



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PLAN FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: Tadpole Creek @ Caraway Spice Ave

Date: 10/21/2021

WIN/Field ID: G1SW0112

WBID: 1686

ENR: -

Latitude: 27.8087

County: HILLSBOROUGH

Org ID: 21FLTPA

Longitude: -82.34 296

Receiving Body of Water: Tampa Bay

RQ: 2021-10-11-49

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Ben Paswater	x	x	x		
☒	Jacob Yodzis		x		x	x
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☐ Syringe	☐ Pole
Depth measured with: Secchi	
Secchi Equipment ID: Secchi #3	
Collection Method	
☒ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other _____	☐ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# SWD							
Photos: YES		Flow: FLOW		Tide:		Tide Times: High: Low:							
Biological Samples Collected: ☐ None ☒ HA ☒ SCI ☒ RPS ☐ Algae ID ☒ LVS ☐ LVI Other:													
SBIO ID Numbers: Visit ID : 83449 HA ID: 17081 RPS ID: 9798													
Notes:													

Duplicate Sample

Time Zone: EST	Time: _____	Field ID: _____ (WIN ID_DUP)
WIN DMT Activity ID: _____		

Blank

Time Zone: _____	Time: _____	Field ID: _____ (Blank Type_DDDMMYY)
DI Source: _____	Location: _____	
DI Type: _____	Equipment ID: _____	
DI Container (Name/ID):		DI Container Type:

LIMS EVENT ID: SW-DIST-2021-10-22-03

WIN Import ID: 31775

Enter Field Parameters, Verify Station ID In LIMS DMT: NA 11/24/2021

QC Station ID, Field Parameters In LIMS DMT: NA 12/28/2021

(Initials/Date)

(Initials/Date)

Scan/Save Field Sheets SM 06/05/2023

(Initials/Date)

Migrate Data to WIN: SM 03/24/2022

(Initials/Date)

Verify Data In WIN: SM 06/05/2023

(Initials/Date)



RQ-2021-10-11-49

Customer: WQAP

Project ID: SMP

Collected By: Ben Paswater, Jacob Yodzis

Field Report Prepared By: Ben Paswater

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G1SW0112

Location: Tadpole Creek @ Caraway Spice Ave

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 _h)		
	1200 EST	5.1	60.4	23.8	6.58	0.3	0.7 ☒ VOB (S)	0.7	302.3	0.14		
10/21/2021												
	EST											
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				☒ Ice ☒ H2SO4*		☒ <2	1	A		
		Lot #	SA1105060		Exp:	4/22						
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☒ HNO3*		☒ <2	1	A		
		Lot #	NA1105100		Exp:	6/22						
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A		
		Filter Lot #	Not Recorded									
		Syringe Lot #	Not Recorded									
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice			1	A		
Physical/Aggregate (Fresh) (P-1L)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / 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 Lot #	10.0092616TR		☒ Formalin			1	SCI		
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			1	A		
Pesticides (BG-500ML) (BG-1L)		☒ W-E8321-DI	☒ WE8321-MS	☒ W-PSNP-TQ	W-CT-CL-R	☒ Ice			5 or 3	A		
Phytoplankton/Periphyton		W-PCL-TQ-R		W-CARB-AA (5 ml of MCAA** Buffer Solution)								
				DTY-QN-C								
				PKD-QN-BV		☐ Ice						
Name: Ben Paswater Jacob Yodzis					Signature:				Date:			

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

Site Name: Tadpole Creek @ Caraway Spice Ave

TORET STATION
NUMBER: see sticker

DATE (MM/DD/YY)

10/21/21

SAMPLING AGENCY:

FDEP SWROC

COUNTY:

Hillsborough

RECEIVING BODY OF WATER:

Bullfrog Creek

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>11</u>	20 19 18 17 16	15 14 13 12 <u>11</u>	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>5</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 <u>5</u> 4 3 2 1
Water Velocity <u>15</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 <u>15</u> 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>4</u> ----- Primary Score <u>35</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. <u>5</u> 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>17</u>	20 19 18 <u>17</u> 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. 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. <u>LR</u> <u>5</u> 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 10 9	Width of vegetation >12 to 18m <u>R</u> <u>L</u> <u>8</u> 7 <u>6</u>	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. <u>RL</u> <u>5</u> <u>4</u>	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). 3 2 1

85 TOTAL SCORE

Date: 10/21/21

Analyst: Ben Paswater

Signature: Ben Paswater

HA ID: 17081

RPS ID: 9798

Visit ID: 83449

G1SW0112

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

Tadpole Creek @ Caraway Spice Ave

1FLTPA

LATITUDE 27.80867

LONGITUDE -82.34296

SAMPLING AGENCY FDEP SW ROC

F WATER Tampa Bay

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)

		10		70	20		
--	--	----	--	----	----	--	--

Local Watershed Erosion (select one): ☐ None ☐ Slight ☐ Moderate ☒ HeavyLocal Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side

Left Bank: 14 Right Bank: 15

Hydrologic Modification Score (per FT 3101)

4

High Water Mark: 2m + 0.7 = 2.7
(m) (above present water level) (present depth) (above bed)

Artificially Impounded

☐ Yes ☒ NoArtificially ☒ No ☐ Mostly recovered, more sinuousChannelized: ☐ 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

2 m wide

0.25 m/s	0.25 m/s	0.25 m/s
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0.3 m deep	0.5 m deep	0.3 m deep
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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

% Coverage	INVERT # Times Sampled	PERI # Times Sampled
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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: 0.3 23.8 6.58 5.10 60.4 302 0.14 0.7

Mid: ☒ VOB

Bottom: TOTAL DEPT

Meter ID: SMD

Water Odors Normal ☒ Petroleum ☐Sewage ☐ Chemical ☐ Other ☐Water Sample Taken? ☒ Yes ☐ NoSample Preserved? ☐ Yes ☐ No

Lot Number: Exp:

Algae Sample Taken? ☐ Yes ☒ NoSample Preserved? ☐ Yes ☐ No

Lot Number: Exp:

Water Surface Oils Normal ☒ Sheen ☐Globs ☐ Slick ☐ Other ☐Color Tannic ☐ Green (Algae) ☐Clear ☒ Other (Specify) ☐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, Jacob Yodanis

SIGNATURE

Ben Paswater

DATE

10/21/21

G1SW0112



Name: Tadpole Creek @ Caraway Spice Ave

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Investigators: Ben Paswater &
Jacob Yodzis

County: Hillsborough

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		85	60	1	N		39
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
10	1			83	70	1			75
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
20	1			86	80	1			64
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
30	1			90	90	1			32
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
40	1			15	100	1	✓		2
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
50	1	✓		8	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.				
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
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%.									

Secchi depth	0.7
Estimated?	No

# 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- 2021-10-11-49	

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



DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD

Name: Tadpole Creek @ Caraway Spice Ave

County: Hillsborough

Waterbody: See Sticker

Date: 10/21/2021

Signature:

Comments:

Analyst: Ben Paswater & Jacob Yodzis

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																							

Less than 2 sq/m

G1SW0112



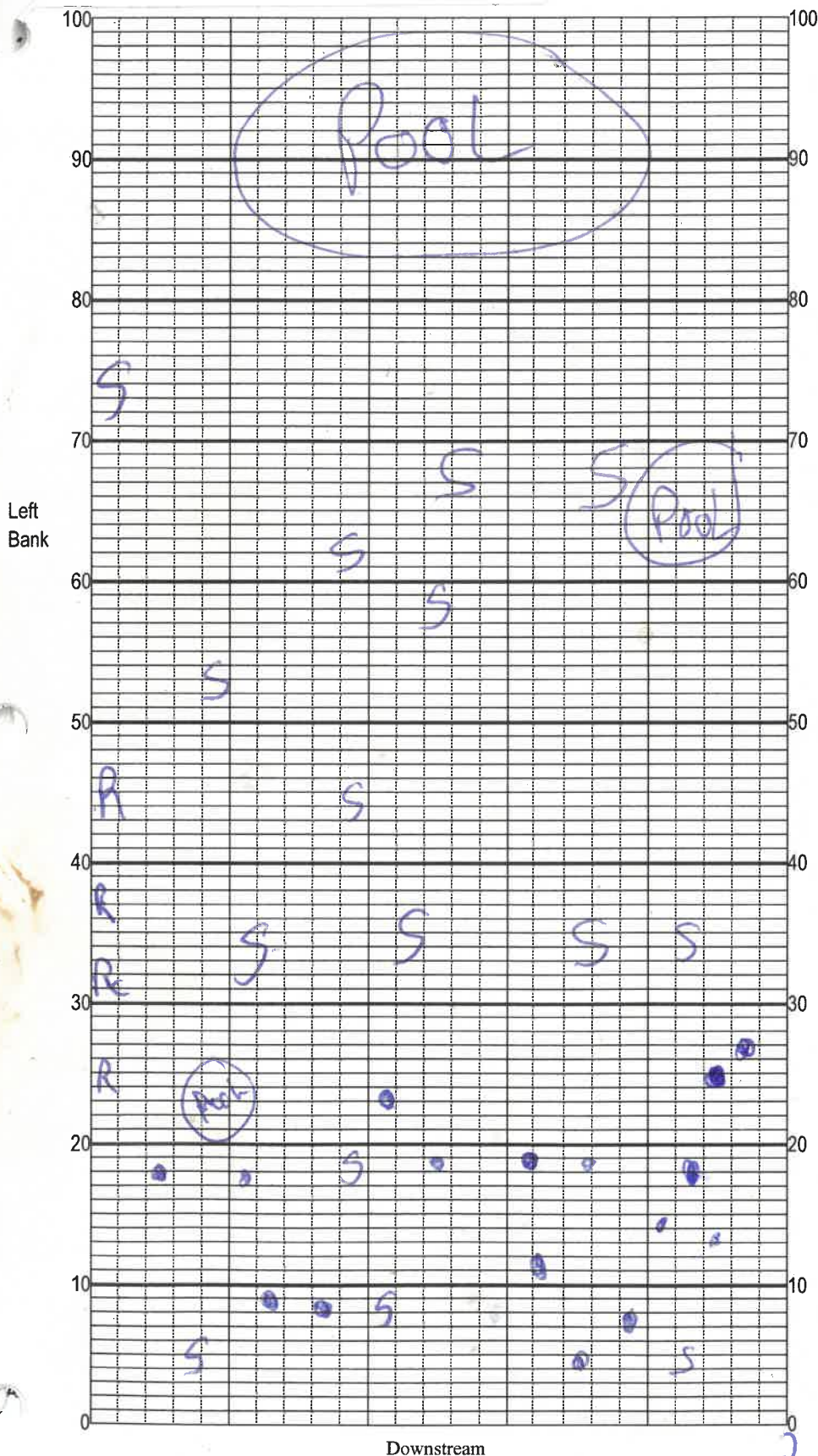
IEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet

Name: Tadpole Creek @ Caraway Spice Ave

Location: _____

Date: 10/21/2021

Sampler: Ben Paswater & Jacob Yodzis



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

100 m: Latitude _____
Longitude _____
0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

☒ S	Snags	3
☒ R	Roots/undercut banks	9
☒ L	Leaf Packs (or mats)	—
☒ V	Aquatic Macrophytes	—
☒ •	ROCKS	9
☐		
☐	Pools	total # observed = _____ # range expected = _____

Average width _____ m

Average depth _____ 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:

Snags = 76
Rock = 24
R = 24

Invoice to: FDEP Micro Overflow

Project Name: RQ-2021-10-11-49

Laboratory Submission #

65-10119

Sample Name	Sample Type / Sample Matrix ²	Collection			Container		Preservative ⁴	Parameters for Analysis	Laboratory Sample #
		Date	Time	Qty	Capacity	Type ³			
G1SW0112	SW	10/21/21	1200	1	250mL	P	Plain (on Ice)	E-Coli	1
G1SW0056	SW	10/21/21	1415	1	250mL	P	Plain (on Ice)	Enterero	2
	SW				250mL	P	Plain (on Ice)		
	SW				250mL	P	Plain (on Ice)		
	SW				250mL	P	Plain (on Ice)		
	SW				250mL	P	Plain (on Ice)		
	SW				250mL	P	Plain (on Ice)		

¹Sample Type¹ is used to indicate whether the sample was a grab (G) or whether it was a composite (C).

²Sample Matrix² is used to indicate whether the sample is being discarded to drinking water (DW), groundwater (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (S/NPT), or other (CFPO).

³Sample Type³ is used to indicate whether the container is plastic (P) or glass (G).

⁴Preservative⁴ is used to indicate whether the sample is being discarded to drinking water (DW), groundwater (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (S/NPT), or other (CFPO).

Laboratory Sample Acceptability:

Temperature: 2.8°C

1. Each bottle has a label identifying sample ID, pretreated preservative contained in the bottle, sample type, client ID, and parameters for analysis.
2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
3. All bottles not containing preservative may be mixed with appropriate sample prior to collection.
4. The client is responsible for documentation of the sampling event. Please note any sampling events on the sample custody form.

Collected / Relinquished By:

Date	Time
10/31/01	15:00

Received By:

10/10/10

Date _____

Time

2 Relinquished By:

Date _____

五

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✓✓✓

10-19-01

150