FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified? Yes / (No)

WIN Station Name: Buckhorn Creek ab Alafia confluence **Date:** 4-4-19 (mm/dd/yyyy)

WIN/ Field ID: G2SW0092 **WBID:** 1635B **Latitude:** 27.886178 (Decimal Degrees)

County: Hillsborough **ORG ID:** 21FLTPA **Longitude:** -82.305918 (Decimal Degrees)

Receiving Body of Water: Alafia **RQ-2019-** 04-01-08

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Judy Ashton	✓		✓		
Ben Pashnyak		✓		✓	✓
Sarah Meyer					

Sampling Equipment
- ☑ Sample Container ☐ Van Dorn ☐ Pole
- ☐ Carboy ☐ Syringe
- ☐ Dipper ☐ Other
- Depth Measured with: Secchi
- Equipment ID Secchi #1

Collection Method
- ☑ Wading ☐ Canoe/Kayak
- ☐ From Shore ☐ Electric Motor
- ☐ Other ☐ Gasoline Motor

Water Level: Dry/ Pooled/ (Low) Normal / High / Flooded **Meter ID#** CHEWY **Matrix:** (Fresh) / Marine / DI

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

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTh)	Sp COND (µmhos/cm)	Temp. (C°)
(EST)	1050	0.4	0.2	0.4 "S"	4.95	58.6	7.55	0.27	552	23.8

Biological Samples Collected: None (HA) (SCI) (RPS) Algae ID (LVS) LVI Other:

SBIO ID Numbers: SBIO-ID: 79430 HA-ID: 15755 RPS-ID: 9317 Macrophyte-ID: <2m² LIMS#: 2076336

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☑ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☑ Ice ☐ ~~H_2SO_4~~	SA8344070	12/10/19	☐ <2
Metals	☐ ~~W-ICPMS~~ ☑ W-ICP	☐ Ice ☑ ~~HNO_3~~	8099110	4/9/19	☑ <2
Filtered Nutrients	☐ ~~W-PO4-F~~ ☑ ~~Field~~ Filtered 0.45 µm Filter	☑ Ice			
Chlorophyll	☐ ~~CHLSUITE-W~~	☑ Ice			
Physical/Aggregate (Fresh)	☑ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☑ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
MacroInvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci	☐ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD	☐ Ice			
Tracers	☐ ~~W-E8321-DI~~ ☐ ~~W-E8321-MS~~	☑ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ W-E8321-MS ☐ W-CARB-AA	☑ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C				

Contains: 1:1 H_2SO_4
Lot No.: SA8344070
Expires: 12/10/19
See Safety Data Sheet (SDS)

SULFURIC ACID ~51%

Place Preservat (If A

Notes: Low TIDE

Field ID/WIN G2SW0092

Site Name: Buckhorn Cr above confluence of Alafia

Signature: Judy Ashton **Date:** 4/4/19

LIMS EVENT ID: 2019-04-05-01 WIN Import ID: 13903

Enter Field Parameters, Verify Station ID In LIMS DMT: SM 05/07/2019 QC Station ID, Field Parameters In LIMS DMT: SM 06/11/2019

Scan/Save Field Sheets SM 09/19/2019 (Initials/Date) Migrate Data to WIN: SM 08/12/2019 (Initials/Date) Verify Data In WIN: SM 09/19/2019 (Initials/Date)

Field ID/WIN G2SW0092

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

Site Name: Buckhorn Cr above confluence of Alafia

	STORET STATION NUMBER: see sticker	DATE (MM/DD/YY): 4/4/2019	SAMPLING AGENCY: FDEP SWROC
FIELD ID/NAME: see sticker	LOCATION: A	COUNTY: Hillsborough	RECEIVING BODY OF WATER: Alafia

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 7	20 19 18 17 16	15 14 13 12 11	10 9 8 (7) 6	5 4 3 2 1
Substrate Availability 7	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) 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity 14	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 7 Primary Score 35	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 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). 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 **Artificial Channelization** 20	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. (20) 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered. 15 14 13 12 11	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area. 10 9 8 7 6	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks. 5 4 3 2 1
Bank Stability Right Bank 9 Left Bank 9	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful to top of bank. Bankfull is within or above the root zone with few raw, eroded areas. 10 (9) LR	Only meets 2 of the 3 requirements for optimal bank stability. 8 7 6	Only meets 1 of the 3 requirements for optimal bank stability. 5 4	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank 10 Left Bank 10	Width of vegetation greater than 18 m LR (10) 9	Width of vegetation >12 to 18m 8 7 6	Width of vegetation 6 to 12 m. human activities close to system 5 4	Less than 6 m of buffer zone due to intensive human activities 3 2 1
Riparian Zone Vegetation Quality Right Bank 6 Left Bank 6 Secondary Score 70	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. 10 9	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. LR 8 7 (6)	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious. 5 4	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). 3 2 1

105 **TOTAL SCORE**

Date: 4/4/2019	Analyst: Ben Paswater	Signature: Ben Paswater

Field ID/WIN G2SW0092

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD

Site Name: Buckhorn Cr above confluence of Alafia

	County: Hillsborough	Waterbody: See Sticker
	Date: 04/04/2019	Signature:
Comments:		Analyst:

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

HERBACEOUS SPECIES	Meter Mark 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Alternanthera philoxeroides											
~~Bacopa caroliniana (Lemon)~~											
Bacopa monneri											
Bidens mitis											
Boehmeria cylindrica											
Centella asiatica											
Ceratophyllum demersum											
Chara sp.											
Cicuta maculata											
Cladium jamaicense											
Colocasia esculenta											
Commelina diffusa											
Commelina virginica											
Crinum americanum											
Cyperus _____											
Diodia virginiana											
Eichhornia crassipes											
Eleocharis (wispy viviparous)	√	√	√	√	√	√	√	√	√		
Fontinalis sp. (Aquatic Moss)											
Fraxinus caroliniana											
Hydrilla verticillata											
Hydrocotle sp.											
Hygrophila polysperma											
Hymenachne amplexicaulis											
Hymenocallis											
Lachnanthes caroliniana											
Landoltia punctata											
Lemna sp.											
Limnophila sessiflora											
Ludwigia leptocarpa											
Ludwigia palustris											
Ludwigia peruviana											
Ludwigia repens											
Luziola fluitans											
If no Dominant or Co-Dominant were selected, indicate with "X"											
Indicate % cover macrophytes per section											
0-5% Macrophyte Coverage	√	√	√	√	√	√	√	√	√		
>5 and ≤10% Macrophyte Coverage											
>10 and ≤25% Macrophyte Coverage											
>25 and ≤50% Macrophyte Coverage											
> 50% Macrophyte Coverage											

HERBACEOUS SPECIES	Meter Mark 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Micranthemum glomeratum											
~~Micranthemum umbrosum~~											
Myriophyllum aquaticum											
Najas guadelupensis											
Nitella sp.											
Nuphar luteum											
Orontium aquaticum											
Panicum hemitomon											
Panicum repens											
Panicum rigidulum											
Pistia stratioides											
Polygonum glabra											
Polygonum hydropiperoides											
Polygonum punctatum											
Pontedaria cordata											
Potamogeton illinoensis											
Ruellia simplex											
Sacciolepis striata											
Sagittaria kurziana											
Sagittaria lancifolia											
Sagittaria latifolia											
Salvinia minima											
Samolus parviflora											
Saururus cernuus											
Sparganium americanum											
Schoenoplectus americanus											
Sphagneticola trilobata(Wedelia)											
Typha sp.											
Urochloa mutica (Brachiaria)											
Vallisneria americana											
Zizania aquatica											

Field ID/WIN G2SW0092

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

Site Name: Buckhorn Cr above confluence of Alafia 21FLTPA

LATITUDE 27.886178

LONGITUDE -82.305918

SITE NAME see sticker

TIME 1050

SAMPLING AGENCY FDEP SW ROC

DATE 04/04/2019

RECEIVING BODY OF WATER Alafia

RIPARIAN ZONE / STREAM FEATURES

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

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)
50				40	10		

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 : 718 Right Bank : 718

Hydrologic Modification Score (per FT 3101) 3

High Water Mark: .4 (m) + .8 (above present water level) = 1.2 (above bed) (present depth)

Artificially Impounded ☐ Yes ☑ No

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

5 m wide

.21 m/s	.21 m/s	.21 m/s
.3 m deep	.5 m deep	.3 m deep

Artificially Channelized : ☑ No ☐ Some recovery ☐ Mostly recovered, more sinuous ☐ Recent, severe

Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%) ☐ Heavily Shaded ☑ Moderate Shaded (46-80%)

SEDIMENT / SUBSTRATE

Sediment Oils ☑ Absent ☐ Slight ☐ Moderate ☐ Profuse

Sediment Odors ☑ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify) :

Smothering of Substrates

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

SUBSTRATE TYPE

Assessment Tool: ☑ SCI ☑ RPS ☐ LVS ☐ LCI ☐ BioRecon

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	7		
Undercut Banks / Roots	3		
Leaf Packs or Mat	1		
Aquatic Vegetation	7		
Rock or Shell Rubble..			
Sand.....	3		
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)
Top :							
Mid:	0.2	23.8	7.55	4.95	58.6	552	0.27
Bottom							

SECCHI (M) 0.4 ☒ VOB

TOTAL DEPTH 0.4

Meter ID: Chewy

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:_____ Exp:_____

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:	☐	☐	☑	☐
Iron/Sulfur Bacteria:	☑	☐	☐	☐

System Type: Stream ☑ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☑ Spring Run

AMBIENT FIELD CONDITIONS / NOTES:

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

SAMPLING TEAM Ben Prunty Judy Ashton Sarah Meyer gate 0003 gate2 2295 6428 3755

SIGNATURE: Ben Prunty

DATE :

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Investigators: B Paswater JAshton S Meyer

County: Hillsborough

STORET Station Number: G2SW0092

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
	1					1			
	2	1				2			
	3					3	2		
	4	N				4			
0	5			36	60	5			86
	6	1				6	8		
	7					7			
	8					8			
	9					9			
	1					1	3		
	2					2			
	3					3			
	4					4	2		
10	5			76	70	5			90
	6					6			
	7					7			
	8					8	2		
	9					9			
	1					1			
	2					2	N		
	3					3			
	4					4			
20	5			20	80	5	1		74
	6					6			
	7					7			
	8					8			
	9					9			
	1					1			
	2					2			
	3					3			
	4					4			
30	5	V		81	90	5			72
	6					6			
	7					7			
	8	N				8			
	9					9			
	1	3				1			
	2	3				2			
	3					3			
	4					4			
40	5			83	100	5	V		88
	6					6			
	7					7			
	8					8			
	9	3				9			
	1								
	2								
	3								
	4	2		80					
50	5								
	6								
	7	2							
	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	
Linear Veg Survey	✓
Habitat Assessment	✓
SCI/Biorecon	✓
Water sample	✓

RQ- 2019-04-01-08

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

where not Numbered

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.

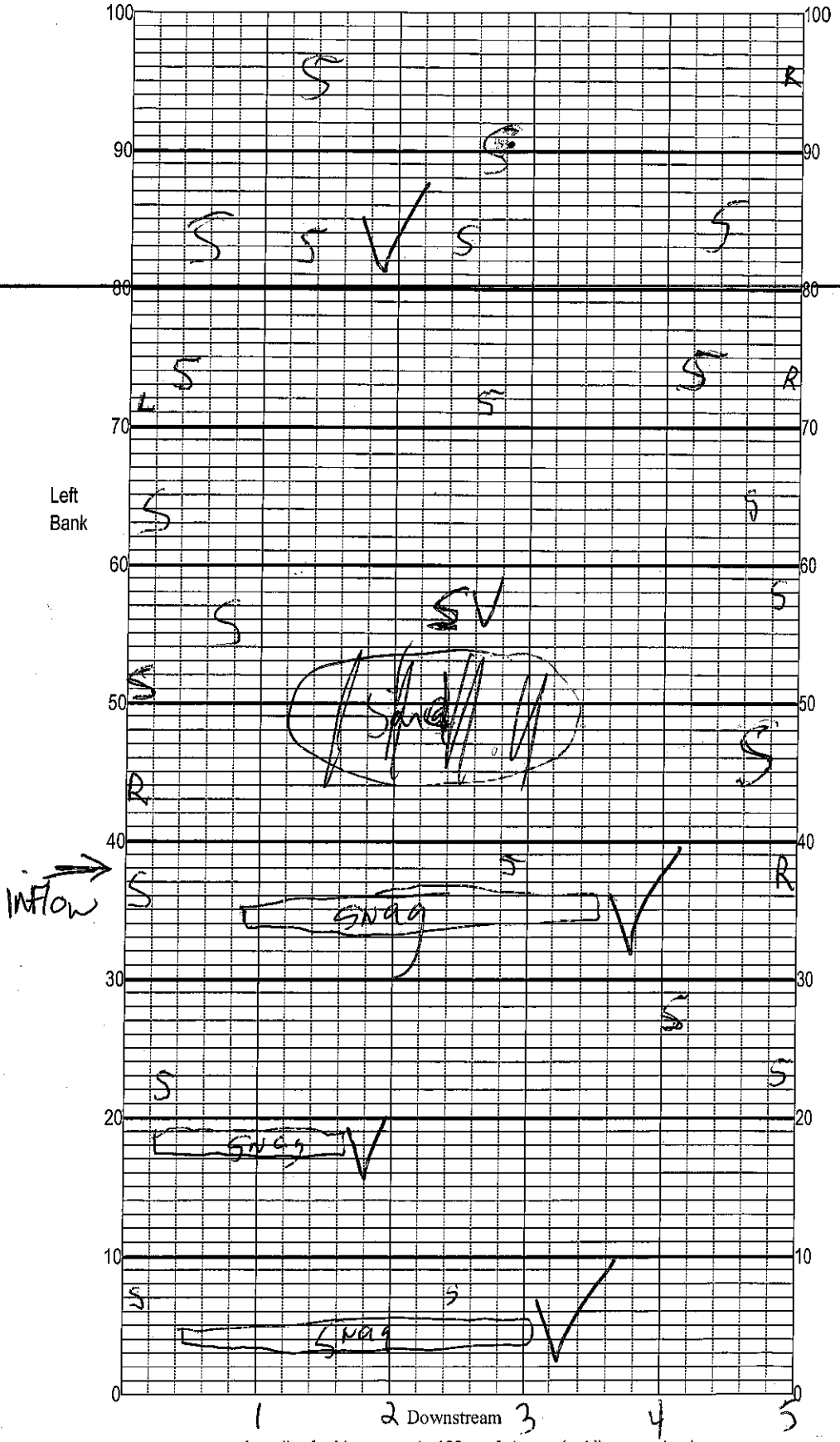
Collect algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5

Field ID/WIN G2SW0092

62-160.800, F.A.C.

Site Name: Buckhorn Cr above confluence of Alafia

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



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

Location: Buckhorn Cr

Date: 04/04/2019

Sampler: B Paswater J Ashton S Meyer

100 m: Latitude	
Longitude	
0 m: Latitude	
Longitude	

Substrates: Code key, draw proportionate habitat abundance.

		%
S	Snags	4.9 5
R	Roots/undercut banks	Few
	Leaf Packs (or mats)	
✓	Aquatic Macrophytes	1.8
0	Pools	total # observed = 0; # range expected = 2-4

Average width	5 m
Average depth	.4 m
Velocity measured at	0, 50, 100 meter mark.
WQ & chemistry taken at	0 meter mark.
Habitat Smothering: Note areas (on map) where sand or silt is smothering substrates, limiting habitability.	all over
Bank Stability: Note areas (on map) with unstable, eroding banks.	
Riparian Buffer Width: Note areas (on map) where natural vegetation is altered or eliminated.	

Plants observed / other notes:

S = 124

V = 46

Field ID/WIN G2SW0092

62-160.800, F.A.C

Site Name: Buckhorn Cr above confluence of Alafia

Request Number: RQ-2019-04-01-08

SCIs

last revised Jan 25, 2018

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: SW-DIST

Project ID: SMP

Requester: Benjamin Paswater

Collected By: J Ashton, S Meyer, B Paswater

Field Report Prepared By: S Meyer

Sampling Agency: FDEP SW ROC

Location Field ID/WIN **G2SW0092** Site Name: Buckhorn Cr above confluence of Alafia	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 04/04/2019 Time 1050 (Eastern) Central	Composite end Date — Time —	Bottle Group(s) (See pg 2) A/B
	Matrix (type, e.g., Salt, (Fresh), etc)	Diss. Oxygen 4.95 ☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L) —	
	Temp (C) 23.8	pH 7.55	Sample Depth 0.2 ☐ ft ☒ m	Sp. Conductance (umho/cm) 552
Lati… ☐ dms ☐ dd ☐ dms	Salinity (ppt) 0.27	Comments		
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time Eastern Central	Composite end Date Time	Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #	Temp (C)	pH	Sample Depth ☐ ft ☐ m	Sp. Conductance (umho/cm)
Latitude ☐ dd ☐ dms Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments		
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time Eastern Central	Composite end Date Time	Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #	Temp (C)	pH	Sample Depth ☐ ft ☐ m	Sp. Conductance (umho/cm)
Latitude ☐ dd ☐ dms Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments		
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time Eastern Central	Composite end Date Time	Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #	Temp (C)	pH	Sample Depth ☐ ft ☐ m	Sp. Conductance (umho/cm)
Latitude ☐ dd ☐ dms Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments		

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Sarah Meyer	04/04/2019 1700	FedEx	1		

Ref:
Dep:

Date: 20Mar19
Wgt: 15.00 LBS

DV: 0.00

SHIPPING: 0.00
SPECIAL: 0.00
HANDLING: 0.00
TOTAL: 0.00

Svcs: PRIORITY OVERNIGHT Master 4751 8777 9706
TRCK: 4751 8777 9728

Group: A	Bottle Type: ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS	P-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: CHLSUITE-W	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: SWD-AEL-EC	P-250ML-WI-THI	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: W-E8321-DI W-E8321-MS	BG-500ML	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: W-ICP W-ICPMS	P-500ML	# of Bottles: 2	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 2	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: W-PSNP-TQ	BG-1L	# of Bottles: 6	Preservative:	ICE	Enter Number of Bottles Sent to Lab	4
Group: B	Bottle Type: ALGAL_ID	PT-50ML	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type:	PJ-2L	# of Bottles: 4	Preservative:	Formalin	Enter Number of Bottles Sent to Lab	

H2SO4
LOT# SA8344070
EXP: 12/10/2019

Group: B Bottle Type: PJ-2L # of Bottles: 4 Preservative: Formalin **Enter Number of Bottles Sent to Lab** 2

MI-FW-QLDC