FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

February 2016

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SMP

Data Qualified? Yes / No

STORET Station Name: Prairie Creek @ SR20 Date: 05-31-16 (mm/dd/yyyy)

STORET Station ID: 20020121 Latitude: 29.56372 (Decimal Degrees)

WBID: 2705A RQ-2016-05-30-28 ORG ID: 21FLA Longitude: 82.12515 (Decimal Degrees)

Receiving Body of Water: Lochloosa Lake Field ID: County: Alachua

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
P O'Connor	✓		✓		✓
J. Parrish		✓		✓	

Sampling Equipment

- [X] Sample Container
- [ ] Carboy
- [ ] Dipper
- [ ] Van Dorn
- [ ] Syringe
- [ ] Other
- [ ] Pole

Equipment ID YSI #556 #1

Collection Method

- [X] Wading From
- [ ] Shore
- [ ] Other (note below)

Via Boat:

- [ ] Canoe/Kayak
- [ ] Electric Motor
- [ ] Gasoline Motor

Water Level: Dry / (Low) / Normal / High / Flooded

Matrix: ~~Fresh~~ / Marine / DI

Meter ID# YSI 556 #1 Photos: (Yes) / No

Tide Falling: Yes / No / (NA)

Time Zon	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	1210	0.3	1.0	2.46	32.3	7.6	0.04	—	89	29.3
CEN										

Biological Samples Collected: None (HA) (SCI) (LVS) (RPS) LVI Other

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	[X] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	[✓] Ice [✓] H_2SO_4	5259020	09-16-16	[✓] <2
Metals	[X] ~~W-ICPMS~~ [ ] W-ICP	[ ] Ice [ ] HNO_3			[ ] <2
Filtered Nutrients	[X] W-PO4-F [✓] Field Filtered 0.45 µm Filter	[✓] Ice			
Chlorophyll	[X] CHLSUITE-W	[✓] Ice			
BOD	[ ] BOD-UNIN	[ ] Ice			
Physical/Aggregate (Kit A)	[ ] Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	[ ] Ice			
Physical/Aggregate (Kit B)	[ ] Alkalinity / W-F / W-TSS / TURBIDITY	[ ] Ice			
Macroinvertebrates	[X] MI-FW-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			

Place Preservative Sticker(s) Here (If Available)

Notes:

Place Label Here (If Available)

Signature: Patricia O'Connor Date: 05/31/16

Field Parameters Entered into LIMS: JParrish 6/3/16 (Initials/Date) Field Parameters QC in LIMS:

Date Migrated to STORET: JParrish 9/8/16 Field Sheets Scanned/Saved: NF 6/7/16 (Initials/Date)

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD4000)

Boldly "X" this box if there is qualified data on this page.

Meter YSI 556 #1 RQ- 2016-05-30-28 Project Guille Sci

Notes: (1) Numbers ≤4, are rounded down; numbers ≥ 5 are rounded up (e.g., 5.15 becomes 5.2).
(2) Always wait for meter to stabilize before recording any readings.
(3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Circle/Fill In: (Lab Calibration) or Calibration/Verification on Site _____

Temperature (Quarterly) FT 1400 Date of Last Temperature Verification 04/2016

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	P O'Connor	05-31-16	0725	23.8	8.44	8.45	100.0	—	-	Pass	LAB
ICV	↓	↓	0732	23.8	8.44	8.44	99.9	-	-	Pass	LAB
CCV	PO'Conn	05/31/16	1458	24.9	8.27	8.48	102.4	-	-	Pass	LAB
CCV											

Report DO mg/L with one decimal figure and DO % saturation as a whole number with no decimals.
DO Acceptance criteria from Table ±0.3 mg/L. **Rapid-Pulse Sensors:** DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.
Optical: DO gain range 0.85 to 1.15; DO charge N/A. **Steady-state & Galvanic Sensors:** DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	P O'Connor	05/31/16	0734	1602164	02/2017	1000	1000	Pass	LAB
ICV	↓	↓	0736	↓	↓	999/1000	999	Pass	LAB
CCV	PO'Conn	05/31/16	1452	1602160	08/2016	100	104	Pass	LAB
CCV									

Report specific conductance as a whole number with no decimal figure. Conductivity Acceptance criteria ± 5%

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	P O'Connor	05-31-16	0738	2509677	08-2017	7.0	7.00	-48.3	Pass	LAB
Calibr.	↓	↓	0745	2509F74	-09-2017	4.0	4.00	132.5	Pass	LAB
Calibr.	↓	↓	0750	2510A88	04-2017	10.0	9.97	-219.3	Pass	LAB
ICV	↓	↓	0755	2509677	08-2017	7.0	7.03	-46.9	Pass	LAB
CCV	PO'Conn	05/31/16	1556	2510A88	04/2017	10.0	9.87	-215.3	Pass	Lab
CCV										

Report pH with one decimal place; pH Acceptance criteria ±0.2 SU; mV pH7 Range 0±50; mV pH 4 Range +180±50;
mV pH 10 Range -180±50; Slope from 7 to 10 and 4 to 7 must be between 165 and 180 mV

Depth (Quarterly) Date of Last Depth Verification N/A

Depth Sensor (Daily)	Name	Date	Time CT-ET	Zero the Sensor	ICV Value	Pass / Fail	Lab / Field
Pressure mode in ~~air~~				~~0.000~~			

ICV acceptance criteria ±5 % or ±0.05m, whichever is greater

NF 6/7/16

5410 76199 (AK)

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

SAMPLING AGENCY: FDEP		STORET STATION NUMBER: 20020121	DATE (MM/DD/YY): 5/31/16	RECEIVING BODY OF WATER: Lochloosa Lake
REMARKS:	COUNTY: Alachua	LOCATION: Prairie @ SR 20		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 3	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 13	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 6 Primary Score 28	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** 15	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 7 Left Bank 7	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful 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 10	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 9 Left Bank 10 Secondary Score 68	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

96 **TOTAL SCORE**

Date: 5/31/16	Analyst: J Parrish	Signature: Jeremy Parrish

— Channelized
Apple snails

Sand
Silt
Smothered

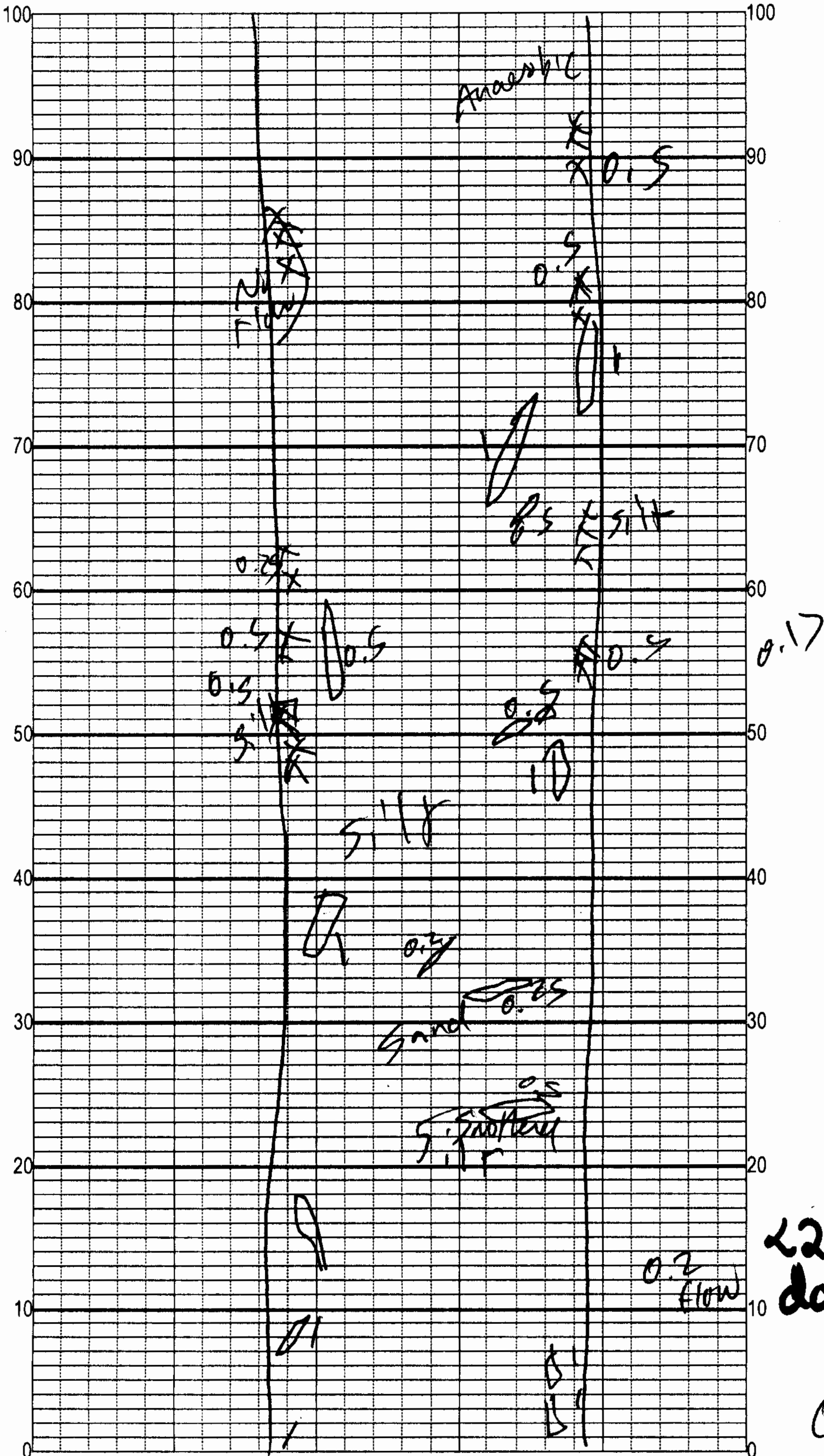
62-160.800, F.A.C.

Revision Date: March 1, 2014

Scanned 6/14/16

DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet

Left Bank



Downstream

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

20020121
Prairie @ 20

Location: ______

Date: 05/31/2016

Sampler: JP/BO

100 m: Latitude ______ Longitude ______	
0 m: Latitude ______ Longitude ______	
Substrates: Code key, draw proportionate habitat abundance.	%
Snags	1-2%
Roots/undercut banks	<1%
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:

<2m observed while doing LVS?

/ = ≈8m

X = <1%

0.4 deep ≈ 3.0m

7 6 m wide

7699 **DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet**

SAMPLE ID ______ ORG ID 21 FLA LATITUDE 29.56372
COUNTY Alachua STORET # 2002QQ21 LONGITUDE 82.12515
DATE 05/31/16 TIME 1210 SAMPLING AGENCY NE ROC
SITE NAME Prairie Cr @ SR20
FIELD ID/NAME ______ RECEIVING BODY OF WATER ______

RIPARIAN ZONE / STREAM FEATURES

Meter ID: YSI556 #1

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category):

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)
35	10		40	15			

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: ~~10~~ 8 m wide; velocity: ___ m/s, 0.2 m/s, 0.2 m/s; depth: ___ m deep, 1.0 m deep, ___ m deep

Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: >18 Right Bank: >18

Hydrologic Modification Score (per FT 3101): ______

High Water Mark: 1.0 (above present water level) + 1.0 (present depth) = 2.0 (above bed) (m)

Artificially Impounded ☐ Yes ☒ No

Artificially Channelized: ☒ No ☐ Some recovery ☐ Mostly recovered, more sinuous ☐ Recent, severe

Canopy Cover % ☐ Open ☐ Heavily Shaded ☐ Lightly Shaded (11-45%) ☒ Moderate Shaded (46-80%)

SEDIMENT / SUBSTRATE

Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse

Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify):

Smothering of Substrates

	None	Slight	Moderate	Severe
Sand Smothering	☐	☐	☒	☐
Silt Smothering	☐	☐	☒	☐
Algae Smothering	☐	☒	☐	☐

SUBSTRATE TYPE

Assessment Tool: ☒ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	1.5	7	
Undercut Banks / Roots	0.5	7	
Leaf Packs or Mat			
Aquatic Vegetation			
Rock or Shell Rubble			
Sand	80	64	
Mud / Muck / Silt	18	2	
Other			
Other			

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)
Top							
Mid	0.3	29.3	7.6	2.46	32.3	89	0.04
Bottom							

SECCHI (M): ——— TOTAL DEPTH: 1.0

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

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

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

Water Sample Taken? ☒ Yes ☐ No
Sample Preserved? ☒ Yes ☐ No
Lot Number: 5259020 Exp: 09/16/16

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	☐	☒	☐	☐

AMBIENT FIELD CONDITIONS / NOTES: Channeled Snails (Exotic) Present in Large #s

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 J Parrish, P O'Dowd

SIGNATURE: [signature]

Scanned 6/7/16

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Prairie Cr @ SR 20 | County: Alachua | Date: 05-31-16 | Investigators: O'Connor

STORET Station Number: 20020121

Transect (m)	Point 1=right	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N		
	2	X		
	3	X		
	4	X		
	5	X		24
	6	X		
	7	X		
	8	X		
	9	X		
10	1	N		
	2	N		
	3	X		
	4	X		
	5	X		32
	6	N		
	7	N		
	8	N		
	9	X		
20	1	N		
	2			
	3			
	4	X		
	5	X		24
	6	X		
	7	X		
	8	X		
	9	X		
30	1	N		
	2			
	3			
	4			
	5	X		92
	6	X		
	7	X		
	8	X		
	9	N		
40	1	N		
	2			
	3			
	4			
	5	X		62
	6	X		
	7	X		
	8	N		
	9	X		
50	1	X		
	2	N		
	3			
	4			
	5			85
	6			
	7			
	8			
	9	X		

Transect (m)	Point 1=right	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
60	1	X		
	2	N		
	3			
	4			
	5			93
	6			
	7			
	8			
	9			
70	1	N		
	2			
	3			
	4			
	5			72
	6			
	7			
	8	X		
	9	X		
80	1	X		
	2	N		
	3	N		
	4	N		
	5	N		60
	6			
	7			
	8			
	9			
90	1	N		
	2	N		
	3	X		
	4	X		
	5	X		93
	6	X		
	7	N		
	8	N		
	9	N		
100	1	N		
	2	X		
	3	X		
	4	X		
	5	X		81
	6	X		
	7	X		
	8	N		
	9	N		

Secchi depth	
Estimated?	
# 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-	

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

<2m2 vegetation
A Few clumps of Eichornia Cr.

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%.

Form FD 9000-32 **FDEP Linear Stream Vegetation Survey (DEP SOP FS 7320)** Revised 10-11-11

Waterbody: Prairie 20 | Date: 5/31/16 | County: Alachua | Storet Number: 20020121

Analyst: [illegible] | Signature: [illegible]

Comments:

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m^2 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.

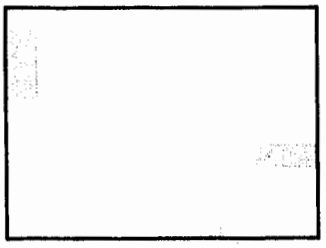
HERBACEOUS SPECIES	Meter Mark 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Alternanthera philoxeroides											
Bacopa caroliniana											
Bacopa monneri											
Bidens mitis											
Boehmeria cylindrica											
Centella asiatica											
Cephalanthus occidentalis											
Ceratophyllum demersum											
Chara											
Cicuta maculata											
Cladium jamaicense											
Colocasia esculenta											
Crinum americanum											
Diodia virginiana											
Eichhornia crassipes											
Eleocharis (wispy viviparous)											
Fontinalis											
Hydrilla verticillata											
Hydrocotle											
Hygrophila polysperma											
Hymenocallis											
Itea virginica											
Lachnanthes caroliniana											
Landoltia punctata											
Lemna											
Limnophila sessiflora											
Lobelia cardinalis											
Ludwigia leptocarpa											
Ludwigia palustris											
Ludwigia peruviana											
Ludwigia repens											
Luziola fluitans											
If no Dominant or Co-Dominant were selected, indicate with an "X"											
Indicate % cover macrophytes per section											
0-5% Macrophyte Coverage											
>5 and ≤10% Macrophyte Coverage											
>10 and ≤25% Macrophyte Coverage											
>25 and ≤50% Macrophyte Coverage											
> 50% Macrophyte Coverage											

HERBACEOUS SPECIES	Meter Mark 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Micranthemum glomeratum											
Micranthemum umbrosum											
Myriophyllum aquaticum											
Najas guadelupensis											
Nuphar luteum											
Orontium aquaticum											
Panicum hemitomon											
Panicum repens											
Panicum rigidulum											
Pistia stratioides											
Polygonum glabra											
Polygonum hydropiperoides											
Polygonum punctatum											
Pontedaria cordata											
Potamogeton illinoensis											
Sacciolepis striata											
Sagittaria kurziana											
Sagittaria lancifolia											
Sagittaria latifolia											
Salix caroliniana											
Salvinia minima											
Samolus parviflora											
Saururus cernuus											
Typha											
Vallisneria americana											
Zizania aquatica											
Zizaniopsis milacea											

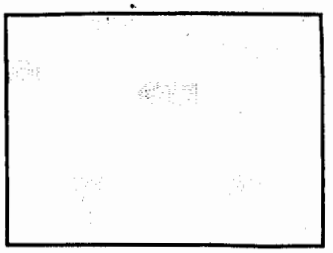
NF 6/7/16

Percent Cover Categories for macrophytes in a 10 m segment of a stream 5 m wide

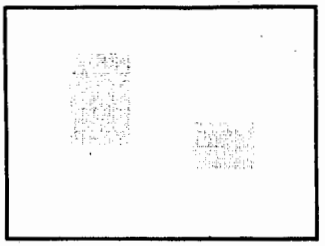
5% Macrophyte Coverage



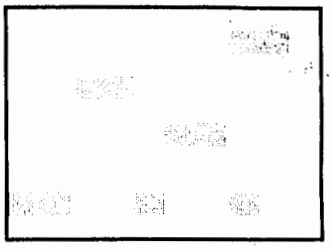
5% Macrophyte Coverage



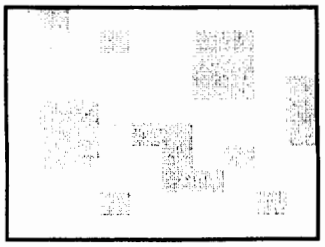
10% Macrophyte Coverage



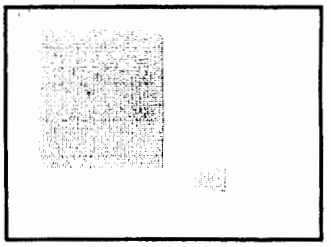
10% Macrophyte Coverage



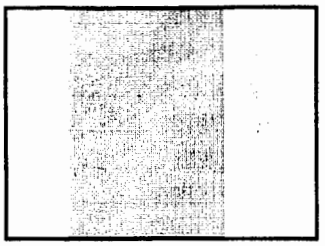
25% Macrophyte Coverage



25% Macrophyte Coverage



50% Macrophyte Coverage



50% Macrophyte Coverage