



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE ____ OF ____

STORET Station Name: _____



20020109 Little Hatchett at 24

Data Qualified?
Yes / No

Date: 3-24-2016
(mm/dd/yyyy)

STORET Station ID: 2695

Latitude: 294155.31

(Decimal Degrees)

WBID: 2706AKRQ - 2016- 03-21-10

ORG ID: 21FLA

Longitude: 821649.270

(Decimal Degrees)

Receiving Body of Water: Newnans Lake

Field ID: _____

County: Alachua

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection	Sampling Equipment			
<u>P. O'Connor</u> <u>A. Kalmbacher</u>				XXX	XXX	XXX	XXX	XXX	XXX	XXX	☒ 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# _____ Photos: Yes / <u>No</u>												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>1010</u>	<u>0.2</u>	<u>0.2</u>	<u>8.65</u>	<u>89.6</u>	<u>7.68</u>	<u>0.11</u>	<u>0.28</u>	<u>225</u>	<u>17.1</u>				
CEN				(*) CODE DO										
Biological Samples Collected: None <u>HA</u> <u>SCI</u> LVS <u>RPS</u> LVI Other _____														
Parameter Suite		Parameter Methods				Preservation		Acid Lot#	Expiration	pH Check				
Preserved Nutrients		☒ TKN / TP / Nox / NH3 / TOC ☐ Other				☒ Ice ☒ H ₂ SO ₄				☒ <2				
Metals		☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO ₂				☐ <2				
Filtered Nutrients		☒ oP ☐ Field Filtered 0.45 µm Filter				☒ Ice								
Chlorophyll		☒ CHLSUITE-W				☒ Ice								
BOD		☒ BOD-INHB ☐ BOD-UNIN				☒ Ice								
Physical/Aggregate		☒ TSS / Turbidity / Alkalinity / Color ☐ Other				☒ Ice								
Macroinvertebrates		☒ MI-FW-QLDC				☒ Formalin								
Microbiology		☐ E Coli ☐ F Coli ☐ Enteroc ☐ QPCR				☐ Ice								
Periphyton		☐ ALGAE-ID				☐ Ice								
Pesticides		☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R				☐ Ice								
		☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH				☐ Other								

Place Preservative Sticker(s) Here
(if Available)

Notes:

Place Label Here
(if Available)

Signature: A. Kalmbacher

Date: 3-24-2016

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

SAMPLING AGENCY: DEAR NED ROC		STORET STATION NUMBER: 20020109	DATE (MM/DD/YY): 03/24/16	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: Alachua	LOCATION: Little Water Hc 24	FIELD ID/NAME:	

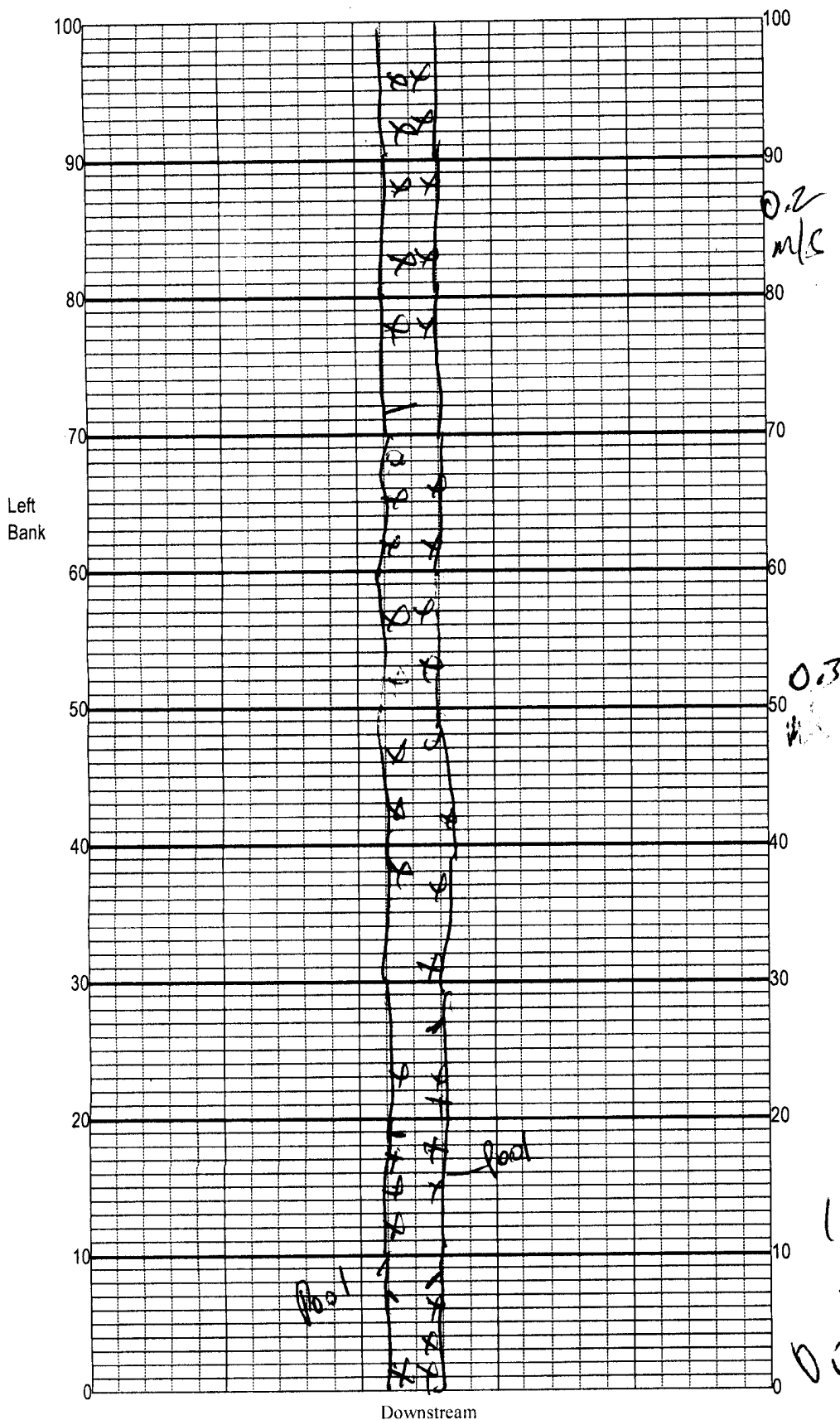
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components Substrate Diversity 6	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock) 20 19 18 17 16	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags) 15 14 13 12 11	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed 10 9 8 7 6	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered 5 4 3 2 1
Substrate Availability 12	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 14	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 11 Primary Score 43	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 12	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 5 Left Bank 5	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 10 Left Bank 6	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 10 Left Bank 10 Secondary Score 58	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

TOTAL SCORE

101

Date: 3/24/16	Analyst: PD am	Signature: [Signature]
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: Little Hatch Creek ²⁴
 Date: 3/24/16
 Sampler: P O'Leary

100 m: Latitude _____	Longitude _____
0 m: Latitude _____	Longitude _____
Substrates: Code key, draw proportionate habitat abundance. %	
☒ Snags	_____ %
☒ Roots/undercut banks	_____ %
☒ Leaf Packs (or mats)	_____ %
☒ Aquatic Macrophytes	_____ %
☒ Rock	_____ %
☐ Pools	_____ %
total # observed = _____	
# range expected = _____	
Average width _____ m	
Average depth _____ m	
Velocity measured at _____ meter mark.	
WQ & chemistry taken at _____ 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:

18% Rock
 2% Snag
 0.2 m/s

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 _____ LATITUDE _____
 COUNTY Alachua STORET # 20020109 LONGITUDE _____
 DATE 3/24/16 TIME 10:10 SAMPLING AGENCY DEAR NED Rec
 SITE NAME Little Hatchet @ 24
 FIELD ID/NAME _____ RECEIVING BODY OF WATER Paines Prairie

RIPARIAN ZONE / STREAM FEATURES

Meter ID: YSI 556 #1

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☐ 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 2 m wide 0.22 m/s 0.1 m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>12</u> Right Bank: <u>>18</u>				Hydrologic Modification Score (per FT 3101) ☐				
High Water Mark: <u>1.5</u> + <u>0.1</u> = <u>1.6</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># Times Sampled</th> <th>PERI # Times Sampled</th> </tr> </thead> <tbody> <tr> <td>Woody Debris (Snags)</td> <td><u>2</u></td> <td><u>7</u></td> <td></td> </tr> <tr> <td>Undercut Banks / Roots</td> <td><u>18</u></td> <td><u>7</u></td> <td></td> </tr> <tr> <td>Leaf Packs or Mat</td> <td></td> <td></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><u>80</u></td> <td><u>6</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	# Times Sampled	PERI # Times Sampled	Woody Debris (Snags)	<u>2</u>	<u>7</u>		Undercut Banks / Roots	<u>18</u>	<u>7</u>		Leaf Packs or Mat				Aquatic Vegetation				Rock or Shell Rubble				Sand	<u>80</u>	<u>6</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></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>0.25</u></td> </tr> <tr> <td>Mid</td> <td><u>0.1</u></td> <td><u>17.1</u></td> <td><u>7.6</u></td> <td><u>8.1</u></td> <td><u>89.6</u></td> <td><u>225</u></td> <td><u>0.11</u></td> <td><u>0.2</u></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> System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐				Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top								<u>0.25</u>	Mid	<u>0.1</u>	<u>17.1</u>	<u>7.6</u>	<u>8.1</u>	<u>89.6</u>	<u>225</u>	<u>0.11</u>	<u>0.2</u>	Bottom								
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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 ☐																																																																														
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SAMPLING TEAM <u>P O'Donnan, A. Kallen Greder</u>			SIGNATURE: <u>P O'Donnan</u> <u>3/24/16</u>																																																																														

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Little Wash c 24 County: Alachua Date: 3/24/16 Investigators: P. O'Brien, A. Kalish

STORET Station Number:

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		96	60	1	N		88
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
10	1	N		88	70	1	N		88
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
20	1	N		84	80	1	N		96
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
30	1	N		96	90	1	N		94
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
40	1	N		84	100	1	N		84
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
50	1	N		92	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.				
	2				Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank.				
	3				Record canopy cover as the number of small densimeter quadrants (out of 96) that HAVE canopy cover. Measure facing upstream at point 4, 5, or 6.				
	4				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%.				
	5								
	6								
	7								
	8								
	9								

Secchi depth 0.25
Estimated?

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

Check accompanying data collected at same site/date.
Algal mat sample NA
Linear Veg Survey NA
Habitat Assessment ✓
SCD Biorecon ✓
Water sample ✓
RQ- 2016-03-21-10

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