



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
☒ Yes / ☐ No

WIN Station Name: Thompson Branch @ Us17 North Of Causey Rd

Date: 1/28/2021

WIN/Field ID: G3SW0086

WBID: 1844

ENR:

Latitude: 27.5248

County: HARDEE

Org ID: 21FLTPA

Longitude: -81.8099

Receiving Body of Water: Sarasota Bay - Peace - Myakka

RQ: 2021-01-25-13

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Ben Paswater	x		x		
☒	Francisco Faria		x		x	x
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☐ Syringe	☐ Pole
Depth measured with: Secchi	
Secchi Equipment ID: Secchi #2	
Collection Method	
☒ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other _____	☐ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded

Meter ID# LEIA

Photos: YES

Flow: FLOW

Tide:

Tide Times:

High

Low

Biological Samples Collected: ☐ None ☒ HA ☒ SCI ☒ RPS ☐ Algae ID ☒ LVS ☐ LVI Other:

SBIO ID Numbers: SBIO ID 81831 HA 16748 LVS 11767 RPS 9658 SCI Result 56

Notes:

Duplicate Sample

Time Zone: EST Time: Field ID: N/A (WIN ID_DUP)

WIN DMT Activity ID:

Blank

Time Zone: Time: Field ID: (Blank Type_DDMYYYY)

DI Source: Location:

DI Type: Equipment ID:

DI Container (Name/ID): DI Container Type:

LIMS EVENT ID: SWD-2021-02-01-01 WIN Import ID: 28082

Enter Field Parameters, Verify Station ID In LIMS DMT: 06/30/2021 SM QC Station ID, Field Parameters In LIMS DMT: 08/16/2021 NA
(Initials/Date) (Initials/Date)

Scan/Save Field Sheets 12/29/2022 BP Migrate Data to WIN: 08/16/2021 NA Verify Data In WIN: 08/25/2021 SM
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2021-01-25-13

Customer: SW-DIST

Project ID: SMP

Collected By: Ben Paswater, Francisco Faria

Field Report Prepared By: Ben Paswater

Sampling Agency: (FDEP) SW ROC

Place Label Here

WIN ID/Field ID:



G3SW0086

Location: Thompson Branch @ Us17 North Of Causey Rd

Comments: Microbiology sample(s) submitted to contract laboratory

Matrix: Fresh

(Check one)

☒ GRAB☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPT)
1/28/2021	1215 EST	8.97	97.6	19.4	7.56	0.3	0.4 ☒ VOB (S)	0.4	352	0.17
	EST						Central Lab please use top row for login purposes			

Parameter Suite	Parameter Methods	Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP Lot # SA0293040 Exp: 10/21	☒ Ice ☒ H2SO4*	☒ <2	1	A
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD Lot # Not Recorded Exp:	☒ Ice ☒ HNO3*	☒ <2	1	A
Filtered Nutrients (P125ML)	☒ W-PQ4-F ☒ Field Filtered 0.45 µm Filter Filter Lot # Not Recorded Syringe Lot # Not Recorded	☒ Ice		1	A
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-C / W-COLOR / W-SO4-IC / W-TDS	☒ Ice		1	A
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates (PJ-2L)	☒ MI-FW-QLDC	☐ Formalin		2	
Periphyton (PT-50ML)	☐ ALGAE-ID	☐ Ice			
Microbiology (Contract Lab Bottle)	☒ E Coli ☐ F Coli ☐ Enterococci ☒ Contract Lab	☒ Ice		1	A
Molecular (QPCR-P-500ML)	☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD	☐ Ice			
Tracers (BG-500ML)	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides (BG-500ML) (BG-1L)	☒ W-E8321-DI ☒ WE8321-MS ☒ W-PSNP-TQ ☒ W-CT-CL-R ☒ W-PCL-SQ-R ☒ W-CARB-AA (5 ml of MCAA** Buffer Solution) ☐ W-DIELDIN	☒ Ice		6	A
Phytoplankton/Periphyton	DTM-QL-C PEN-QL-C DTY-QN-C PKD-QN-C DTM-QN-C PRN-QN-C PKD-QN-BV	☐ Ice			

Name:
Ben Paswater
Francisco Faria

Signature:

Date:

1/28/2021

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

Field ID/WIN

G3SW0086

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

01/28/2021

STORET STATION
NUMBER: see stickerDATE (MM/DD/YY):
see bottom of page

SAMPLING AGENCY:

FDEP SWROC

Site Name: Thompson Branch @ US 17 North of Causey COUNTY:

POLK

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)	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>5</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>4</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 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>17</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>3</u> ----- Primary Score <u>29</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 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	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>12</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability <u>5</u> Right Bank <u>4</u> 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. 10 9	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. LR 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	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	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. 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). LR 3 2 1
Secondary Score <u>43</u>	10 9	8 7 6	5 4	3 2 1

72

TOTAL SCORE

Date: 1/28/2021	Analyst: Ben Paswater	Signature: Ben Paswater
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ID

81831

APS 9658

HA 16748

LVS 11767



Site Name: Thompson Branch @ US 17 North of Causey

FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Investigators: FF BP

County: Polk

STORET Station Number: see label

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	
0	1	N			60	1	N			
	2					2				
	3					3				
	4					4				
	5					5				92
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N			70	1				
	2					2				
	3					3				
	4					4				
	5					5				30
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N			80	1				
	2					2				
	3					3				
	4					4				
	5					5				65
	6					6				
	7					7				
	8					8				
	9					9				
30	1				90	1				
	2					2				
	3					3				
	4					4				
	5					5				91
	6					6				
	7					7				
	8					8				
	9					9				
40	1				100	1				
	2					2				
	3					3				
	4					4				
	5					5				30
	6					6				
	7					7				
	8					8				
	9					9				
50	1					1				
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				

Secchi depth .4
Estimated? No

points ranked 4-6 8
total points assessed 8
% points ranked 4-6 100

Check accompanying data collected at same site/date.

Algal mat sample
Linear Veg Survey
Habitat Assessment
SCI/Biorecon
Water sample

RQ- 2021-01-25-13

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%.



Site Name: Thompson Branch @ US 17 North of Causey

21FLTPA

LATITUDE 27.52483

LONGITUDE -81.80986

SAMPLING AGENCY FDEP SW ROC

WATER

Peace River

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☐ 10 ☐ Silviculture ☐ Field/Pasture ☐ 80 ☐ Agricultural ☐ 10 ☐ Residential ☐ 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						Typical Width (m) Depth (m)/Velocity (m/sec) Transect 3 m wide .27 m/s .27 m/s .27 m/s .3 m deep .4 m deep .3 m deep			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: 718 Right Bank: 218				Hydrologic Modification Score (per FT 3101) 5					
High Water Mark: 2 + .4 = 2.4 (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%)					

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 ☐																																		
SUBSTRATE TYPE Assessment Tool: ☒ SCI ☐ RPS ☒ LVS ☐ LCI ☐ BioRecon			WATER QUALITY <table border="1"> <thead> <tr> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> <th>SECCHI (M)</th> </tr> </thead> <tbody> <tr> <td>Top: .2</td> <td>19.4</td> <td>7.56</td> <td>8.97</td> <td>97.6</td> <td>362</td> <td>0.17</td> <td>.4</td> </tr> <tr> <td>Mid:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>☒ VOB</td> </tr> <tr> <td>Bottom:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>TOTAL DEPTH .4</td> </tr> </tbody> </table>						Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top: .2	19.4	7.56	8.97	97.6	362	0.17	.4	Mid:							☒ VOB	Bottom:							TOTAL DEPTH .4
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Other																																								
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			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) ☐																																					
AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																								
SAMPLING TEAM Ben Paswater, Francisco Faria				SIGNATURE: Ben Paswater				DATE: 1/28/2021																																



DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD

Site Name: Thompson Branch @ US 17 North of Causey

County: Polk

Waterbody: See Sticker

Date: 01/28/2021

Signature: Benjamin Paswater

Analyst: Ben Paswater

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																							



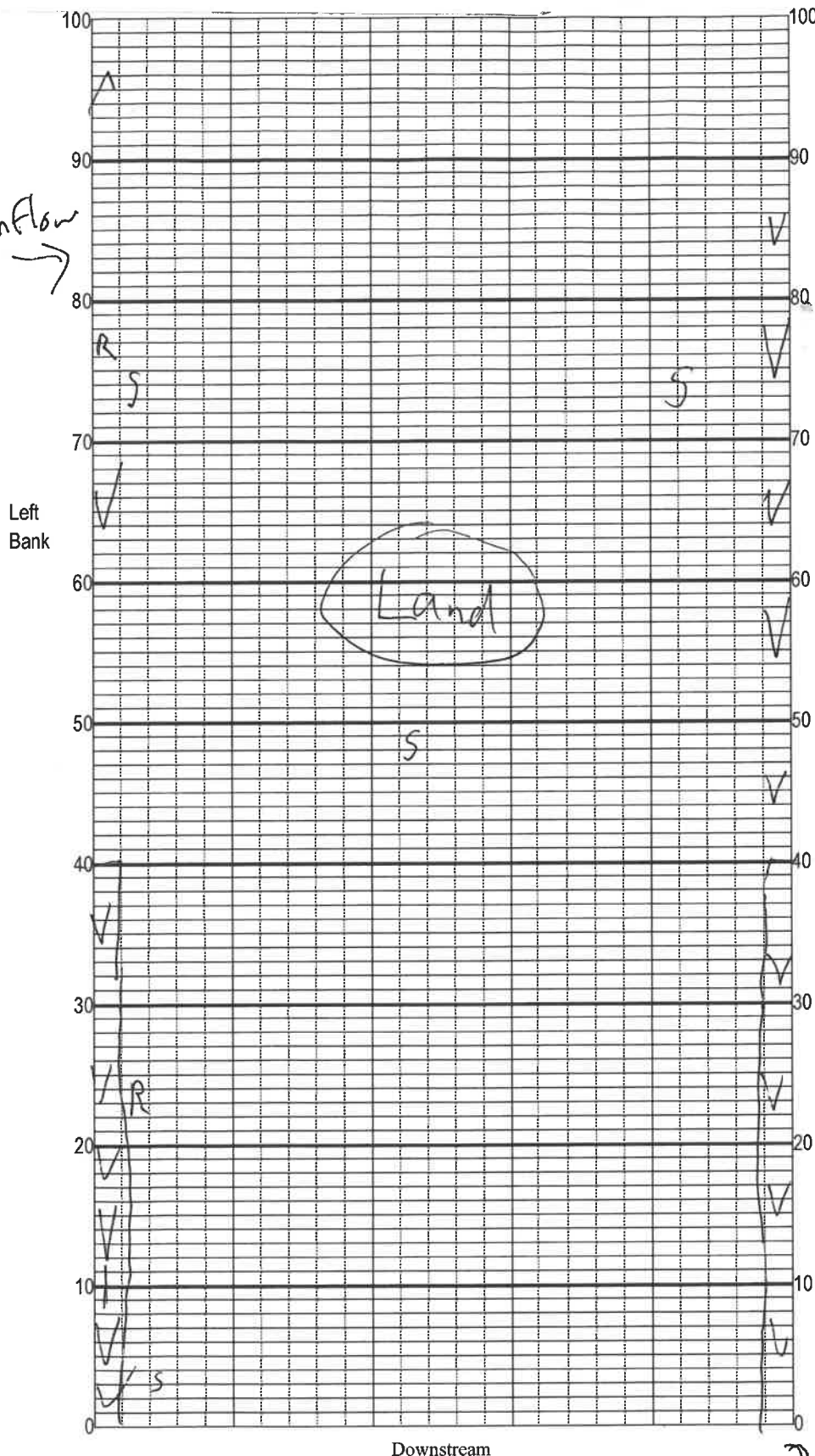
EP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet

Site Name: Thompson Branch @ US 17 North of Causey

Location: Thompson Branch

Date: 1/24/2021

Sampler: Ben Deswater



100 m: Latitude _____

Longitude _____

0 m: Latitude _____

Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %



Snags

few



Roots/undercut banks

few



Leaf Packs (or mats)



Aquatic Macrophytes

4.1



ROCKS



Pools

total # observed = 0

range expected = 4-5

Average width 3 m

Average depth 4 m

Velocity measured at 50, 100 meter mark.

WQ & chemistry taken at 100 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:

V = 103/2500

4.1%

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