FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

FOR DO

Data Qualified? Yes / No

WIN Station Name: G25W0098 Date: 11-12-19 (mm/dd/yyyy)

WIN/ Field ID: Hurrah Creek @ Alafia River SP WBID: 1711 Latitude: (Decimal Degrees)

County: Hills ORG ID: 21FLTPA Longitude: (Decimal Degrees)

Receiving Body of Water: Alafia R. RQ-2019- 11-11-62

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Judy Ashton	✓		✓		
Ben Pasmore		✓		✓	✓

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# CHEM 7

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)	1100	0.6 ~~0.48~~	0.3	0.6 ~~0.54~~ "SI"	7.92 J	88.7	5.71	0.10	204.9	20.9

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

SBIO ID Numbers: SBIO-ID: 80514 HA-ID: 16407 RPS-ID: 9497 Macrophyte-ID: ~~213~~ 11560 LIMS#: 2135376

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-ES~~ BF	☐ Ice ☐ HNO_3			☐ <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				

Notes:

Field ID/WIN G2SW0098

Site Name: Hurrah Creek @ Alafia River SP

Signature: Judy Ashton Date: 11-12-19

LIMS EVENT ID: 2019-11-13-01 WIN Import ID: 16150

Enter Field Parameters, Verify Station ID In LIMS DMT: SM 12/02/2019 QC Station ID, Field Parameters In LIMS DMT: SM 01/06/2020

Scan/Save Field Sheets SM 03/11/2020 (Initials/Date) Migrate Data to WIN: SM 01/06/2020 (Initials/Date) Verify Data In WIN: SM 03/11/2020 (Initials/Date)

Field ID/WIN G2SW0098

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

Site Name: Hurrah Creek @ Alafia River SP

21FLTPA

LATITUDE

LONGITUDE

SAMPLING AGENCY FDEP SW ROC

DATE 11-12-19

RECEIVING BODY OF WATER ALAFIA R.

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		30	10	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: 718m Right Bank: 718m

Hydrologic Modification Score (per FT 3101): 5

High Water Mark: 0.4 (m) + 1.5 (above present water level) = 1.9 (present depth) (above bed)

Artificially Impounded ☐ Yes ☑ No

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

3.0 m wide

	m/s	0.21	m/s		m/s			
	m deep	0.4	m deep		m deep			

Artificially Channelized: ☑ No ☐ Mostly recovered, more sinuous ☐ 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

	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)	3.0		
Undercut Banks / Roots	2.6		
Leaf Packs or Mat			
Aquatic Vegetation	2.1		
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)
Top:							
Mid:							
Bottom	0.3	20.9	5.71	7.52	88.7	204.9	0.10

Meter ID:

SECCHI (M): 0.6 ☐ VOB

TOTAL DEPTH: 0.6

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) ☐

AMBIENT FIELD CONDITIONS / NOTES:

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

SAMPLING TEAM

J. ASHTON, B. PRAWATER

SIGNATURE:

DATE: 11-12-19

62-160.800, F.A.C.

Revision Date: March 1, 2014

Field ID/WIN G2SW0098

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

Site Name: Hurrah Creek @ Alafia River SP

STORET STATION NUMBER: see sticker	DATE (MM/DD/YY): 11-12-19	SAMPLING AGENCY: FDEP SWROC
FIELD ID/NAME: see sticker	LOCATION:	COUNTY: HILLS
		RECEIVING BODY OF WATER: ALAFIA R

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 12	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags) 15 14 13 12 11	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed 10 9 8 7 6	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered 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 12 Primary Score 45	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 7 Left Bank 7	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	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 9 Left Bank 10	Width of vegetation greater than 18 m 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 8 Left Bank ~~8~~ 10 Secondary Score 69	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). 3 2 1

53 + 2

114 **TOTAL SCORE**

Date: 11-12-19	Analyst: J. ASHTON, B. PASSMORE	Signature:

Field ID/WIN G2SW0098

Rapid Periphyton Survey Field Sheet

Site Name: Hurrah Creek @ Alafia River SP

Date: 11-12-19

Investigators: J. Ashton

STORET Station Number: G2SW0098

RQ-2019-11-11-62

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N		
	2			
	3			
	4			
	5			64
	6			
	7			
	8			
	9			
10	1	N		
	2			
	3			
	4			
	5			88
	6			
	7			
	8			
	9			
20	1	N		
	2			
	3			
	4			
	5			86
	6			
	7			
	8			
	9			
30	1	N		
	2			
	3			
	4			
	5			90
	6			
	7			
	8			
	9			
40	1	N		
	2			
	3			
	4			
	5			87
	6			
	7			
	8			
	9			
50	1	N		
	2			
	3			
	4			
	5			76
	6			
	7			
	8			
	9			

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
60	1	N		
	2			
	3			
	4			
	5			46
	6			
	7			
	8			
	9			
70	1	N		
	2			
	3			
	4			
	5			45
	6			
	7			
	8			
	9			
80	1	N		
	2			
	3			
	4			
	5			57
	6			
	7			
	8			
	9			
90	1	N		
	2			
	3			
	4			
	5			89
	6			
	7			
	8			
	9			
100	1	N		
	2			
	3			
	4			
	5			96
	6			
	7			
	8			
	9			

Secchi depth	0.4
Estimated?	NO

# points ranked 4-6	8
total points assessed	89
% points ranked 4-6	9

Check accompanying data collected at same site/date.	
Algal mat sample	
Linear Veg Survey	✓
Habitat Assessment	✓
SCI/Biorecon	
Water sample	✓

RQ-2019-11-11-62

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

*If you can see the secchi on the bottom, but you cannot see or reach surrounding substrate use "X" and check estimated

0.21 Flow
1.5 Ht water

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%.

Field ID/WIN G2SW0098

Site Name: Hurrah Creek @ Alafia River SP

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD

County:

Waterbody: See Sticker

Date: 11-12-19

Signature:

Analyst: Doug Ashton

>7-M² VEG.

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 sessilus			X							X	✓
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	X	X	X	X			X		X		
Crinum americanum				X	X						
Cyperus _____											
Diodia virginiana											
Eichhornia crassipes											
Eleocharis (wispy viviparous)											
Fontinalis sp. (Aquatic Moss)											
Fraxinus caroliniana											
Hydrilla verticillata											
Hydrocotle sp.	X							X			
Hygrophila polysperma											
Hymenachne amplexicaulis											
Hymenocallis											
Lachnanthes caroliniana											
Landoltia punctata											
Lemna sp.											
Limnophila sessiflora											
Ludwigia leptocarpa											
Ludwigia palustris											
Ludwigia peruviana							X				
Ludwigia repens DOMINANT	X	X	X	X	X	X	X	X	X	X	
Luziola fluitans											
If no Dominant or Co-Dominant were selected, indicate with "X"											
Indicate % cover macrophytes per section											
0-5% Macrophyte Coverage	X	X	X				X	X	X	X	
>5 and ≤10% Macrophyte Coverage				X	X	X					
>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		X									
Potamogeton illinoensis											
Ruellia simplex											
Sacciolepis striata											
Sagittaria kurziana											
Sagittaria lancifolia											
Sagittaria latifolia											
Salvinia minima											
Samolus parviflora											
Saururus cernuus						X					
Sparganium americanum											
Schoenoplectus americanus											
Sphagneticola trilobata(Wedelia)											
Typha sp.											
Urochloa mutica (Brachiaria)					X	X	X	X	X		
Vallisneria americana											
Zizania aquatica											
Hydrocotyle umbellata		X									
Limnophila sessiflora			X	X	X						
~~Hymenachne amplexicaulis~~ NO					X	X	X	X			
Aquatic Moss → Fontanalis										X	

62-160.800, F.A.C.

Revision Date: March 1, 2014

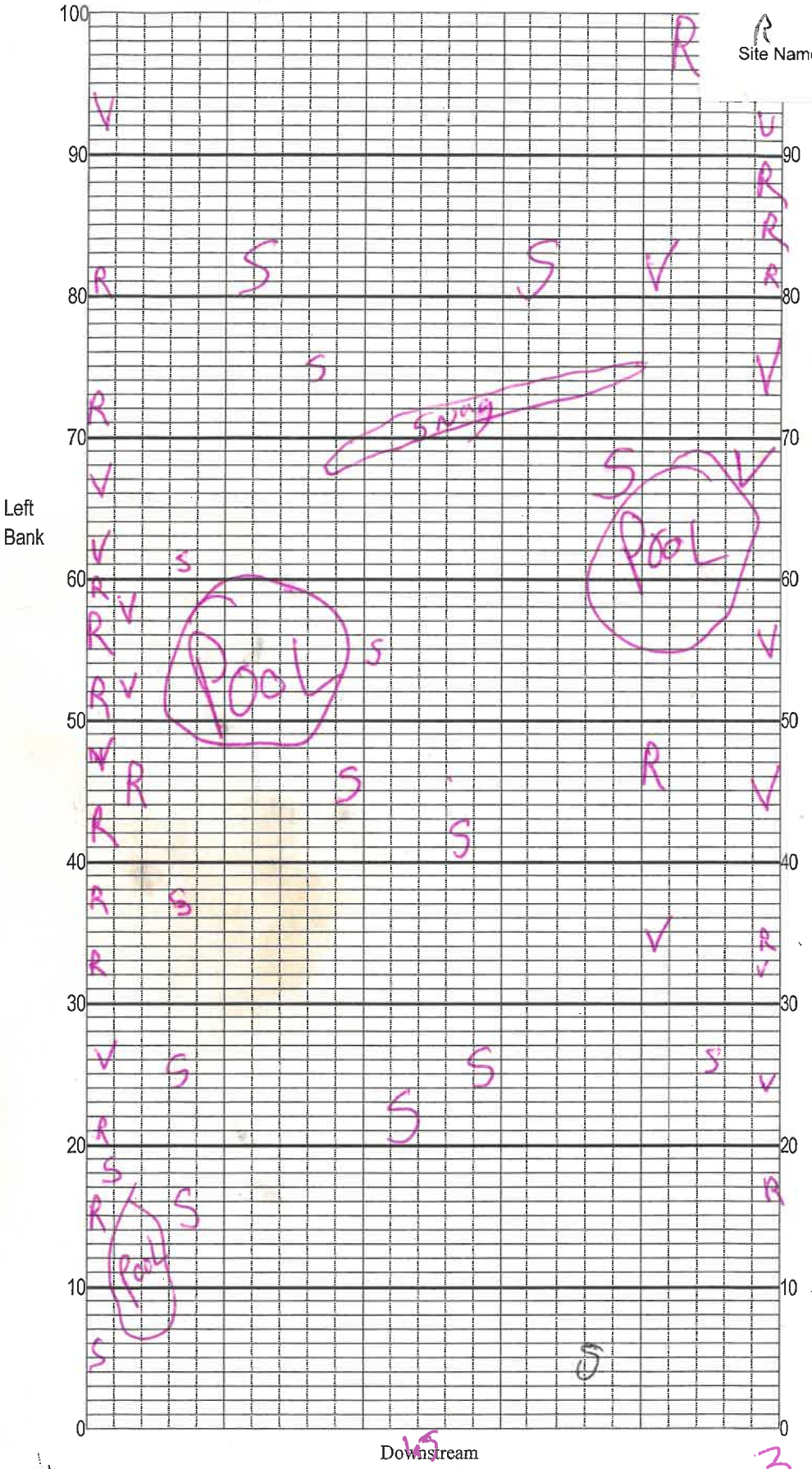
DEP Form FD 9000-4 Stream/River Habitat Assessment Ske

Field ID/WIN G2SW0098

Site Name: Hurrah Creek @ Alafia River SP

Date: _____

Sampler: B. Passmore



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	2.6
	Leaf Packs (or mats)	
V	Aquatic Macrophytes	2.1
3	Pools	total # observed = 3
		# range expected = 3-5

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:

S = 75 3 1/4
R = 66 26
V = 54 2.1

62-160.800, F.A.C

Revision Date: March 1, 2014

Advanced Environmental Laboratories, Inc.

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☐ **Tallahassee:** 2639 North Monroe Street, Suite D • Tallahassee, FL 32303 • 850.219.6274 • Fax 850.219.6275
☑ **Tampa:** 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327

ent Name: FDEP SW Dist.
dress: 13051 N. Telecom Pkwy. Temple Terrace FL 33637
one: 813-470-5770
ntact: Judy Ashton 813-470-5772
mpled By:
n Around Time: ☑ STANDARD ☐ RUSH
Page: of

Project Name: SMP
P.O. Number: B5A496
Project Address:

Special Instructions:
RQ-2019-11-11-62

☐ ADaPT ☐ EQuIS ☐ Other

Analysis Required: E. Coli

SAMPLE ID	SAMPLE DESCRIPTION	Grab / Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	BOTTLE SIZE & TYPE	LABORATORY I.D. #
Field ID/WIN G2SW0098	Site Name: Hurrah Creek @ Alafia River SP		11/12/19	1100	SW	1		✓	

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Preservation Code: I = Ice H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

eceived on Ice ☑ Yes ☐ No ☐ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked Temperature when received _____ (in degrees celcius)

CN: AD-051 Form last revised 04/30/2015

Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V

	Relinquished by:	Date	Time	Received by:	Date	Time
1	Judy Ashton	11-12-19	12:11		11/12/19	12:11

FOR DRINKING WATER USE:
PWS ID:

Request Number: RQ-2019-11-11-62

Hurrah Creek HA

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: SW-DIST

Project ID: SMP

Requester: Judy Ashton

Collected By: J. ASHTON, B. PASUWATEL

Field Report Prepared By: J. ASHTON

Sampling Agency: FDEP

Location		☐ Comp ☑ Grab	Collection (comp begin or grab) Date 11/12/19 Time 1100	Eastern (circled) Central	Composite end Date Time (struck through)	Bottle Group(s) (See pg 2)
Field ID/WIN: G2SW0098		Matrix (type, e.g., Salt, Fresh, etc): Fresh (circled)	Diss. Oxygen 7.92 ☑ mg/L ☐ % sat		Total Res. Chlorine (mg/L) (struck through)	A
Site Name: Hurrah Creek @ Alafia River SP		Temp (C) 20.9	pH 5.71	Sample Depth 0.3 ☐ ft ☑ m	Sp. Conductance (umho/cm) 204.9	
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt) .1	Comments: E.COLI DROPPED OFF 2 ALL			

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
J. ASHTON	11-12-19 1600	FED EX	1		