



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes No

WIN Station Name: Possum Creek downstream of culvert under NW 16th Ave Date: 4/15/2018
WIN/ Field ID: G1NE0900 WBID: 2696 Latitude: 29.6663
County: Alachua ORG ID: 21FLA Longitude: 82.36416
Receiving Body of Water: Hogtown Creek RQ-2018- 04-02-55

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
P.O'Connor						X	X	X	X
A. Kalmbacher					X	X	X		

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Depth Measured with <u>YSI #2</u>		
Equipment ID <u>ORTHO</u>		

Collection Method		
☒ Wading	☐ Canoe/Kayak	
☐ From Shore	☐ Electric Motor	
☐ Other	☐ Gasoline Motor	

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded Meter ID# YSI #3 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 (µmhos/cm)	Temp. (C°)
EST	1140	0.2	0.1	0.25	10.0	105.0	7.9	0.12	261	17.6
CEN										

Biological Samples Collected: None HA SCI RPS Algae ID LVS 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 ☒ H2SO4	SA7341020	12/07/18	☒ <2
Metals	☒ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice	R7EAL251		
Chlorophyll	☒ CHLSUITE-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-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☒ E Coll ☐ F Coll ☐ 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			

Notes: Alachua county ~~Personnel~~ to collect SCI? WIN / FIELD ID G1NE0900
Possum Cr. Downstream of Culvert under NW 16th Ave

Signature: [Signature] Date: 4/9/18

Enter Field Parameters, Verify Station ID in LIMS DMT: 2146118 QC Station ID, Field Parameters in LIMS DMT: ED 4/9/18

Scan/Save Field Sheets BD 4/9/18 Migrate Data to WIN: [Initials/Date] Verify Data in WIN: [Initials/Date]



	Altamonte Springs: 380 Northlake Blvd., Suite 1048 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597
✓	Gainesville: 4965 SW 41st Blvd. • Gainesville, FL 32608 • 352.377.2349 • Fax 352.395.6639
	Jacksonville: 6881 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.363.9350 • Fax 904.363.9354
	Miramar: 10200 SW Today Way • Miramar, FL 33025 • 954.889.2288 • Fax 954.889.2281
	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

[illegible]

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

SAMPLE ID _____ ORG ID 21FLA LATITUDE _____
 COUNTY Alachua STORET # GINE0900 LONGITUDE _____
 DATE 04-05-18 TIME 1140 SAMPLING AGENCY DEAR NED RQ
 SITE NAME OPPOSSUM Creek Downstream of Culvert UNDER NW 16th AVE
 FIELD ID/NAME GINE0900 RECEIVING BODY OF WATER _____

RIPARIAN ZONE / STREAM FEATURES

Meter ID: YSI #3

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>10</u> Silviculture _____ Field/Pasture _____ Agricultural <u>75</u> Residential <u>15</u> Commercial _____ Industry _____ Other (Specify) <u>Past</u>						Landscape Development Intensity Index (LDI) _____	
Local Watershed Erosion (select one): ☐ None ☐ Slight ☒ Moderate ☐ Heavy						Typical Width (m) Depth (m)/Velocity (m/sec) Transect <u>4.5</u> m wide	
Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy						_____ m/s <u>0.3</u> m/s _____ m/s	
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>10</u> Right Bank: <u>218</u>				Hydrologic Modification Score (per FT 3101) _____		_____ m deep _____ m deep _____ m deep	
High Water Mark: <u>1.5</u> + <u>0.2</u> = <u>1.7</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☐ No		Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%) ☒ Heavily Shaded ☐ Moderate Shaded (46-80%)	
Artificially ☐ No ☐ Mostly recovered, more sinuous Channelized: ☒ Some recovery ☐ Recent, severe							

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 ☐
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SUBSTRATE TYPE Assessment Tool: ☐ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon				WATER QUALITY							
				Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Woody Debris (Snags)	<u>1.5</u>	<u>5</u>		Top:							<u>0.25</u>
Undercut Banks / Roots	<u>0.5</u>	<u>5</u>		Mid:	<u>0.1</u>	<u>9.6</u>	<u>7.9</u>	<u>10.0</u>	<u>105</u>	<u>261</u>	<u>0.12</u>
Leaf Packs or Mat	<u>2.0</u>	<u>5</u>		Bottom:							<u>0.2</u>
Aquatic Vegetation				System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) _____							
Rock or Shell Rubble	<u>21</u>	<u>2</u>		Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐				Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐			
Sand	<u>95</u>	<u>3</u>		Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☐ Yes ☐ No Lot Number: <u>SA7341020</u> Exp: <u>12-07-18</u>				Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) _____			
Mud / Muck / Silt				Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____				Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐			
Other											

ABUNDANCE	Not Obs.	Rare	Common	Abundant
Periphyton:	☐	☒	☐	☐
Fish:	☐	☒	☐	☐
Aquatic Plants:	☒	☐	☐	☐
Iron/Sulfur Bacteria:	☐	☒	☐	☐

AMBIENT FIELD CONDITIONS / NOTES:

RQ-2018-04-02-55

Hydrologic Disturbance Scoring ☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ 7-8 ☐ 9-10

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

SAMPLING TEAM

A. Kalmbacher, P. O'Connor

SIGNATURE:

Pakulian

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Poossum Creek Down Stream of Culvert under N.W. 16th Ave County: Alachua Date: 04-05-18 Investigators: A. KA/mbador, PO'Connor

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			96		5			80	
	6					6				
	7					7				
	8					8				
	9					9				
10	1	X			70	1	X			
	2					2				
	3					3				
	4					4				
	5			96		5			75	
	6					6				
	7					7				
	8					8				
	9					9				
20	1	X			80	1	X			
	2					2	X			
	3					3	X			
	4					4	X			
	5			96		5			80	
	6					6				
	7					7				
	8					8				
	9					9				
30	1	X			90	1	N			
	2					2				
	3					3				
	4					4				
	5			96		5			96	
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N			100	1	N			
	2					2				
	3					3				
	4					4				
	5			96		5			60	
	6					6				
	7					7				
	8					8				
	9					9				
50	1	N				1	N			
	2					2				
	3					3				
	4					4				
	5			88		5				
	6					6				
	7					7				
	8					8				
	9					9				

STORET Station Number: GINE0900

Secchi depth 0.25
Estimated?

points ranked 4-6 1
total points assessed 99
% points ranked 4-6 1

Check accompanying data collected at same site/date:
Algal mat sample
Linear Veg Survey ✓
Habitat Assessment ✓
SCI/Biorecon
Water sample ✓
RQ-2018-04-02 55

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 9000-5 Stream/River Habitat Assessment Field Sheet

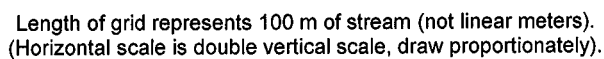
SAMPLING AGENCY: NE ROC		STORET STATION NUMBER: <u>G1NE0900</u>	DATE (MM/DD/YY): <u>04-05-18</u>	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: <u>Alachua</u>	LOCATION: <u>Dossun Creek down stream of culvert under NW 16th Ave</u>		FIELD ID/NAME: <u>G1NE0900</u>

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>13</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>4</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 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 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>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 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 <u>14</u>	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 <u>7</u> Left Bank <u>7</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>6</u> Left Bank <u>10</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 2 1
Riparian Zone Vegetation Quality Right Bank <u>10</u> Left Bank <u>8</u> Secondary Score <u>59</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

104 TOTAL SCORE

Date: <u>4-5-2018</u>	Analyst: <u>Kelbacher</u>	Signature: <u>[Signature]</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



<2 M of Macrophytes was observed while doing the LVS? YES or NO

OPPOSUM Creek DOWN stream

Analyst: PO'Connor	Signature: Patrick O'Connor
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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.

NO
AQUATIC
PLANTS

Gville Biology

Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: ME-DIST

Project 3, SMP

Requester: Jeremy M. Parrish

Field Report Prepared By:

Collected By:

Sampling Agency:

WIN / FIELD ID		Collection (comp begin or grab)		Eastern		Composite end		Bottle Groups(s) (See pg 2)
		Date		Central		Date		
Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		☐ mg/L		Total Res. Chlorine		
				☐ % sat		(mg/L)		
Temp (C)		pH		Sample Depth		☐ ft		
						☐ m		
Salinity (ppt)		Comments		No Sample Collected				
☐ dd								
☐ dms								
Latitude		Longitude						
WIN ID:		Collection (comp begin or grab)		Eastern		Composite end		Bottle Groups(s)
		Date		Central		Date		
Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		☐ mg/L		Total Res. Chlorine		
				☐ % sat		(mg/L)		
Temp (C)		pH		Sample Depth		☐ ft		
						☐ m		
Salinity (ppt)		Comments		No Sample Collected				
☐ dd								
☐ dms								
Latitude		Longitude						
WIN / FIELD ID		Collection (comp begin or grab)		Eastern		Composite end		Bottle Groups(s)
		Date		Central		Date		
Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		☒ mg/L		Total Res. Chlorine		A
				☐ % sat		(mg/L)		
Temp (C)		pH		Sample Depth		☐ ft		
						☒ m		
Salinity (ppt)		Comments		DO% 105.0				
☐ dd								
☐ dms								
Latitude		Longitude						
WIN / FIELD ID		Collection (comp begin or grab)		Eastern		Composite end		Bottle Groups(s)
		Date		Central		Date		
Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		☒ mg/L		Total Res. Chlorine		B
				☐ % sat		(mg/L)		
Temp (C)		pH		Sample Depth		☐ ft		
						☒ m		
Salinity (ppt)		Comments		DO% 92				
☐ dd								
☐ dms								
Latitude		Longitude						

Possum Cr. Downstream of Culvert
under NW 16th Ave

Turkey Creek @ NW59th

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
J. O'Connor	04-05-18 1530	Fed Ex	1		

Group: A	Bottle Type: ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS	P-1L	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: CHLSUITE-W	BP-1L	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: NED-AEG-EC	P-120ML-WC-THI	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: PCR-FILTER	QPCR-P-500ML	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: W-E8321-DI W-E8321-MS	BG-500ML	# of Bottles: 3	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC	P-500ML	# of Bottles: 3	Preservative: ICE And H2SO4	ICE	Enter Number of Bottles Sent to Lab	1
Group: A	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 3	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: NED-AEG-EC	P-120ML-WC-THI	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1 to HEC CHARLESVILLE
Group: B	Bottle Type: PCR-FILTER	QPCR-P-500ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
Group: B	Bottle Type: W-E8321-DI	BG-500ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1