

Site Name:

21FLTPA

LATITUDE

LONGITUDE

Thompson Branch @ US17 north of Causey Raod

SAMPLING AGENCY **FDEP SW ROC**

RECEIVING BODY OF WATER

Peace River

RIPARIAN ZONE / STREAM FEATURES

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)		
20		40	20	20					
Local Watershed Erosion (select one): ☐ None ☒ Slight ☒ Moderate ☐ Heavy								Typical Width (m) Depth (m)/Velocity (m/sec) Transect	
Local Watershed NPS Pollution: ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy								8.5 m wide	
Width of Riparian Vegetation (m) on Each Buffer Side				Hydrologic Modification Score (per FT 3101)					
Left Bank: 18		Right Bank: 10		5					
High Water Mark: 15 + 0.5 = 1.0				Artificially Impounded					
(m) (above present water level) (present depth) (above bed)				☐ Yes ☒ No					
Artificially ☒ No ☐ Mostly recovered, more sinuous				Canopy Cover %					
Channelized: ☐ Some recovery ☐ Recent, severe				☐ Open ☐ Lightly Shaded (11-45%)					
				☐ Heavily Shaded ☒ Moderate Shaded (46-80%)					

SEDIMENT / SUBSTRATE

Sediment Oils			Sediment Odors			Smothering of Substrates				
☐ Absent ☐ Slight			☒ Normal ☐ Sewage ☐ Petroleum			Sand Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐				
☐ Moderate ☐ Profuse			☐ Chemical ☐ Anaerobic			Silt Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐				
			☐ Other (Specify):			Algae Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐				
SUBSTRATE TYPE			WATER QUALITY							
Assessment Tool: ☒ SCI ☒ RPS ☒ LVS			Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
☐ LCI ☐ BioRecon			Top: 0.3	21.3	7.26	8.18	92.4	331	1.6	0.5
Woody Debris (Snags)			Mid:							☒ VOB
Undercut Banks / Roots			Bottom:							TOTAL DEPTH
Leaf Packs or Mat			Meter ID: 1.5							
Aquatic Vegetation			Water Odors Normal ☒ Petroleum ☐			Water Surface Oils Normal ☒ Sheen ☐				
Rock or Shell Rubble			Sewage ☐ Chemical ☐ Other ☐			Globs ☐ Slick ☐ Other ☐				
Sand			Water Sample Taken? ☒ Yes ☐ No			Color Tannic ☐ Green (Algae) ☐				
Mud / Muck / Silt			Sample Preserved? ☒ Yes ☐ No			Clear ☒ Other (Specify) ☐				
Other			Lot Number: see Water Datasheet			Clarity Clear ☒ Slightly Turbid ☐				
Other			Algae Sample Taken? ☐ Yes ☒ No			Turbid ☐ Opaque ☐				
			Sample Preserved? ☐ Yes ☐ No							
			Lot Number: Exp:							
ABUNDANCE			System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐							
Not Obs. Rare Common Abundant			AMBIENT FIELD CONDITIONS / NOTES:							
Periphyton: ☐ ☒ ☐ ☐			☒ The antecedent hydrologic conditions have been met to my best knowledge.							
Fish: ☐ ☐ ☒ ☐										
Aquatic Plants: ☐ ☒ ☐ ☐										
Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐										

SAMPLING TEAM

Ben Paswater, Ken Turman

SIGNATURE:

Ben Paswater

DATE:

12/15/2022

Benchmark EnviroAnalytical, Inc
1711 12th Street East
Palmetto, FL 34221
941-723-9986
941-723-6061 Fax

Client Information: DEP: SW-DIST
Address: 13051 N. Telecom Parkway
Tampa FL 33604
Phone # 815-470-5878

PO# C00EF5

Report to: benjamin.paswater@dep.state.fl.us
DEP-Overflomicro@dep.state.fl.us

Invoice to: FDEP Micro Overflow

Project Name: RQ-2022-11-14-42

Laboratory Submission # 25120465

Sample Name	Sample Type / Sample Matrix ²	Collection		Container		Preservative ⁴	Parameters for Analysis	Laboratory Sample #
		Date	Time	Qty	Capacity	Type ³		
G3SW0086	SW	12/15/22	1205	1	250mL	P	E-Coli	1
	SW				250mL	P		
	SW				250mL	P		
	SW				250mL	P		
	SW				250mL	P		
	SW				250mL	P		
	SW				250mL	P		
	SW				250mL	P		

1. "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
2. "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), saline surface water (SSW), soil, sediment (SDMT), or sludge (SLD).
3. "Type" is used to indicate the type of container used for the sample. The container must be labeled with the sample ID and the date and time of collection. The container must be labeled with the sample ID and the date and time of collection. The container must be labeled with the sample ID and the date and time of collection. The container must be labeled with the sample ID and the date and time of collection.
4. Under "Preservative" list any preservatives that were added to the sample container.
5. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.

Laboratory Sample Acceptability:
Temperature: 1.0 C

1	Collected / Relinquished By: [Signature]	Date: 12/15/22	Time: 1400	Received By: [Signature]	Date: 12-15-22	Time: 1400
2	Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Site Name:



Thompson Branch @ US17 north of Causey Raod

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD

County:

Harder

Waterbody: See Sticker

Date:

12/15/2022

Signature:

Ben Asiwato

Analyst:

Ben Asiwato

Comments:

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m² of taxa present). Note in the boxes below if no dominant are selected, and note total macrophyte abundance rank for each section. Only the most common taxa are listed, so use blank spaces for additional taxa names. **BOLD is exotic invasive**

HERBACEOUS SPECIES	Meter Mark										Specimen collected (check)	HERBACEOUS SPECIES	Meter Mark										Specimen collected (check)
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100			0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	
Alternanthera philoxeroides												Micranthemum glomeratum											
Bacopa caroliniana (Lemon)												Micranthemum umbrosum											
Bacopa monnieri												Myriophyllum aquaticum											
Bidens mitis												Najas guadelupensis											
Boehmeria cylindrica												Nitella sp.											
Centella asiatica												Nuphar luteum											
Ceratophyllum demersum												Orontium aquaticum											
Chara sp.												Panicum hemitomon											
Cicuta maculata												Panicum repens											
Cladium jamaicense												Panicum rigidulum											
Colocasia esculenta												Pistia stratioides											
Commelina diffusa												Polygonum glabra											
Commelina virginica												Polygonum hydropiperoides											
Crinum americanum												Polygonum punctatum											
Cyperus												Pontedaria cordata											
Diodia virginiana												Potamogeton illinoensis											
Eichhornia crassipes												Ruellia simplex (Mex Petunia)											
Eleocharis (wispy viviparous)												Sacciolepis striata											
Fontinalis sp. (Aquatic Moss)												Sagittaria kurziana											
Fraxinus caroliniana												Sagittaria lancifolia											
Hydrilla verticillata												Sagittaria latifolia											
Hydrocotyle sp.												Salvinia minima											
Hygrophila polysperma												Samolus parviflora											
Hymenachne amplexicaulis												Saururus cernuus											
Hymenocallis												Sparganium americanum											
Lachnanthes caroliniana												Schoenoplectus americanus											
Landoltia punctata												Sphagneticola trilobata (Wedelia)											
Lemna sp.												Typha sp.											
Limnophila sessiflora												Urochloa mutica (Brachiaria)											
Ludwigia leptocarpa												Vallisneria americana											
Ludwigia palustris												Zizania aquatica											
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																							

24/m

not enough for SBO

Site Name:



Thompson Branch @ US17 north of Causey Road

Mid Periphyton Survey Field Sheet

Date:

12/15/22

Investigators:

BP, KT

STORET Station Number:

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N			60	1	N		
	2					2			
	3					3			
	4					4			
	5			86		5			20
	6					6			
	7					7			
	8					8			
	9					9			
10	1				70	1			
	2					2			
	3					3			
	4			96		4			
	5					5			12
	6					6			
	7					7			
	8					8			
	9					9			
20	1				80	1			
	2					2			
	3					3			
	4			60		4			24
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
30	1				90	1			
	2					2			
	3					3			
	4			41		4			68
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
40	1				100	1			
	2					2			
	3					3			
	4			45		4			86
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
50	1					1			
	2					2			
	3					3			
	4			48		4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			

Secchi depth

Estimated?

points ranked 4-6

total points assessed

% points ranked 4-6

Check accompanying data collected at same site/date.

Algal mat sample

Linear Veg Survey

Habitat Assessment

SCI/Biorecon

Water sample

RQ-2022-11-14-42

① 1205 pm

Algal Thickness Rank

N	rough, no algae, slimy, algae up to 1m
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 reached with the hand. No estimated rank.

Record canopy cover as the number of small densimeter 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%.

Site Name:

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

Thompson Branch @ US17 north of Causey Road

Location:

Date:

Sampler:

100 m: Latitude

Longitude

0 m: Latitude

Longitude

Substrates: Code key, draw proportionate habitat abundance.



Snags



Roots/undercut banks



Leaf Packs (or mats)



Aquatic Macrophytes



ROCKS



Pools

total # observed =

range expected =

Average width 2.5 m

Average depth 0.5 m

Velocity measured at 0.50 meter mark.

WQ & chemistry taken at 0 meter mark.

Habitat Smothering:

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

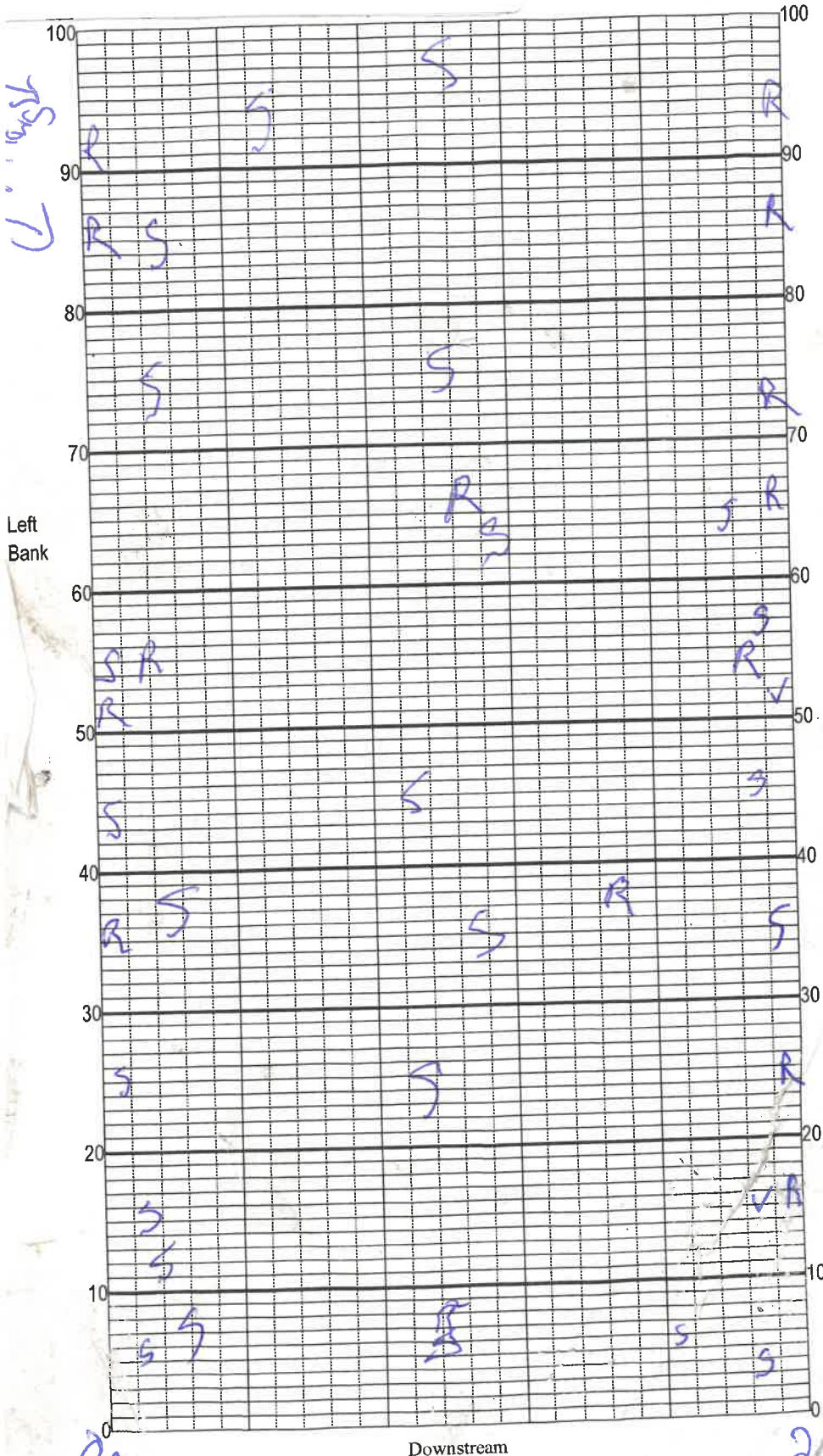
Bank Stability:

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

Riparian Buffer Width:

Note areas (on map) where natural vegetation is altered or eliminated.

Plants observed / other notes:



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

G3SW0086



Site Name:

Thompson Branch @ US17 north of Causey Road

FIELD ID/NAME:

COUNTY: Hardee

LOCATION:

STREET STATION NUMBER:

(MMDPRY):

DATE

SAMPLING AGENCY:

FDEP SWROC

RECEIVING BODY OF WATER: Peace River

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]	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Diversity Greater than 30% major productive habitat present at site	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Water Velocity Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec	20 19 18 17 16 15 14 13 12 11 10 9 8 7 6	15 14 13 12 11 10 9 8 7 6	10 9 8 7 6 5 4 3 2 1	5 4 3 2 1
Habitat Smothering 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 15 14 13 12 11 10 9 8 7 6	15 14 13 12 11 10 9 8 7 6	10 9 8 7 6 5 4 3 2 1	5 4 3 2 1
Secondary Habitat Components Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks.	20 19 18 17 16 15 14 13 12 11 10 9 8 7 6	15 14 13 12 11 10 9 8 7 6	10 9 8 7 6 5 4 3 2 1	5 4 3 2 1
Bank Stability Right Bank Left Bank 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.	20 19 18 17 16 15 14 13 12 11 10 9 8 7 6	15 14 13 12 11 10 9 8 7 6	10 9 8 7 6 5 4 3 2 1	5 4 3 2 1
Riparian Buffer Right Bank Left Bank Width of vegetation greater than 18 m	20 19 18 17 16 15 14 13 12 11 10 9 8 7 6	15 14 13 12 11 10 9 8 7 6	10 9 8 7 6 5 4 3 2 1	5 4 3 2 1
Riparian Zone Right Bank Left Bank 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.	20 19 18 17 16 15 14 13 12 11 10 9 8 7 6	15 14 13 12 11 10 9 8 7 6	10 9 8 7 6 5 4 3 2 1	5 4 3 2 1
TOTAL SCORE	94	59	54	31

Analyst:

Ben P. Swartz, Ken Titman

Signature:

Ben P. Swartz