



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: Buzzard Roost Branch @ Pine Level St

Date: 03/28/2019

WIN/ Field ID: G3SD0152

WBID: 1944

Latitude: 27.23661549

(mm/dd/yyyy)

County: DeSoto

ORG ID:

Longitude: -81.99656047

(Decimal Degrees)

Receiving Body of Water: Peace River

RQ: 2019-03-25-64

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment			
Chase Conley									☒ Sample Container	☐ Van Dorn	☐ Pole	
Morgan Degen									☐ Carboy	☒ Syringe		
Steven C. Neal									☐ Dipper	☐ Other		
									Depth Measured with <u>Secchi</u>			
									Equipment ID <u>3312B</u>			
Collection Method												
☒ Wading									☐ Canoe/Kayak			
☐ From Shore									☐ Electric Motor			
☐ Other									☐ Gasoline Motor			
Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded				Meter ID# <u>Snork</u>				Matrix: <u>Fresh</u> / Marine / DI				
Photos: Yes / <u>No</u>		Flow: No Flow / Intertidal / <u>Flowing</u> / NA		Tide: Rising/ Falling/ Slack/ <u>NA</u>		Tide Times: High <u>NA</u> Low <u>NA</u>						
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (umhos/cm)	Temp. (C°)		
<u>EST</u>	<u>1000</u>	<u>0.3</u>	<u>0.15</u>	<u>0.35</u>	<u>7.70</u>	<u>82.2</u>	<u>7.62</u>	<u>/</u>	<u>516</u>	<u>18.4</u>		
CEN												
Biological Samples Collected: None <u>HA</u> <u>SC</u> <u>RPS</u> Algae ID <u>VS</u> LVI Other:												
SBIO ID Numbers:		SBIO-ID:		HA-ID:		RPS-ID:		Macrophyte-ID:		LIMS#:		
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 ₂ SO ₄	<u>SA8197090</u>	<u>7/16/19</u>	☒ <2				
Metals	☒ W-ICPMS ☒ W-ICP				☒ Ice ☒ HNO ₃	<u>NA8197080</u>	<u>7/16/19</u>	☒ <2				
Filtered Nutrients	☒ W-P04-F ☒ Field Filtered 0.45 um Filter				☒ Ice							
Chlorophyll	☒ CHL-SUITE-W				☒ Ice							
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-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	Place Preservative Sticker(s) Here (If Available)						
Periphyton	☐ ALGAE-ID				☐ Ice							
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci				☒ Ice							
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF1.83 ☐ 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-E8321-MS				☐ Ice							
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C				☐ Ice							
Notes:				Field ID/WIN ID		G3SD0152						
				Location		Buzzard Roost Branch						
Signature: <u>[Signature]</u>				Date: <u>3/29/19</u>								

LIMS EVENT ID: SO-DIST-2019-03-29-02

WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT:

QC Station ID, Field Parameters In LIMS DMT:

Scan/Save Field Sheets NO 04/09/2019 Migrate Data to WIN: (Initials/Date)

Verify Data In WIN: (Initials/Date)

(Initials/Date)

(Initials/Date)

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

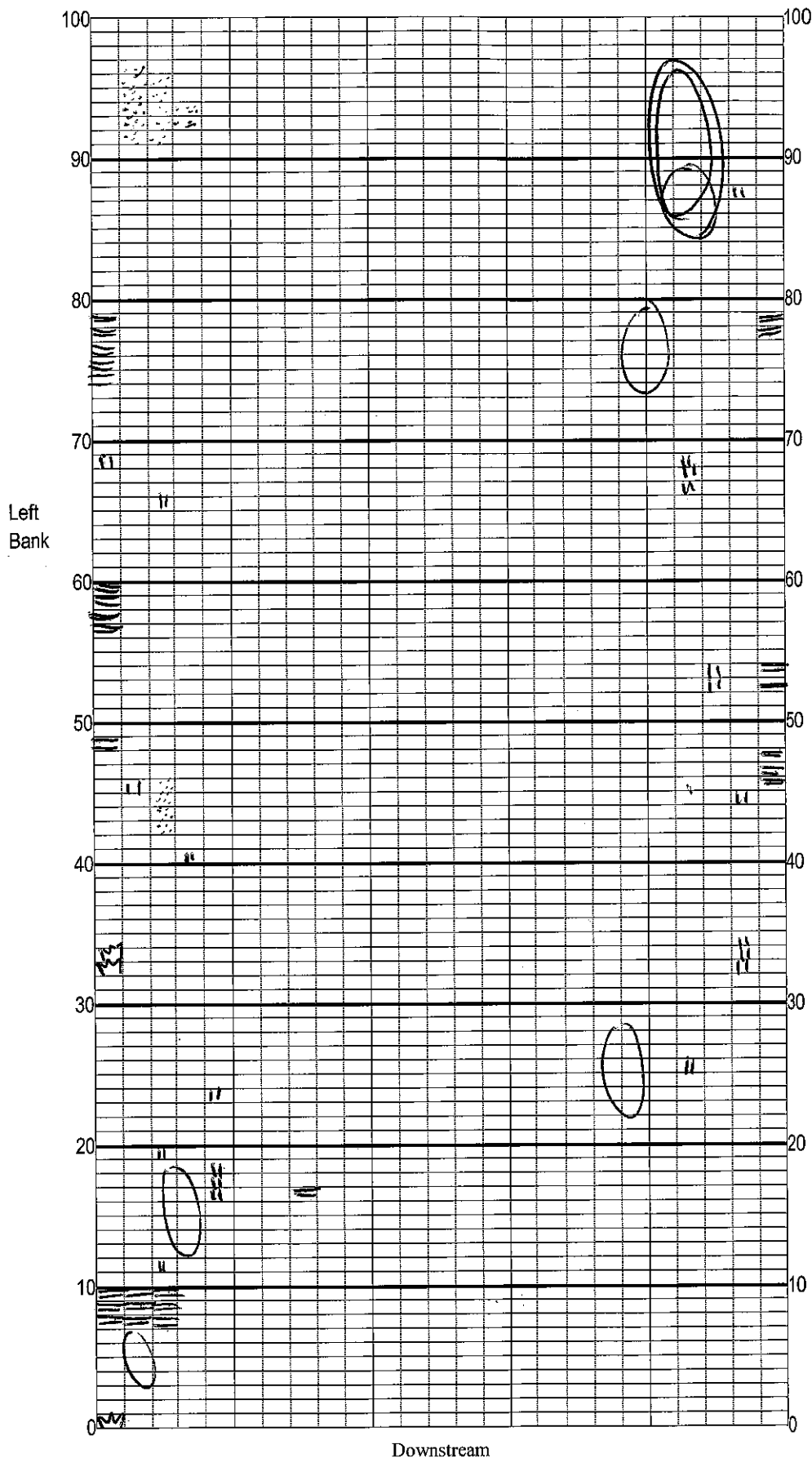
SAMPLING AGENCY: <u>SOROC</u>		STORET STATION NUMBER: <u>G3SD0152</u>	DATE (MM/DD/YY): <u>3/29/19</u>	RECEIVING BODY OF WATER: <u>Peace River</u>
REMARKS:	COUNTY: <u>Desoto</u>	LOCATION: <u>Buzzard Roost Branch</u>	FIELD ID/NAME:	

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>9</u>	20 19 18 17 16	15 14 13 12 11	10 <u>9</u> 8 7 6	5 4 3 2 1
Substrate Availability <u>2</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 <u>2</u> 1
Water Velocity <u>20</u>	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 <u>20</u> 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>14</u> Primary Score <u>45</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 <u>14</u> 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 <u>16</u>	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. 20 19 18 17 <u>16</u>	Good sinuosity within old channelized area. Evidence of dredging or straightening 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 <u>5</u> Left Bank <u>5</u>	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the woody 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>5</u> 4	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the woody root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank <u>9</u> Left Bank <u>9</u>	Width of vegetation greater than 18 m 10 <u>9</u>	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 <u>6</u> Left Bank <u>6</u> Secondary Score <u>56</u>	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 <u>6</u>	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

101 TOTAL SCORE

Date: <u>3/29/19</u>	Analyst: <u>Chase Colby, Shawn Colner, Morgan Dyer</u>	Signature: 
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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: Buzzard Roost
Date: 8/29/19
Sampler: Maryam Dye

100 m: Latitude 27.237498
Longitude -81.997137

0 m: Latitude 27.236800
Longitude -81.996626

Substrates: Code key, draw proportionate habitat abundance.

	%	m ²
Snags	<u>0.35</u>	<u>2.1</u>
Roots/undercut banks	<u>0.45</u>	<u>2.7</u>
Leaf Packs (or mats)	<u>0.28</u>	<u>1.7</u>
Aquatic Macrophytes	<u>0.05</u>	<u>0.3</u>
ROCKS	<u>0</u>	<u>0</u>
Pools	total # observed = <u>5</u> # range expected = <u>2-4</u>	

Average width 4.0 m
Average depth 0.4 m

Velocity measured at 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:

$$1 \text{ box} = .1 \text{ m}^2$$

$$3.3/\text{m} = 0.33 \text{ m/s}$$

1.13%
HABitat

Site:			County:			Date:			Investigators:				
Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N - 6)	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N - 6)	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N - 6)	Canopy Cover		
0	1	N		40	1	N		80	1	N			
	2				2					2			
	3				3					3			
	4				4					4			
	5				5					5			
	6				6					6			
	7				7					7			
	8				8					8			
	9				9					9			
10	1	N		50	1	N		90	1	N			
	2				2					2			
	3				3					3			
	4				4					4			
	5				5					5			
	6				6					6			
	7				7					7			
	8				8					8			
	9				9					9			
20	1	N		60	1	N		100	1	N			
	2				2					2			
	3				3					3			
	4				4					4			
	5				5					5			
	6				6					6			
	7				7					7			
	8				8					8			
	9				9					9			
30	1	N		70	1	N			1	N			
	2				2					2			
	3				3					3			
	4				4					4			
	5				5					5			
	6				6					6			
	7				7					7			
	8				8					8			
	9				9					9			

Secchi depth: 0.35

Check accompanying data collected at same site/date.

Algal mat sample ☒

Habitat Assessment ☒

Linear Veg. Survey ☒

SCI/Biorecon (circle 1) ☒

Water sample ☒

RO: 2019-03-25-04

points ranked 4-6: 0

total points assessed: 99

% points ranked 4-6: 0

Algal Thickness Rank

1 rough, no algae; slimy; algae to 1 mm

2 >1mm - 6 mm

3 >6 - 20 mm

4 >20 mm -10 cm

5 >10 cm

6

Record "N" for points deeper than the Secchi depth; algae are presumed absent. Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. Note if thickness estimated for deep points which can be seen but not reached.

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 an 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%.

(This fits with paper margins and orientation.)

User Defined Space.
Location, directions,
samplers, whatever...

Date: 1/2/34

1234567890123456

Field ID
STREET
←

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD

Store Number: ^ put sticker here

Date: 3/29/19

County: Desoto

Waterbody: Buzzard Roost

Analyst: Maryann Dye

Signature: Maryann Degan

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**

[illegible]

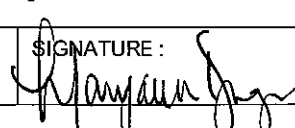
DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID _____ ORG ID 8052 LATITUDE 27.23661549
 COUNTY DE SOTO STORET# G3SD0152 LONGITUDE -81.99656047
 DATE 03/28/2019 TIME 1000 SAMPLING AGENCY S ROC
 SITE NAME Buzzard Roost Branch
 FIELD ID/NAME " " " Pine Level st RECEIVING BODY OF WATER PEACE RIVER

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>20</u> Silviculture _____ Field/Pasture <u>80</u> Agricultural _____ 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 <u>6.0</u> m wide <u>0.33</u> m/s <u>0.33</u> m/s <u>0.33</u> m/s <u>0.3</u> m deep <u>0.3</u> m deep <u>0.3</u> m deep			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>50</u> Right Bank: <u>80</u>		Hydrologic Modification Score (per FT 3101) _____					
High Water Mark: <u>0.5</u> + <u>0.3</u> = <u>0.8</u> (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 <table border="1"> <thead> <tr> <th></th> <th>% Coverage</th> <th>INVERT # Times Sampled</th> <th>PERI # Times Sampled</th> </tr> </thead> <tbody> <tr> <td>Woody Debris (Snags)</td> <td><u>0.35</u></td> <td><u>6</u></td> <td></td> </tr> <tr> <td>Undercut Banks / Roots</td> <td><u>0.45</u></td> <td><u>6</u></td> <td></td> </tr> <tr> <td>Leaf Packs or Mat</td> <td><u>0.28</u></td> <td><u>6</u></td> <td></td> </tr> <tr> <td>Aquatic Vegetation</td> <td><u>0.05</u></td> <td></td> <td></td> </tr> <tr> <td>Rock or Shell Rubble..</td> <td><u>0</u></td> <td></td> <td></td> </tr> <tr> <td>Sand</td> <td></td> <td><u>2</u></td> <td></td> </tr> <tr> <td>Mud / Muck / Silt</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				% Coverage	INVERT # Times Sampled	PERI # Times Sampled	Woody Debris (Snags)	<u>0.35</u>	<u>6</u>		Undercut Banks / Roots	<u>0.45</u>	<u>6</u>		Leaf Packs or Mat	<u>0.28</u>	<u>6</u>		Aquatic Vegetation	<u>0.05</u>			Rock or Shell Rubble..	<u>0</u>			Sand		<u>2</u>		Mud / Muck / Silt				Other				Other				WATER QUALITY <table border="1"> <thead> <tr> <th></th> <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:</td> <td><u>0.5</u></td> <td><u>18.4</u></td> <td><u>7.62</u></td> <td><u>7.70</u></td> <td><u>82.2</u></td> <td><u>516</u></td> <td></td> <td><u>0.3</u></td> </tr> <tr> <td>Mid:</td> <td></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></td> <td></td> </tr> </tbody> </table> Meter ID: <u>SNEK</u> TOTAL DEPTH <u>0.3</u>				Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top:	<u>0.5</u>	<u>18.4</u>	<u>7.62</u>	<u>7.70</u>	<u>82.2</u>	<u>516</u>		<u>0.3</u>	Mid:								☒ VOB	Bottom:								
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System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) _____			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) _____ Clarity Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐																																																																														
AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																																																																	
SAMPLING TEAM <u>MARYANN DUGAN, CHASE CONLEY, STEVEN COFONE</u>			SIGNATURE: 		DATE: <u>07/09/2019</u>																																																																												