

RQ#: 2016-06-30-16 EventID# _____

Sampling Date: 6/30/16 Sampling Crew: Judy Ashman, Carrie Orr
EALAN GUERONENJUELA

Site(s)/STORET #: 24020134

Fish Hawk Creek Ref SCI

STORET /LIMS:

Sonde: Pass failed CCV
Parameter(s): _____

- ☐ 1. Spread Sheet (LIMS Input) _____ / _____
Initials Date
- ☐ 2. QC 1 _____ / _____ ☐ 3. QC 2 _____ / _____
Initials Date Initials Date
- ☐ 4. SIM File Generated _____ / _____
Initials Date
- ☐ 5. STORET Upload _____ / _____
Initials Date

Biology:

SBIO ID# _____
VPDB ID# _____

- ☐ 6. Site and Event established in SBio?
- ☐ 7. Habitat Data and YSI Entered Into SBIO _____ / _____
Initials Date
- ☐ 8. Habitat Data and YSI QC _____ / _____
Initials Date
- ☐ 9. SBio data marked complete _____ / _____
Initials Date
- ☐ 10. Macrophyte Data Entered into VPDB _____ / _____
Initials Date
- ☐ 12. Field Paperwork Filed In Biology Lab _____ / _____
Initials Date
- ☐ 13. Macrophyte Data QC _____ / _____ 11. Macrophyte Data Marked Complete _____ / _____



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

A-KIT

PAGE 1 OF 1

February 2015

Data Qualified?
Yes / No

STORET Station Name: FISH HAWK CREEK REP STREAM

Date:

(mm/dd/yyyy)

STORET Station ID: 24020134 TP31

Latitude: 27.8228N

(Decimal Degrees)

WBID: 1658 RQ - 2016-06-27-44 ORG ID: 21FLTPA

Longitude: 82.2033W

(Decimal Degrees)

Receiving Body of Water:

Field ID: 24020134

County: HILLS

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
JUDY ASHTON					X				
CATE ORR							X		
EDGAR GUERRONQUEJUELA						X	X	X	

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 / <u>Normal</u> / High / Flooded	Matrix: <u>Fresh</u> / Marine / DI
Meter ID# <u>ULSON</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°)
EST	12:00	0.2	0.2	6.5	79	7.0	0.09	0.2	197	25.4
CEN		"5"						"5"		

Biological Samples Collected: None HA SCI LVS RPS 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 ☒ H ₂ SO ₄			☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO ₃			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
BOD	☐ BOD-UNIN	☐ Ice			
Physical/Aggregate (Kit A)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Kit B)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-PW-QLDC	☐ Formalin			
Microbiology	☐ E Coli ☐ F Coli ☐ Entero ☐ 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			

Flow m/s: 0.25 "J" Qualify Flow

Notes:	RQ-2016-06-27-44 Date: 06/30/16 Time:	TP31 24020134
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Signature: Judy Ashton Date: 6-30-16

Field Parameters Entered into LIMS: _____ (Initials/Date) Field Parameters QC in LIMS: _____ (Initials/Date)
Date Migrated to STORET: _____ (Initials/Date) Field Sheets Scanned/Saved: _____ (Initials/Date)

DEP-SOP-001/01: Form FD 9000-3 (9/19/12)
PHYSICAL/CHEMICAL CHARACTERIZATION FIELD SHEET

SAMPLE ID _____ ORG ID 21FLTPA LATITUDE _____
 COUNTY HILLS. STORET # 24020134 LONGITUDE _____
 DATE 6-30-16 TIME _____ SAMPLING AGENCY FDEP
 SITE NAME FISH HAWK CRK. REL. STREAM
 FIELD ID/NAME TP31 RECEIVING BODY OF WATER _____

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>100</u> Silviculture _____ Field/Pasture _____ 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>3.0</u> <u>2</u> <u>0.25</u> m wide _____ m/s _____ m/s _____ m/s _____ m deep <u>0.2</u> m deep _____ m deep			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>718m</u> Right Bank: <u>718m</u>		Hydrologic Modification Score (per FT 3101) <u>1</u>					
High Water Mark: <u>1.2</u> + <u>0.2</u> = <u>1.4</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 ☐
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SUBSTRATE TYPE

Assessment Tool: ☒ SCI ☒ RPS ☒ LVS

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	<u>3</u>	<u>7</u>	
Undercut Banks / Roots	<u>2</u>	<u>7</u>	
Leaf Packs or Mat		<u>2</u>	
Aquatic Vegetation			
Rock or Shell Rubble..			
Sand.....		<u>4</u>	
Mud / Muck / Silt			
Other			
Other			

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top:	<u>0.1</u>	<u>25.4</u>	<u>7.0</u>	<u>6.5</u>	<u>79</u>	<u>197</u>	<u>0.09</u>	<u>0.2</u>
Mid:								☒ VOB
Bottom:								
Meter ID:	<u>Lil Jon</u>							<u>0.2</u>

Water Odors Normal ☒ Petroleum ☐
 Sewage ☐ Chemical ☐ Other ☐

Water Sample Taken? ☒ Yes ☐ No
 Sample Preserved? ☒ Yes ☐ No
 Lot Number: _____ Exp: _____

Algae Sample Taken? ☐ Yes ☒ No
 Sample Preserved? ☐ Yes ☐ No
 Lot Number: _____ Exp: _____

Water Surface Oils Normal ☒ Sheen ☐
 Globbs ☐ Slick ☐ Other ☐

Color Tannic ☒ Green (Algae) ☐
 Clear ☐ Other (Specify) ☐

Clarity Clear ☒ Slightly Turbid ☐
 Turbid ☐ Opaque ☐

ABUNDANCE

	Absent	Rare	Common	Abundant
Periphyton:	☐	☒	☐	☐
Fish:	☐	☐	☒	☐
Aquatic Plants:	☐	☒	☐	☐
Iron/Sulfur Bacteria:	☒	☐	☐	☐

System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐

WEATHER CONDITIONS / NOTES:

600m

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

SAMPLING TEAM

Andy Boston, CAPEDM, EOWR

SIGNATURE:

July E

DATE:

6-30-16

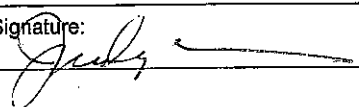
DEP Form FD 9000-5 Stream/River Habitat Assessment Field Sheet

SAMPLING AGENCY: <u>FSCA</u>		STORET STATION NUMBER: <u>24020134</u>	DATE (MM/DD/YY): <u>6-30-16</u>	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: <u>HILLS.</u>	LOCATION:	FIELD ID/NAME: <u>TP31</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>10</u>	20 19 18 17 16	15 14 13 12 11	<u>10</u> 9 8 7 6	5 4 3 2 1
Substrate Availability <u>5</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 <u>5</u> 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 <u>15</u> 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>15</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. <u>15</u> 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	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>20</u>	<u>20</u> 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability Right Bank <u>5</u> <u>5</u> Left Bank	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. <u>5</u> 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>10</u> Left Bank <u>10</u>	Width of vegetation greater than 18 m <u>10</u> 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>9</u> Secondary Score <u>69</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. <u>10</u> <u>9</u>	>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

TOTAL SCORE

114

Date: <u>06/30/16</u>	Analyst: <u>L. Grewen-Orjuela, Judy Ashton, Cathie Orr</u>	Signature: 
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DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>FISH HAWK CREEK REF. SITE</u>					County: <u>HILLS</u>		Date: <u>6-30-16</u>		Investigators: <u>JUDY ASHTON</u>	
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	STORET Station Number: <u>24020134</u>
0	1	N			60	1	N			Secchi depth <u>0.2</u> Estimated? <u>No</u>
	2					2				
	3					3				
	4					4				
	5			96		5			94	
	6					6				
	7					7				
	8					8				
	9					9				
10	1				70	1				# points ranked 4-6 <u>0</u> total points assessed <u>99</u> % points ranked 4-6 <u>0</u>
	2					2				
	3					3				
	4					4				
	5			92		5			90	
	6					6				
	7					7				
	8					8				
	9					9				
20	1				80	1				Check accompanying data collected at same site/date: Algal mat sample ☐ Linear Veg Survey ☒ Habitat Assessment ☒ SC/Biorecon ☒ Water sample ☒ RQ- <u>2016-06-27-44</u>
	2					2				
	3					3				
	4					4				
	5			96		5			96	
	6					6				
	7					7				
	8					8				
	9					9				
30	1				90	1				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
	2					2				
	3					3				
	4					4				
	5			96		5			94	
	6					6				
	7					7				
	8					8				
	9					9				
40	1				100	1				*If you can see the Secchi on the bottom, but you cannot see or reach surrounding substrate use "X" and check estimated
	2					2				
	3					3				
	4					4				
	5			96		5			96	
	6					6				
	7					7				
	8					8				
	9					9				
50	1					1				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%.
	2					2				
	3					3				
	4					4				
	5			96		5				
	6					6				
	7					7				
	8					8				
	9					9				



**Advanced
Environmental Laboratories, Inc.**

8801 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.363.9330 • Fax 904.363.9354 • E82574
9610 Princess Palm Ave. • Tampa, FL 33619 • 813.930.8916 • Fax 813.930.4327 • E84549
2106 NW 67th Place, Ste. 7 • Gainesville, FL 32606 • 352.387.1500 • Fax 352.367.0050 • E88262
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revised 1/12

FedEx Package
Express **US Airbill**

FedEx
Tracking
Number

8085 0983 0421

1 From Please print and press hard

Date 06/30/16 Sender's FedEx
Account Number

Sender's
Name

FDEX

Phone

(813) 478-5770

Company

Address

13051 N Telecom Pkwy

City

Tempe Terrace

State

FL

ZIP

33637

Dept./Floor/Suite/Room

2 Your Internal Billing Reference

First 24 characters will appear on invoice.

3 To

Recipient's Name

SAMPLE RECEIVING

Phone

(850) 245-8085

Company

FLORIDA DEP/CHEMISTRY SECTION

Address

2600 BLAIRSTONE RD

We cannot deliver to P.O. boxes or R.D. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City

TALLAHASSEE

State

FL

ZIP

32399-6542

0119899133



Ship it. Track it. Pay for it. All online.
Go to fedex.com

Form
ID No.

0215

4 Express Package Service

*To most locations.

NOTE: Service order has changed. Please select carefully.

Next Business Day

☐ FedEx First Overnight

Earliest business morning delivery to select
locations. Monday through Friday. Delivery
is selected.

☒ FedEx Priority Overnight

Second business morning. Heavy packages will be
delivered the following morning. Saturday delivery
is selected.

☐ FedEx Standard Overnight

Third business morning. Saturday delivery NOT available.

☐ FedEx Express Saver

Third business morning. Saturday delivery NOT available.

5 Packaging

*Declared value limit \$500.

☐ FedEx Envelope*

☐ FedEx Pak*

☐ FedEx Box

☐ FedEx Tube

☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery

NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required

Package may be left without obtaining a signature for delivery.

☐ Direct Signature

Someone at recipient's address may sign for delivery. Fee applies.

☐ Indirect Signature

No one is available at recipient's address. FedEx will attempt to deliver to alternate address or return to sender. Fee applies.

Does this shipment contain dangerous goods?

☒ No ☐ Yes

One box must be checked.

☐ As per attached Shipper's Declaration.

☐ Shipper's Declaration not required.

☐ Dry Ice

By FedEx UN 1845

☐ Cargo Aircraft Only

7 Payment Bill to:

Sender's Account

☒ Recipient

☐ Third Party

☐ Credit Card

☐ Cash/Check

FedEx Account No. 4490-2262-09

For Code

Total Packages Total Weight Total Declared Value

1 5.0 lbs. \$

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Request Number: RQ-2016-06-20-41

1329F WITHREF SCI

Florida Department of Environmental Protection

Central Laboratory Submittal Form

Page 1 of 2

last revised Apr 7, 2016

Customer: SW-DIST

Project ID: SCIREF

Requester: Judy Ashton

Field Report Prepared By: Judy Ashton

Collected By: Judy Ashton

Sampling Agency: FDEP

Location <i>FISH HAWK CREEK RET. SPILLWAY</i>		Comp ☒ Grab		Collection (comp begin or grab) Date <i>6-30-16</i> Time <i>12:00</i>		Composite end Date <i>6-30-16</i> Time <i>12:00</i>		Bottle Group(s) (See pg 2) <i>A/B</i>	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen <i>6.5</i>		☒ mg/L ☒ % sat		Total Res. Chlorine	
STORET #		Temp (C) <i>25.4</i>		pH <i>7.0</i>		Sample Depth <i>0.3</i>		Sp. Conductance (umho/cm) <i>197</i>	
Latitude		Salinity (ppt) <i>0.09</i>		Comments					
Location		Comp ☒ Grab		Collection (comp begin or grab) Date <i>6-30-16</i> Time <i>12:00</i>		Composite end Date <i>6-30-16</i> Time <i>12:00</i>		Bottle Group(s)	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		☒ mg/L ☒ % sat		Total Res. Chlorine	
STORET #		Temp (C)		pH		Sample Depth		Sp. Conductance (umho/cm)	
Latitude		Salinity (ppt)		Comments					
Location		Comp ☒ Grab		Collection (comp begin or grab) Date <i>6-30-16</i> Time <i>12:00</i>		Composite end Date <i>6-30-16</i> Time <i>12:00</i>		Bottle Group(s)	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		☒ mg/L ☒ % sat		Total Res. Chlorine	
STORET #		Temp (C)		pH		Sample Depth		Sp. Conductance (umho/cm)	
Latitude		Salinity (ppt)		Comments					
Location		Comp ☒ Grab		Collection (comp begin or grab) Date <i>6-30-16</i> Time <i>12:00</i>		Composite end Date <i>6-30-16</i> Time <i>12:00</i>		Bottle Group(s)	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		☒ mg/L ☒ % sat		Total Res. Chlorine	
STORET #		Temp (C)		pH		Sample Depth		Sp. Conductance (umho/cm)	
Latitude		Salinity (ppt)		Comments					

Relinquished By: Judy Ashton

Date/Time: 6-30-16 5:00

Shipping Method: KLS Ex

Number of Coolers Shipped: 2

Received By:

Date/Time