



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

February 2016

PAGE ____ OF ____

Data Qualified?
Yes / No

STORET Station Name: Pimple Creek @ Julia St.

Date: 04/06/2016
(mm/dd/yyyy)

STORET Station ID: G1TLHRO011

Latitude: 30.12395
(Decimal Degrees)

WBID: 3514 RQ - 2016-03-14-56 ORG ID: 21FLTHR

Longitude: -83.58981
(Decimal Degrees)

Receiving Body of Water: Spring Creek

Field ID: G1TLHRO011

County: Taylor

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Chris Green									
Colby Marshall									

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Equipment ID		

Collection Method	
☒ Wading	☐ Via Boat
☐ From Shore	☐ Canoe/Kayak
☐ Other (note below)	☐ Electric Motor
	☐ Gasoline Motor

Water Level: Dry / Low / Normal / <u>High</u> / Flooded						Matrix: <u>Fresh</u> / Marine / DI					
Meter ID# <u>12 YSI 600 XLM</u>				Photos: <u>Yes</u> / No		Tide Falling: Yes / No / <u>NA</u>					
Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)	
<u>EST</u>	<u>10:30</u>	<u>0.3</u>	<u>0.7</u>	<u>5.3</u>	<u>56</u>	<u>6.0</u>		<u>0.4</u>	<u>62</u>	<u>17.8</u>	
CEN											

Biological Samples Collected:		None	<u>HA</u>	<u>SCI</u>	<u>LVS</u>	<u>RPS</u>	LVI	Other
Parameter Suite	Parameter Methods		Preservation		Acid Lot#	Expiration	pH Check	
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP		☒ Ice	☒ H2SO4	<u>SA-5259020</u>	<u>9/16</u>	☒ <2	
Metals	☐ W-ICPMS ☐ W-ICP		☐ Ice	☐ HNO3			☐ <2	
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter		☒ Ice		Place Preservative Sticker(s) Here (If Available)			
Chlorophyll	☒ CHLSUITE-W		☒ Ice					
BOD	☒ BOD-UNIN		☒ Ice					
Physical/Aggregate (Kit A/C)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-IC / W-COLOR / W-SO4-IC / W-TDS		☒ Ice					
Physical/Aggregate (Kit B/D)	☐ Alkalinity / W-F / W-TSS / TURBIDITY		☐ Ice					
Macroinvertebrates	☒ MI-FW-QLDC		☒ Formalin					
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococcus ☐ QPCR		☐ Ice					
Periphyton	☐ ALGAE-ID		☐ Ice					
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH		☐ Ice ☐ Other					

Notes: <u>SCI-10:55</u>	Place Label Here (If Available)
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Signature: <u>Ch. J.</u>	Date: <u>4/6/2016</u>
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Field Parameters Entered into LIMS: cm 6/13/16
(Initials/Date)

Field Parameters QC in LIMS: PB 6-20-16
(Initials/Date)

Date Migrated to STORET: cm 7/1/16
(Initials/Date)

Field Sheets Scanned/Saved: CB 7-21-16
(Initials/Date)

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

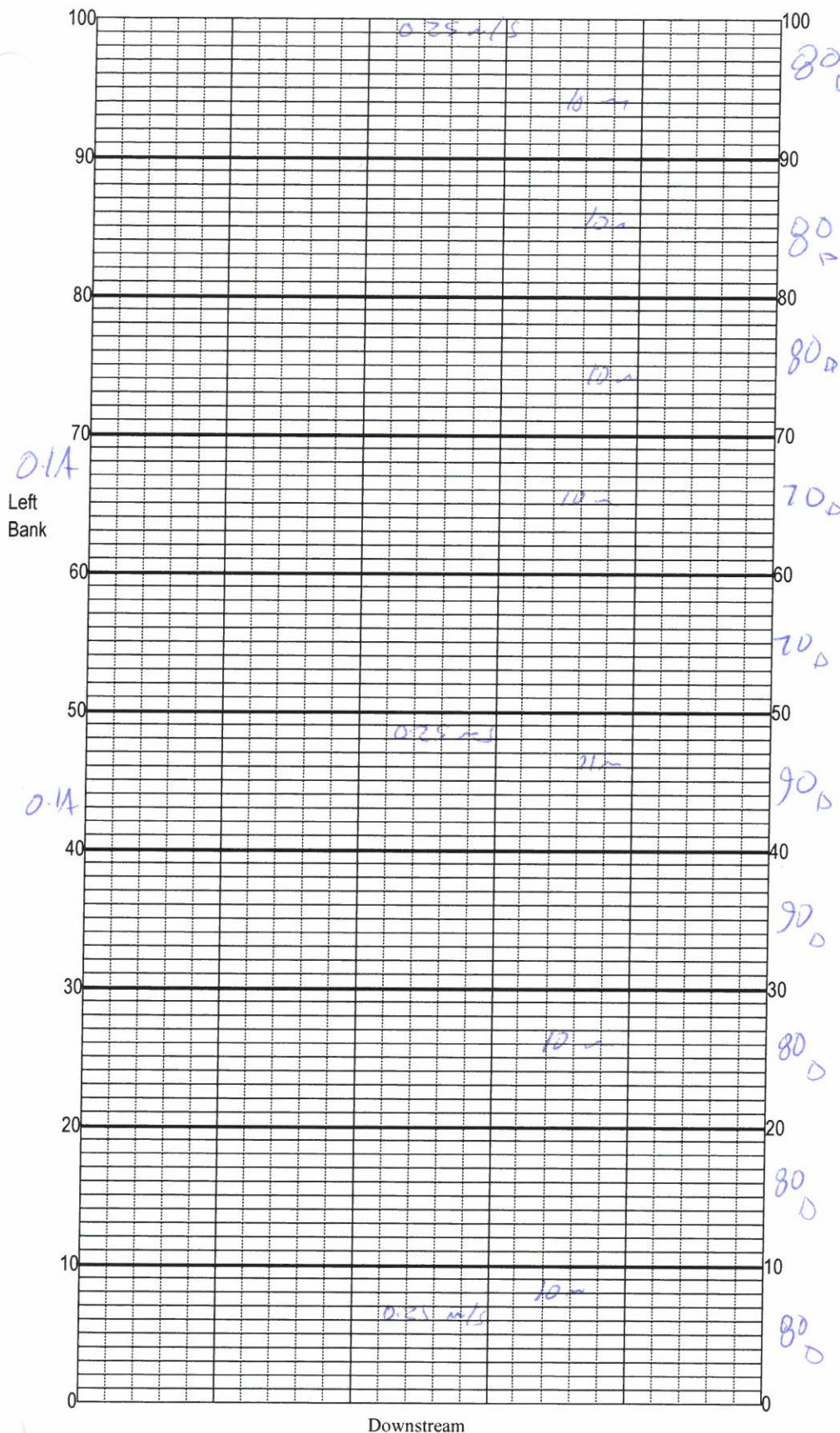
SAMPLING AGENCY: <u>8034</u>		STORET STATION NUMBER: <u>GITLH20011</u>	DATE (MM/DD/YY): <u>04/06/16</u>	RECEIVING BODY OF WATER: <u>Spring Creek</u>
REMARKS:	COUNTY: <u>Taylor</u>	LOCATION: <u>Pimple Creek</u>	FIELD ID/NAME: <u>GITLH20011</u>	

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>20</u>	Greater than 30% major productive habitat present at site <u>20</u> 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>16</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 <u>16</u>	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>13</u> ----- Primary Score <u>54</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 <u>13</u> 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). <u>10</u> 9 8 <u>7</u> 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>7</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 <u>7</u> 6	5 4 3 2 1
Bank Stability Right Bank <u>8</u> Left Bank <u>8</u>	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. 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 <u>2</u> Left Bank <u>2</u>	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 <u>2</u> 1
Riparian Zone Vegetation Quality Right Bank <u>5</u> Left Bank <u>5</u> ----- Secondary Score <u>37</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 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

91 TOTAL SCORE

Date: <u>4/6/16</u>	Analyst: <u>Chris Green/Kelby Marshall</u>	Signature: <u>CKS</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: Purple Creek @ Julia
 Date: 4/6/16
 Sampler: Green / Marshall

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

Substrates: Code key, draw proportionate habitat abundance. %

☒ A Snags 0.02
☒ B Roots/undercut banks _____
☒ C Leaf Packs (or mats) _____
☒ D Aquatic Macrophytes _____

 Pools total # observed = _____
 # range expected = _____

Average width 10 m
 Average depth 0.6 m

Velocity measured at 50 meter mark.

WQ & chemistry taken at 0 meter mark.

Habitat Smothering: none
 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: 2m
 Note areas (on map) where natural vegetation is altered or eliminated. 2m

Plants observed / other notes:

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

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

SAMPLE ID _____ ORG ID 21FLTLR LATITUDE 30.12395
 COUNTY Taylor STORET # GITLH20011 LONGITUDE -83.58981
 ATE 4/6/16 TIME 10:55 SAMPLING AGENCY 8034
 TE NAME Pimple Creek
 FIELD ID/NAME GITLH20011 RECEIVING BODY OF WATER Spring Creek

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) ☐ <u>5</u> <u>5</u> <u>10</u> <u>70080</u>							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>10</u> m wide <u>0.25</u> m/s <u>0.3</u> m/s <u>0.2</u> m/s <u>0.6</u> m deep <u>0.7</u> m deep <u>0.3</u> m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>2m</u> Right Bank: <u>2m</u>				Hydrologic Modification Score (per FT 3101) ☐			
High Water Mark: <u>0.1</u> + <u>0.7</u> = <u>0.8</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No			
Artificially Channelized: ☐ No ☒ Some recovery ☐ Mostly recovered, more sinuous ☐ 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 % Coverage INVERT # Times Sampled PERI # Times Sampled Woody Debris (Snags) <u>51</u> <u>0</u> Undercut Banks / Roots <u>80</u> <u>10</u> Leaf Packs or Mat <u>70</u> <u>10</u> Aquatic Vegetation <u>80</u> <u>10</u> Rock or Shell Rubble <u>70</u> <u>10</u> Sand <u>70</u> <u>10</u> Mud / Muck / Silt <u>70</u> <u>10</u> Other <u>70</u> <u>10</u> Other <u>70</u> <u>10</u>			WATER QUALITY Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: <u>0.3</u> <u>17.8</u> <u>6.0</u> <u>5.3</u> <u>56</u> <u>62</u> <u>0.3</u> Mid: <u>0.3</u> <u>17.8</u> <u>6.0</u> <u>5.3</u> <u>56</u> <u>62</u> <u>0.3</u> Bottom: <u>0.3</u> <u>17.8</u> <u>6.0</u> <u>5.3</u> <u>56</u> <u>62</u> <u>0.3</u> Meter ID: <u>600 XLM #12</u>		
Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ 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

Chris Green / Colby Marshall

SIGNATURE:

CLG

DATE:

4/6/2016

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: GTLAR0011 County: Taylor Date: 4/6/16 Investigators: Green / Marshall

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			91		5			91	
	6					6				
	7					7				
	8					8				
	9					9				
10	1				70	1				
	2					2				
	3					3				
	4					4				
	5			93		5			94	
	6					6				
	7					7				
	8					8				
	9					9				
20	1				80	1				
	2					2				
	3					3				
	4					4				
	5			91		5			91	
	6					6				
	7					7				
	8					8				
	9					9				
30	1				90	1				
	2					2				
	3					3				
	4					4				
	5			98		5			93	
	6					6				
	7					7				
	8					8				
	9					9				
40	1				100	1				
	2					2				
	3					3				
	4					4				
	5			96		5			91	
	6					6				
	7					7				
	8					8				
	9					9				
50	1					1				
	2					2				
	3					3				
	4					4				
	5			94		5				
	6					6				
	7					7				
	8					8				
	9					9				

STORET Station Number:

Secchi depth 0.4
 Estimated? 0.4

points ranked 4-6 0
 total points assessed
 % points ranked 4-6

Check accompanying data collected at same site/date.
 Algal mat sample
 Linear Veg Survey
 Habitat Assessment
 SCI/Biorecon
 Water sample
 RQ-2016-03-14-56

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%.

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Waterbody: Pimple Creek	Date: 4-6-16	County: Taylor	Storet Number: GIT4H2001
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Analyst: Green/ncashall Signature: [Signature]

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.

[illegible]