |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7                          |                                  |           |              |
|              | 8                          | 3                                |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 8                          |                                  |           |              |
|              | 9                          | 3                                |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 9                          |                                  |           |              |
| 10           | 1                          | 3                                |           |              | 70                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1                          | N                                |           |              |
|              | 2                          | N                                |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2                          |                                  |           |              |
|              | 3                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3                          |                                  |           |              |
|              | 4                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4                          |                                  |           |              |
|              | 5                          |                                  |           | 24           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 5                          |                                  |           | 89           |
|              | 6                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 6                          |                                  |           |              |
|              | 7                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7                          |                                  |           |              |
|              | 8                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 8                          |                                  |           |              |
|              | 9                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 9                          |                                  |           |              |
| 20           | 1                          | 3                                |           |              | 80                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1                          | N                                |           |              |
|              | 2                          | 3                                |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2                          |                                  |           |              |
|              | 3                          | N                                |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3                          |                                  |           |              |
|              | 4                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4                          |                                  |           |              |
|              | 5                          |                                  |           | 18           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 5                          |                                  |           | 44           |
|              | 6                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 6                          |                                  |           |              |
|              | 7                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7                          |                                  |           |              |
|              | 8                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 8                          |                                  |           |              |
|              | 9                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 9                          |                                  |           |              |
| 30           | 1                          | N                                |           |              | 90                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1                          | N                                |           |              |
|              | 2                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2                          |                                  |           |              |
|              | 3                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3                          |                                  |           |              |
|              | 4                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4                          |                                  |           |              |
|              | 5                          |                                  |           | 82           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 5                          |                                  |           | 62           |
|              | 6                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 6                          |                                  |           |              |
|              | 7                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7                          |                                  |           |              |
|              | 8                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 8                          |                                  |           |              |
|              | 9                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 9                          |                                  |           |              |
| 40           | 1                          | N                                |           |              | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1                          |                                  |           |              |
|              | 2                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2                          |                                  |           |              |
|              | 3                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3                          |                                  |           |              |
|              | 4                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4                          |                                  |           |              |
|              | 5                          |                                  |           | 87           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 5                          |                                  |           | 0            |
|              | 6                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 6                          |                                  |           |              |
|              | 7                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7                          |                                  |           |              |
|              | 8                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 8                          |                                  |           |              |
|              | 9                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 9                          |                                  |           |              |
| 50           | 1                          | 3                                |           |              | <p>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.</p> <p>Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank.</p> <p>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.</p> <p>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%.</p> |                            |                                  |           |              |
|              | 2                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                            |                                  |           |              |
|              | 3                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                            |                                  |           |              |
|              | 4                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                            |                                  |           |              |
|              | 5                          |                                  |           | 90           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                            |                                  |           |              |
|              | 6                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                            |                                  |           |              |
|              | 7                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                            |                                  |           |              |
|              | 8                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                            |                                  |           |              |
|              | 9                          |                                  |           |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                            |                                  |           |              |

Secchi depth 0.4  
Estimated? N

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

Check accompanying data collected at same site/date.

|                    |                                     |
|--------------------|-------------------------------------|
| Algal mat sample   | <input checked="" type="checkbox"/> |
| Linear Veg Survey  | <input checked="" type="checkbox"/> |
| Habitat Assessment | <input checked="" type="checkbox"/> |
| SCI/Biorecon       | <input checked="" type="checkbox"/> |
| Water sample       | <input checked="" type="checkbox"/> |

RQ- 2019-05-06-73

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                                  |

|                                 |                       |                          |                                |
|---------------------------------|-----------------------|--------------------------|--------------------------------|
| Waterbody: <u>Pirate Cane I</u> | Date: <u>05/08/19</u> | County: <u>Charlotte</u> | Storet Number: <u>G2SD0037</u> |
| Analyst: <u>Gary Snorek</u>     | Signature: _____      |                          |                                |
| Comments: _____                 |                       |                          |                                |

[illegible]