



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

WIN Station Name: Flint Creek @ US 301

Date: 10/23/2018
(mm/dd/yyyy)

WIN/ Field ID: G2SW0004

WBID: 1522A

Latitude: 28.086227

(Decimal Degrees)

County: Hillsborough

ORG ID: 21FLTPA

Longitude: -82.27089

(Decimal Degrees)

Receiving Body of Water: Hillsborough River

RQ-2018- 10-22-61

Sampling Team Members

Judy Ashton

Ben Paswater

Sarah Meyer

WQ Measurements
Sample Collection
Documentation
Preservation
Preservation Check

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# Chewy

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 (PPT)	Sp COND (umhos/cm)	Temp. (C°)
<u>EST</u>	<u>11:30</u>	<u>0.3</u>	<u>0.2</u>	<u>0.35</u>	<u>2.94</u>	<u>35.4</u>	<u>6.81</u>	<u>0.09</u>	<u>193.5</u>	<u>24.6</u>

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

SBIO ID Numbers: SBIO-ID: 79013 HA-ID: 15477 RPS-ID: 9132 Macrophyte-ID: --- LIMS#: 2035571

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☐ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☐ Ice ☐ H2SO4	<u>SA8101020</u>	<u>04/11/19</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☐ W-PO4-F ☐ Field Filtered 0.45 um 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-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☒ Coli ☐ F Coli ☐ Enterococci	☒ Ice			
Molecular	☒ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD	☒ Ice			
Tracers	☒ W-SUC-AA-R ☒ W-UHERB-AA ☒ W-AHERB-AA	☒ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA ☐ W-CARB-AA ☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Field ID/WIN

G2SW0004

Notes:

WBID needs are 2 SCIs and 10 Ecoli+MT

Site Name: Flint Creek @ SR301, TP39

Signature:

Sarah Meyer

Date:

10/23/2018

Enter Field Parameters, Verify Station ID In LIMS DMT: SM 11/6/2018

QC Station ID, Field Parameters In LIMS DMT: SM 12/19/2018

Scan/Save Field Sheets SM 1/8/2019

Migrate Data to WIN: SM 12/19/2018

Verify Data In WIN: SM 1/8/2019



Site Name: Flint Creek @ SR301, TP39

10-23-18.

RQ-2018-10-22-61

FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

County:		Investigators								
Hillsborough		J Ashton, B Paswater, S Meyer								
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			88		5				94
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N			70	1	N			
	2					2				
	3					3				
	4					4				
	5			96		5				92
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N			80	1	N			
	2					2				
	3					3				
	4					4				
	5			88		5				89
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N			90	1	N			
	2					2				
	3					3				
	4					4				
	5			93		5				84
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N			100	1	N			
	2					2				
	3					3				
	4					4				
	5			83		5				96
	6					6				
	7					7				
	8					8				
	9					9				
50	1	N				1	N			
	2					2				
	3					3				
	4					4				
	5			90		5				
	6					6				
	7					7				
	8					8				
	9					9				

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%.

STORET Station Number:
G2SW0004Secchi depth 0.6
Estimated? NO# points ranked 4-6 10
total points assessed 99
% points ranked 4-6 10

Check accompanying data collected at same site/date.

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

RQ-2018-10-22-61

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

Waterbody: FLINT CREEK @ 301	Date: 10-23-18	County: Hills	Store Number:
Analyst: SMITH MALEY	Signature: <i>[Signature]</i>		625W0004
Comments: 5 2m ² RD 2018-10-22-61			

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.

Revision Date: March 1, 2014

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

129-2018-10-22-6 / 10-23-18

SAMPLING AGENCY: <u>SWROC</u>	Field ID/WIN G2SW0004	RECEIVING BODY OF WATER: <u>TAMPA BAY</u>
REMARKS:	COUNTY: <u>Hillsborough</u>	ELD ID/NAME:
Site Name: <u>Flint Creek @ SR301, TP39</u>		

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	<u>5</u> 4 3 2 1
Substrate Availability <u>6</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 <u>6</u>	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>14</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 <u>14</u> 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>12</u> Primary Score <u>37</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 <u>12</u> 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>15</u>	20 19 18 17 16	<u>15</u> 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.	Only meets 2 of the 3 requirements for optimal bank stability.	Only meets 1 of the 3 requirements for optimal bank stability.	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas.
Right Bank <u>9</u> Left Bank <u>9</u>	10 <u>9</u> LR	8 7 6	5 4	3 2 1
Riparian Buffer Zone Width	Width of vegetation greater than 18 m	Width of vegetation >12 to 18m	Width of vegetation 6 to 12 m. human activities close to system	Less than 6 m of buffer zone due to intensive human activities
Right Bank <u>10</u> Left Bank <u>9</u>	R L <u>10</u> <u>9</u>	8 7 6	5 4	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.	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed.	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).
Right Bank <u>9</u> Left Bank <u>9</u> Secondary Score <u>70</u>	R L 10 <u>9</u>	8 7 6	5 4	3 2 1

107 TOTAL SCORE

Date: <u>10/23/18</u>	Analyst: <u>Ben Paswater</u>	Signature: <u>Ben Paswater</u>
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Site Name: Flint Creek @ SR301, TP39

LATITUDE

LONGITUDE

SAMPLING AGENCY

FDEP South RO

SWBOC

SITE NAME see sticker

RECEIVING BODY OF WATER

Tampa Bay

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☒ 90 ☐ Silviculture ☐ Field/Pasture ☐ Agricultural ☒ 5 ☐ Residential ☒ 2 ☐ Commercial ☐ Industry ☒ 3 ☐ 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 10 m wide 0.2 m/s 0.1 m/s 0.2 m/s 0.2 m deep 0.6 m deep 0.2 m deep			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: 28 Right Bank: 18				Hydrologic Modification Score (per FT 3101) 			
High Water Mark: 1 + 0.6 = 1.6 (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># Times Sampled</th> <th>PERI # Times Sampled</th> </tr> </thead> <tbody> <tr> <td>Woody Debris (Snags)</td> <td>10</td> <td>10</td> <td></td> </tr> <tr> <td>Undercut Banks / Roots</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Leaf Packs or Mat</td> <td>few</td> <td>3</td> <td></td> </tr> <tr> <td>Aquatic Vegetation</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rock or Shell Rubble..</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sand.....</td> <td>lots</td> <td>7</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	# Times Sampled	PERI # Times Sampled	Woody Debris (Snags)	10	10		Undercut Banks / Roots				Leaf Packs or Mat	few	3		Aquatic Vegetation				Rock or Shell Rubble..				Sand.....	lots	7		Mud / Muck / Silt				Other				Other				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:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.6</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></td> </tr> </tbody> </table> Meter ID: Chewy TOTAL DEPTH: 0.6			Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top:							0.6	Mid:							☒ VOB	Bottom							
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Periphyton:	☐	☐	☒	☐																																																																									
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Iron/Sulfur Bacteria:	☒	☐	☐	☐																																																																									
AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Sllick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☒ Other (Specify) ☐ Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐																																																																										

SAMPLING TEAM

 Ben Parwater
 Judy Ashton
 Sarah Meyer

SIGNATURE:

Ben Parwater

DATE:

10-23-18

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

L

RQ. 2018-10-23-18

R

100

Sl.
%
Armor

90

Sl.
%
Armor

80

Sl.
%
Armor

70

Sl.
%
Armor

60

Sl.
%
Armor

50

Sl.
%
Armor

40

Sl.
%
Armor

30

Sl.
%
Armor

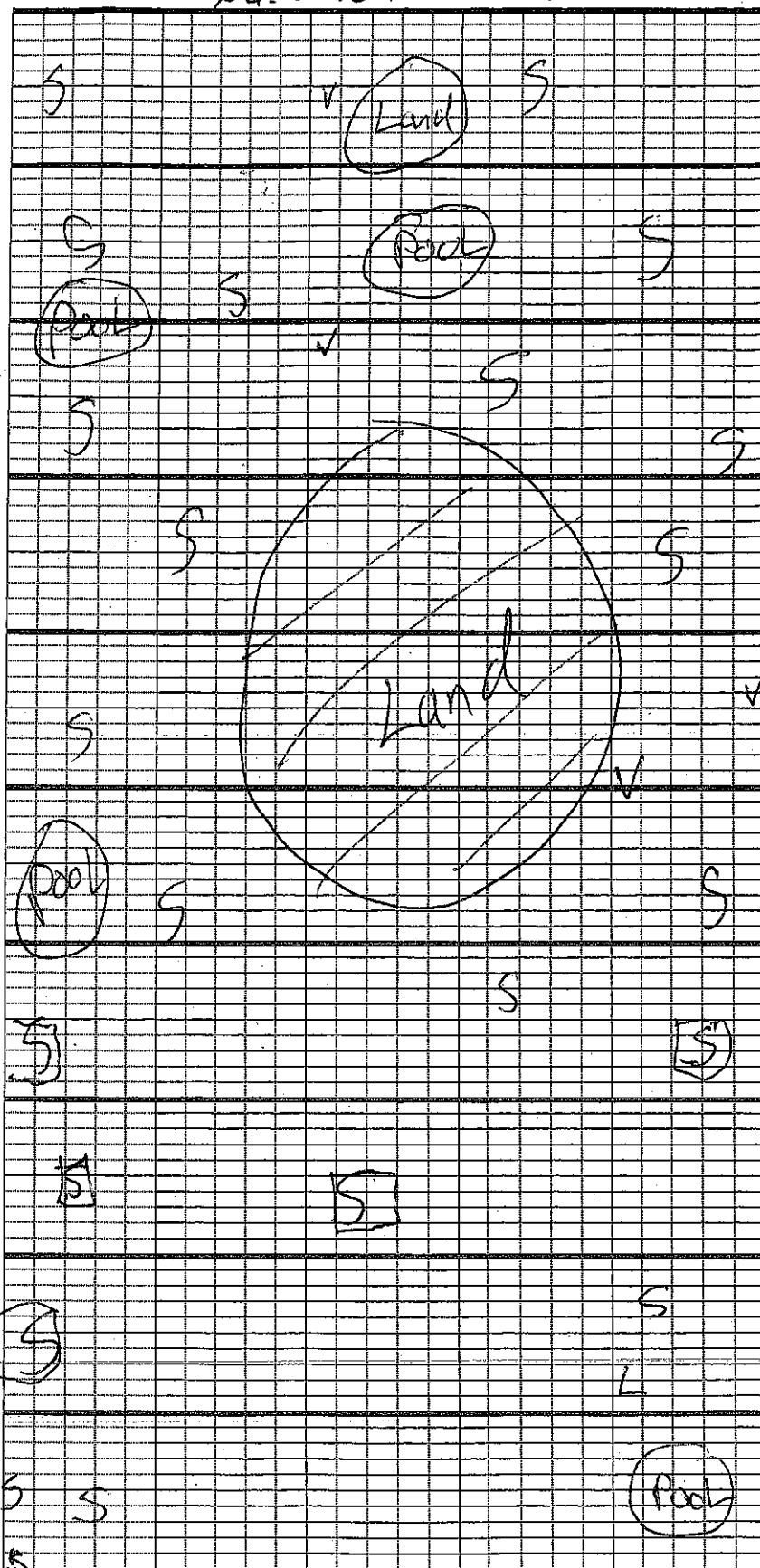
20

Sl.
%
Armor

10

Sl.
%
Armor

0



Downstream

Field IDWIN

Location:

Date: 10-23-18

Samplers: J. B. H. H. H.

B. M. M. M.

S. M. M. M.

Substrates: Code key, draw
proportionate habitat abundance. .%

☐ Snags 0.4

☐ Roots/undercut banks few

☐ Leaf Packs (or mats) few

☒ Macrophytes few

☐

☐

Total observed 4

☒ Pools Range expected 1

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.

1 sec per 1 m	1m/s	sec	m/s
2	0.5	12	0.08
3	0.33	13	0.076
4	0.25	14	0.071
5	0.2	15	0.066
6	0.16	16	0.062
7	0.14	17	0.058
8	0.12	18	0.055
9	0.11	19	0.052
10	0.1	20	0.052
11	0.09	21	0.047
22	0.045	NO	FLOW

G2SW0004



Site Name: Flint Creek @ SR301, TP39

Flint Creek-SCI

last revised Jan 25, 2018

Central Laboratory Submittal Form

Customer: SW-DIST

Requester: Judy Ashton

Field Report Prepared By: S Meyer

Project ID: SMP

Collected By: J Ashton, B Paswater, S Meyer

Sampling Agency: FDEP SW ROC

Location		☐ Comp ☒ Grab		Collection (comp begin or grab) Date 10/23/2018 Time 11:30		Eastern Central		Composite end Date _____ Time _____		Bottle Group(s) (See pg 2)	
Field ID/WIN G2SW0004		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen 2.94		☒ mg/L ☐ % sat		Total Res. Chlorine (mg/L)		AB	
Site Name: Flint Creek @ SR301, TP39		Temp (C) 24.6		pH 6.81		Sample Depth 0.2		Sp. Conductance (umho/cm) 193.5			
Lat _____ _____ dms		Salinity (ppt) 0.09		Comments							
Location		☐ Comp ☒ Grab		Collection (comp begin or grab) Date 10/23/18 Time 9:16		Eastern Central		Composite end Date _____ Time _____		Bottle Group(s)	
Field ID/WIN G2SW0012		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen 3.55		☒ mg/L ☐ % sat		Total Res. Chlorine (mg/L)		C SM	
Site Name: Baker Creek @ Thonotosassa Rd		Temp (C) 23.2		pH 6.26		Sample Depth 0.3		Sp. Conductance (umho/cm) 150.7			
Latitude _____ _____ 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		Sp. Conductance (umho/cm)			
Latitude _____ _____ dms		Longitude _____ _____ 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		Sp. Conductance (umho/cm)			
Latitude _____ _____ dms		Longitude _____ _____ dms		Salinity (ppt)		Comments					

Relinquished By: Sarah Meyer	Date/Time 10/23/2018 1700	Shipping Method FedEx	Number of Coolers Shipped: 1	Received By:	Date/Time
---------------------------------	------------------------------	--------------------------	---------------------------------	--------------	-----------

Group: A	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-SO4-IC						
	W-TDS						
	W-TSS						
Group: A	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						
					H2SO4 LOT# SA8101020 EXP: 04/11/2019		
Group: A	Bottle Type:	P-125ML	# of Bottles: 1	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
	W-PO4-F						
Group: B	Bottle Type:	PJ-2L	# of Bottles: 2	Preservative:	Formalin	Enter Number of Bottles Sent to Lab	1
	MI-FW-QLDC						

Group C 5MB-AEL-EC 120ML-W-NH3

BOTTLES SENT 1

Group C PCR-FILTER 2PCR-P-SWANE

BOTTLES SENT 2

Group C W-E8321-D1 B6-500ML
W-E8321-MS

BOTTLES SENT 1