



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE ____ OF ____

February 2016

Data Qualified?
Yes / No

STORET Station Name: Shady Brook @ 2400m US of US 301

Date: 05/24/16
(mm/dd/yyyy)

STORET Station ID: G1CE0021

Latitude: 28.7812

(Decimal Degrees)

WBID: 1356

RQ: 2016-05-23-56

ORG ID: 21FLCEN

Longitude: -82.0544

(Decimal Degrees)

Receiving Body of Water: _____

Field ID: G1CE0021

County: Sumter

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Mike Linger				/	/	/	/	/
Mike Drennan				/	/	/	/	/
Leif Boman				/	/	/	/	/

Sampling Equipment			
☒ Sample Container	☐ Van Dorn	☐ Pole	
☐ Carboy	☐ Syringe		
☐ Dipper	☐ Other		
Equipment ID _____			

Collection Method			
☒ Wading	☐ Canoe/Kayak	☐ Electric Motor	☐ Gasoline Motor
☐ From Shore			
☐ Other (note below)			

Water Level: Dry / Low / Normal / High / Flooded

Matrix: Fresh / Marine / DI

Meter ID# _____ Photos: Yes / No NESW

Tide Falling: Yes / No / NA

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
<u>EST</u>	<u>11:02</u>	<u>0.3</u>	<u>0.5</u>	<u>6.1</u>	<u>71</u>	<u>7.6</u>	<u>0.15</u>	<u>0.5(s)</u>	<u>316</u>	<u>22.7</u>
<u>CEN</u>				<u>5.5</u>	<u>64</u>	<u>7.5</u>	<u>0.15</u>		<u>316</u>	<u>22.8</u>

Biological Samples Collected: None HA SCI LVS RPS LVI Other _____

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

Contains
1:1
Sulfuric Acid
SA-5259020
EXP: 09/16/16
Warning!
See MSDS

Notes:

Eureka Meter Readings (Do not put in LIMS) mkl

Shady Brook @ 2400m
US of US 301

Date: 05/24/16
RQ-2016-05-23-56

G1CE0021

Field ID ↑

STORET ↓

G1CE0021

Signature: _____

Date: _____

Field Parameters Entered into LIMS: _____

(Initials/Date)

Field Parameters QC in LIMS: _____

(Initials/Date)

Date Migrated to STORET: _____

(Initials/Date)

Field Sheets Scanned/Saved: _____

(Initials/Date)

SAMPLE ID 76254 ORG ID 21 FL CEN LATITUDE _____
COUNTY Sumter STORET # G1CE0021 LONGITUDE _____
DATE 5/24/16 TIME 1200 SAMPLING AGENCY FDEP CE-RDC
SITE NAME Shady Brook @ 2400m US of US 301
FIELD ID/NAME G1CE0021 RECEIVING BODY OF WATER _____

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category) :								Landscape Development Intensity Index (LDI)	
Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)		
10		70							
Local Watershed Erosion (select one) :					Typical Width (m) Depth (m)/Velocity (m/sec) Transect				
☐ None ☒ Slight ☐ Moderate ☐ Heavy					8 m wide				
Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☐ Moderate ☒ Heavy					m/s				
Width of Riparian Vegetation (m) on Each Buffer Side				Hydrologic Modification Score (per FT 3101)					
Left Bank : 20		Right Bank : 15							
High Water Mark: 0.4 + 0.5 = 0.7				Artificially Impounded					
(m) (above present water level) (present depth) (above bed)				☐ Yes ☒ No					
Artificially ☒ No				Canopy Cover %					
Channelized : ☐ Some recovery ☐ Recent, severe				☐ Open ☐ Lightly Shaded (11-45%)					
				☐ Heavily Shaded ☒ Moderate Shaded (46-80%)					

Revision Date: September 19, 2012

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

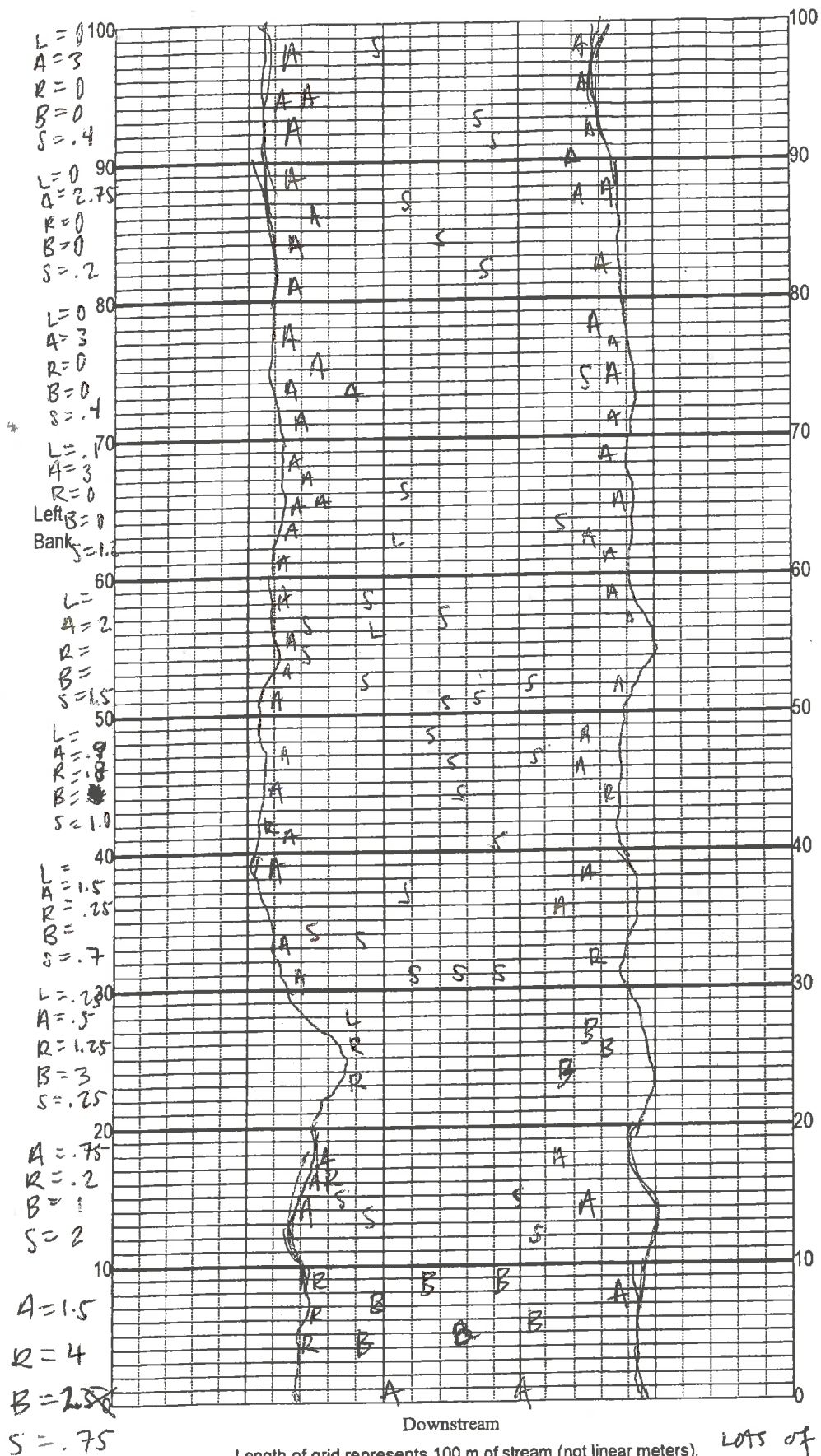
SAMPLING AGENCY: <u>FOEP CE ROC</u>		STORET STATION NUMBER: <u>61CE0021</u>	DATE (MM/DD/YY): <u>5/24/16</u>	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: <u>Sumter</u>	LOCATION: <u>Shady Brook @ 2400m vs. of vs 301</u>	FIELD ID/NAME: <u>61CE0021</u>	

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags)	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered
Substrate Diversity <u>14</u>	20 19 18 17 16	15 <u>14</u> 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 20 19 18 17 16	16% to 30% major productive habitat, by aerial extent 15 14 13 12 11	6% to 15% major productive habitat 10 9 8 7 <u>6</u>	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>12</u>	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 20 19 18 17 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering <u>13</u>	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 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. 15 14 <u>13</u> 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). 10 9 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 4 3 2 1
Secondary Habitat Components	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks.	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered.	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area.	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks.
Artificial Channelization <u>20</u>	<u>20</u> 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the root zone with few raw, eroded areas.	Only meets 2 of the 3 requirements for optimal bank stability.	Only meets 1 of the 3 requirements for optimal bank stability.	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas.
Right Bank <u>9</u> Left Bank <u>7</u>	10 <u>9</u>	8 7 6	5 4	3 2 1
Riparian Buffer Zone Width	Width of vegetation greater than 18 m	Width of vegetation >12 to 18m	Width of vegetation 6 to 12 m. human activities close to system	Less than 6 m of buffer zone due to intensive human activities
Right Bank <u>6</u> Left Bank <u>7</u>	10 9	8 7 <u>6</u>	5 4	3 2 1
Riparian Zone Vegetation Quality	Over 80% of riparian surfaces consist of normal, expected plant community for given sunlight & habitat conditions (e.g., native plants; tree, shrub, and forbs represented, if appropriate). Minimal disturbance.	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed.	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).
Right Bank <u>8</u> Left Bank <u>8</u>	10 9	<u>8</u> 7 6	5 4	3 2 1
Secondary Score <u>67</u>				

112 TOTAL SCORE

Date: <u>5/24/16</u>	Analyst: <u>Mike Linger</u> <u>Leif Boman</u>	Signature: <u>[Signature]</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: Shady Brook
 Date: 5/24/16
 Sampler: M. Linger

100 m: Latitude	_____
Longitude	_____
0 m: Latitude	_____
Longitude	_____
Substrates: Code key, draw proportionate habitat abundance. %	
☐ S	Snags <u>1.1</u>
☐ R	Roots/undercut banks <u>0.8</u>
☐ L	Leaf Packs (or mats) <u>0.04</u>
☐ A	Aquatic Macrophytes <u>2.4</u>
☐ B	ROCKS <u>0.8</u>
☐	_____
☐	_____
Pools	total # observed = _____ # range expected = _____
Average width	<u>8</u> m
Average depth	<u>0.5</u> m
Velocity measured at _____ 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:

A: 18.9
 S: 8.4
 R: 6.5

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Shady Brook 2400m US of US 301 County: Semter Date: 5/24/16 Investigators: Mike Linger

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N		92	60	1	N		52
	2	3							
	3	4							
	4	4							
	5	5							
	6	4							
	7	2							
	8	3							
	9	3							
10	1	3		88	70	1	N		52
	2	4							
	3	2							
	4	2							
	5	4							
	6	4							
	7	5							
	8	5							
	9	4							
20	1	4		76	80	1	N		52
	2	4							
	3	2							
	4	5							
	5	2							
	6	2							
	7	2							
	8	4							
	9	5							
30	1	2		80	90	1	3		62
	2	3							
	3	4							
	4	5							
	5	2							
	6	2							
	7	4							
	8	4							
	9	4							
40	1	3		80	100	1	N		52
	2	4							
	3	5							
	4	5							
	5	5							
	6	2							
	7	4							
	8	2							
	9	2							
50	1	2		56		1	2		
	2	2							
	3	2							
	4	3							
	5	6							
	6	6							
	7	6							
	8	6							
	9	3							

STORET Station Number:
G1CE0021

Secchi depth 0.5 (s)
Estimated?

points ranked 4-6 58
total points assessed 99
% points ranked 4-6 59%

Check accompanying data collected at same site/date.

Algal mat sample ☒
Linear Veg Survey ☒
Habitat Assessment ☒
SC/Biorecon ☒
Water sample ☒

RQ-2016-05-23-56

Algal Thickness Rank

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

Record "N" and check "Estimated" for points deeper than the Secchi depth; algae are presumed absent. Check "Estimated" if thickness estimated for deep points which can be seen but not reached.

Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank.

Record canopy cover as the number of small densiometer quadrants (out of 96) that HAVE canopy cover. Measure facing upstream at point 4, 5, or 6.

Collect algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.