



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE ____ OF ____

STORET Station No:

STORET Station ID:

WBID: 2688

RQ: 2016-03-21-09

ORG ID: 21 FLA

Date: 03/24/2016
(mm/dd/yyyy)

Latitude: 29.6882778

Longitude: 82.2066111
(Decimal Degrees)

Receiving Body of Water: Newnan's Lake

Field ID:

County: Alachua

Sampling Team Members

J. Parnish
J. Caceres

WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	☒	☒	☒	☒
☒	☒	☒	☒	☒
☒	☒	☒	☒	☒

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 / High / Flooded

Meter ID#

Photos: Yes / No

Matrix: Fresh Marine / DI

Tide Falling: Yes / No / NA

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (umhos/cm)	Temp. (C°)
<u>EST</u>	<u>1155</u>	<u>0.3</u>	<u>0.5</u>	<u>7.45</u> <u>12.16</u>	<u>77%</u> <u>124.7</u>	<u>7.8</u> <u>6.74</u>	<u>0.05</u>	<u>0.5</u>	<u>102</u> <u>2102</u>	<u>17.3</u> <u>16.78</u>
CEN										

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 ☒ H2SO4	<u>6259020</u>	<u>9/16/16</u>	☐ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter	☒ Ice			
Chlorophyll	☒ CHL SUITE-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 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 ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other			

Place Preservative Sticker(s) Here
(if available)

Place Label Here
(if available)

Notes: 29.41 17.8 / 82.20 23.8

Signature:

Date:

Field Parameters Entered into LIMS: 2/23/15
(Initials/Date)

Field Parameters QC in LIMS: _____
(Initials/Date)

Date Migrated to STORET: _____
(Initials/Date)

Field Sheets Scanned/Saved: _____
(Initials/Date)

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

SAMPLE ID _____ ORG ID 21 PLA LATITUDE _____
COUNTY Alachua STORET # 20020122 LONGITUDE _____
DATE 3/24/2016 TIME 11:59 SAMPLING AGENCY FWP DEAR NE ROC
SITE NAME Hatchett Cr @ SR 26
FIELD ID/NAME _____ RECEIVING BODY OF WATER _____

RIPARIAN ZONE / STREAM FEATURES

Meter ID: _____

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 4.0 m wide		
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>> 18m</u> Right Bank: <u>> 18m</u>				Hydrologic Modification Score (per FT 3101) ☐		0.2 m/s		
High Water Mark: <u>0.5</u> + <u>1.3</u> = <u>1.8</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No		0.5 m deep		
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			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>0.3</td> <td>17.3</td> <td>7.8</td> <td>7.4</td> <td>77%</td> <td>102</td> <td>0.05</td> <td>0.5</td> </tr> <tr> <td>Mid:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bottom:</td> <td>0.5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.5</td> </tr> </tbody> </table>							Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top:	0.3	17.3	7.8	7.4	77%	102	0.05	0.5	Mid:									Bottom:	0.5							0.5
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Woody Debris (Snags) <u>454</u> <u>7</u> Undercut Banks / Roots <u>440</u> <u>7</u> Leaf Packs or Mat _____ Aquatic Vegetation _____ Rock or Shell Rubble _____ Sand <u>92</u> <u>6</u> Mud / Muck / Silt _____ Other _____ Other _____			System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) _____			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐																																						
			Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: _____ Exp: _____			Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Slick ☐ Other ☐																																						
			Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____			Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) _____																																						
			Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐																																									
ABUNDANCE <table border="1"> <thead> <tr> <th></th> <th>Not Obs.</th> <th>Rare</th> <th>Common</th> <th>Abundant</th> </tr> </thead> <tbody> <tr> <td>Periphyton:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Fish:</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☒</td> </tr> <tr> <td>Aquatic Plants:</td> <td>☐</td> <td>☐</td> <td>☒</td> <td>☐</td> </tr> <tr> <td>Iron/Sulfur Bacteria:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>				Not Obs.	Rare	Common	Abundant	Periphyton:	☒	☐	☐	☐	Fish:	☐	☐	☐	☒	Aquatic Plants:	☐	☐	☒	☐	Iron/Sulfur Bacteria:	☒	☐	☐	☐	AMBIENT FIELD CONDITIONS / NOTES: Hydrologic Disturbance Scoring ☒ 1-2 ☐ 3-4 ☐ 5-6 ☐ 7-8 ☐ 9-10 ☐ The antecedent hydrologic conditions have been met to my best knowledge.																
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SAMPLING TEAM <u>[Signature]</u>			SIGNATURE: <u>3/24/16</u>																																									

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Hatchett @ SR26 County: Alachua Date: 3/24/2016 Investigators: J. Kersh J. Gervent

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	<u>N</u>		<u>92</u>	60	1	<u>N</u>		<u>94</u>
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
10	1	<u>N</u>		<u>88</u>	70	1	<u>N</u>		<u>88</u>
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
20	1	<u>N</u>		<u>90</u>	80	1	<u>N</u>		<u>92</u>
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
30	1	<u>N</u>		<u>86</u>	90	1	<u>N</u>		<u>70</u>
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
40	1	<u>N</u>		<u>94</u>	100	1	<u>N</u>		<u>92</u>
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
50	1	<u>N</u>		<u>92</u>		1	<u>N</u>		
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								

Secchi depth 0.5

Estimated? N

points ranked 4-6

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- 2016-03-21

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

75908

20020122

SAMPLING AGENCY:		STORET STATION NUMBER: <u>63NE0012</u>	DATE (MM/DD/YY): <u>3/24/16</u>	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: <u>Hatchery</u>	LOCATION: <u>Brewer's Creek 231</u> <u>Hatchery 26</u>	FIELD ID/NAME:	

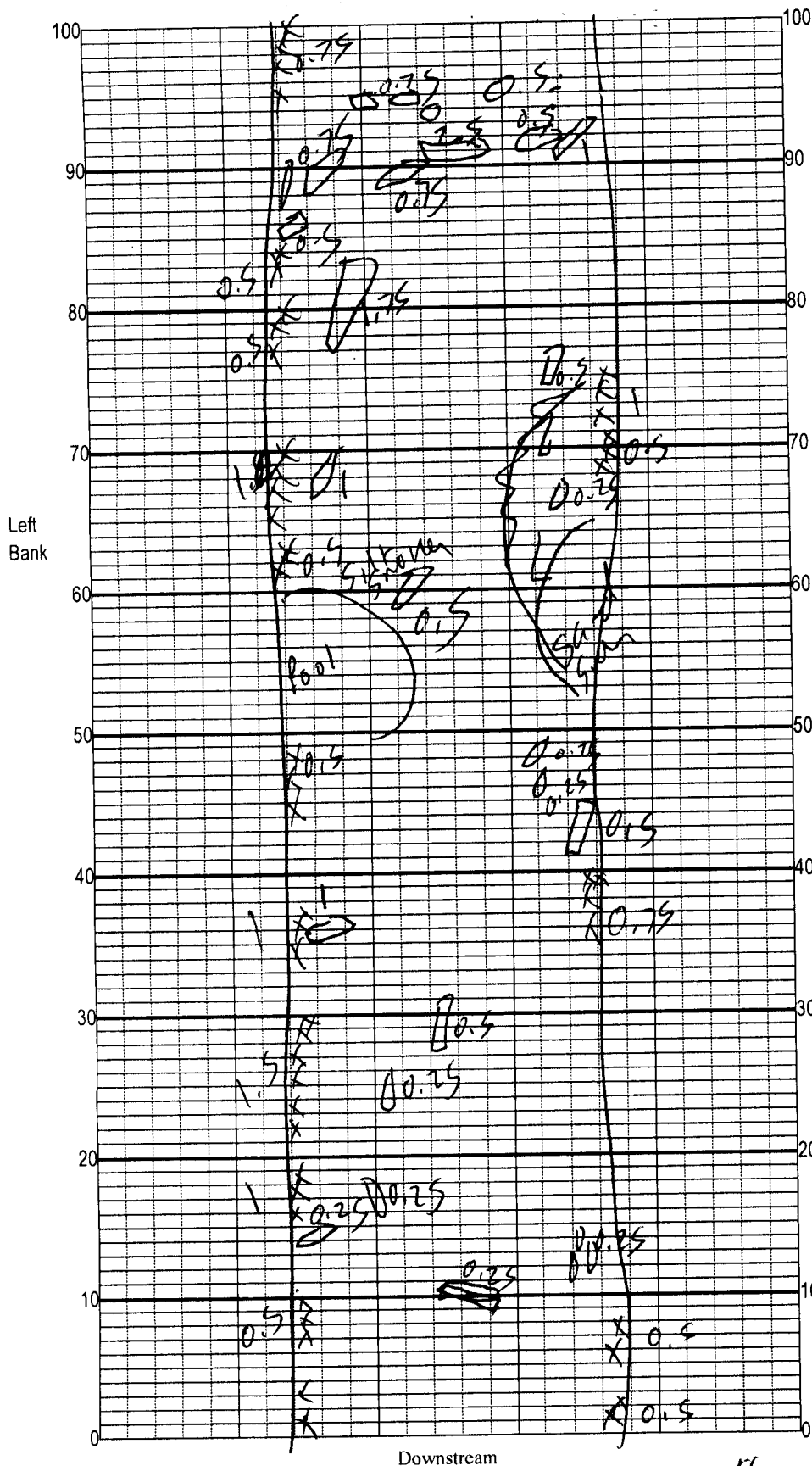
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh 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>8</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 <u>8</u> 7 6	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>15</u> Primary Score <u>47</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>26</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>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 <u>7</u> 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>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>9</u> Left Bank <u>10</u> Secondary Score <u>73</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

120

TOTAL SCORE

Date: <u>3/24/16</u>	Analyst: <u>Jeremy Parrish</u>	Signature: <u>Jeremy Parrish</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



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

Location: Hatchett Co SR 26

Date: 3/24/16

Sampler: _____

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	_____ %
☐	_____	_____ %
☐	_____	_____ %
☐	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:

0.24 sec.
 $X = 4.5 \times 5.75 \times 5 \approx 3\%$
11 meters

$P = 1 + 1.5 + 2 + 1.75 = 4.9$
5.25 7

400

4 = 1%

8 = 2%

12 = 3%

Revision Date: March 1, 2014