FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

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Data Qualified? Yes / No

RQ-2017-04-10-09
4/19/2017
WBID 2074
Alligator Cr South Branch @ SR768
G2SD041917-22 (Field ID)
STORET * 25010009

Location/STORET Station Name: _____ **Date:** _____ (mm/dd/yyyy)

STORET # _____ **itude:** _____ (Decimal Degrees)

County: Charlotte **RQ -** _____ **gitude:** _____ (Decimal Degrees)

Receiving Body of Water: Alligator Creek **Field ID:** _____

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Corey Anderson		✓		✓	✓
Kaitlin DeAeth	✓		✓		

Sampling Equipment

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

Equipment ID _____

Collection Method

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

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

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

Matrix: (Fresh) / Marine / DI

Meter ID# 18

Photos: Yes / (No)

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 (µmhos/cm)	Temp. (C°)
(EST)	910	0.3	0.4	4.3	49	7.2	—	0.45	1223	21.7
CEN										

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

SBIO ID Numbers: SBIO-ID: RPS-ID: Macrophyte-ID: LIMS#:

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	[x] Ice [x] H_2SO_4			[ ] <2
Metals	[ ] W-ICPMS [ ] W-ICP	[ ] Ice [ ] HNO_3			[ ] <2
Filtered Nutrients	[x] W-PO4-F [x] Field Filtered 0.45 µm Filter	[x] Ice			
Chlorophyll	[x] CHLSUITE-W	[x] Ice			
Physical/Aggregate (Fresh)	[x] Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	[x] Ice			
Physical/Aggregate (Marine)	[ ] Alkalinity / W-F / W-TSS / TURBIDITY	[ ] Ice			
Macroinvertebrates	[ ] MI-FW-QLDC	[ ] Formalin			
Periphyton	[ ] ALGAE-ID	[ ] Ice			
Microbiology	[ ] E Coli [ ] F Coli [ ] Enterococci [ ] qPCR	[ ] Ice			
Tracers	[ ] W-SUC-AA-R [ ] W-UHERB-AA [ ] W-AHERB-AA	[ ] Ice			
Pesticides	[ ] W-PSNP-TQ [ ] W-AHERB-AA [ ] W-PYR-AA-R [ ] W-PCL-SQ-R [ ] W-UHERB-AA [ ] W-GLYPH [ ] W-SUC-AA-R	[ ] Ice [ ] Other			

Contains 1:1 Sulfuric Acid SA-6302030 EXP: 10/28/17 Warning! See SDS

Contains 1:1 Nitric Acid NA-6291010 EXP: 10/17/17 Warning! See SDS

Notes:

Dup time: 915

Algae-ID sample Collected

RQ-2017-04-10-09
4/19/2017
WBID 2074
Alligator Cr South Br @ SR768 DUP
G2SD041917-24 (Field ID)
STORET 25010009 DUP

Signature: [signature] **Date:** 4-19-17

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)

Sanders Laboratories
Environmental Testing Services

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only)

Client: Florida Dept. of Environmental Protection
Address: 2600 Blairstone Rd. Tallahassee, FL 32399
Phone: 850-245-8085
Fax:

Report To: DEP- OverflowMicro@dep.state.fl.us
Bill to: Carina Tull
P.O. # LAB #039
Preservative: HCL = H, HNO_3= N, $Na_2S_2O_3$ = ST, H_2SO_4 = S, NaOH = SH, NH_4Cl = NH

Project Name: Strategic Monitoring Program
Project Location: Alligator WBID 2071, WbID 2074
Customer Type:
Kit #:
Requested Due Date:

Sampled By (PRINT): Kaitlin Defeth
Sampler Signature:

Matrix	Sample Description	Date	Time	Type	Preservatives: Ice	Preservatives: S	Analysis Requested: E. coli	Sample ID # (Lab Use Only)
SW	G2SD041917-20 Alligator 2071 North Prong	4/19/17	850	SW	✓		✓	
SW	G2SD041917-22 Alligator 2074 South Br	4/19/17	910		✓		✓	
SW	G2SD041917-24 Alligator 2074 South Br DUP	4/19/17	915		✓		✓	

Bottle Lot #	Relinquished By/Affiliation	Date	Time	Accepted By/Affiliation	Date	Time
	Corey Anderson/FDEP	4/19/17	1039		4/19	1039

Samples are ambient water

RQ-2017- 04-10-09

Okay to Run As Is...
Client Initial: CA

Samples On Ice
(Yes) No

1050 Endeavor Ct, Nokomis, FL 34275-3623 (941) 488-8103 fax(941) 484-6774
10090 Bavaria Rd., Fort Myers, FL 33913 (239) 590-0337 fax (239) 590-0536

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

SAMPLE ID _____ ORG ID _____ LATITUDE 26.884776 / 26.885289

COUNTY Charlotte STORET # 25010069 LONGITUDE -81.978440 / -81.979547

DATE 4/19/17 TIME 0910 SAMPLING AGENCY SROC

SITE NAME Alligator Cr South Branch @ SR768

FIELD ID/NAME G25D041917-22 RECEIVING BODY OF WATER Alligator Creek

RIPARIAN ZONE / STREAM FEATURES

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

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)
		90		10			

Landscape Development Intensity Index (LDI) —

Local Watershed Erosion (select one) : ☐ None ☐ Slight ☑ Moderate ☐ Heavy

Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☑ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side

Left Bank : 12m Right Bank : 12m

Hydrologic Modification Score (per FT 3101) —

High Water Mark: 1.0 (m) + 0.4 (above present water level) = 1.4 (present depth) (above bed)

Artificially Impounded ☐ Yes ☑ No

Typical Width (m) Depth (m)/Velocity (m/sec) Transect

2 m wide

0.2 m/s	m/s	m/s
0.4 m deep	m deep	m deep

Artificially Channelized : ☐ No ☐ Some recovery ☑ Mostly recovered, more sinuous ☐ 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

	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)			
Undercut Banks / Roots			
Leaf Packs or Mat	0-74		
Aquatic Vegetation	0-36		
Rock or Shell Rubble..			
Sand.....			
Mud / Muck / Silt			
Other			
Other			

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)
Top :	0.3	21.7	7.2	4.3	49	1223	—
Mid:							
Bottom							

SECCHI (M) 0.4 ☑ VOB

TOTAL DEPTH 0.4

Meter ID: 18

Water Odors Normal ☐ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☑ Odor

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

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 ☐

ABUNDANCE

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

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

AMBIENT FIELD CONDITIONS / NOTES:

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

SAMPLING TEAM

SROC Kaitlin DeAeth

SIGNATURE : [signature]

DATE : 4/19/17

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

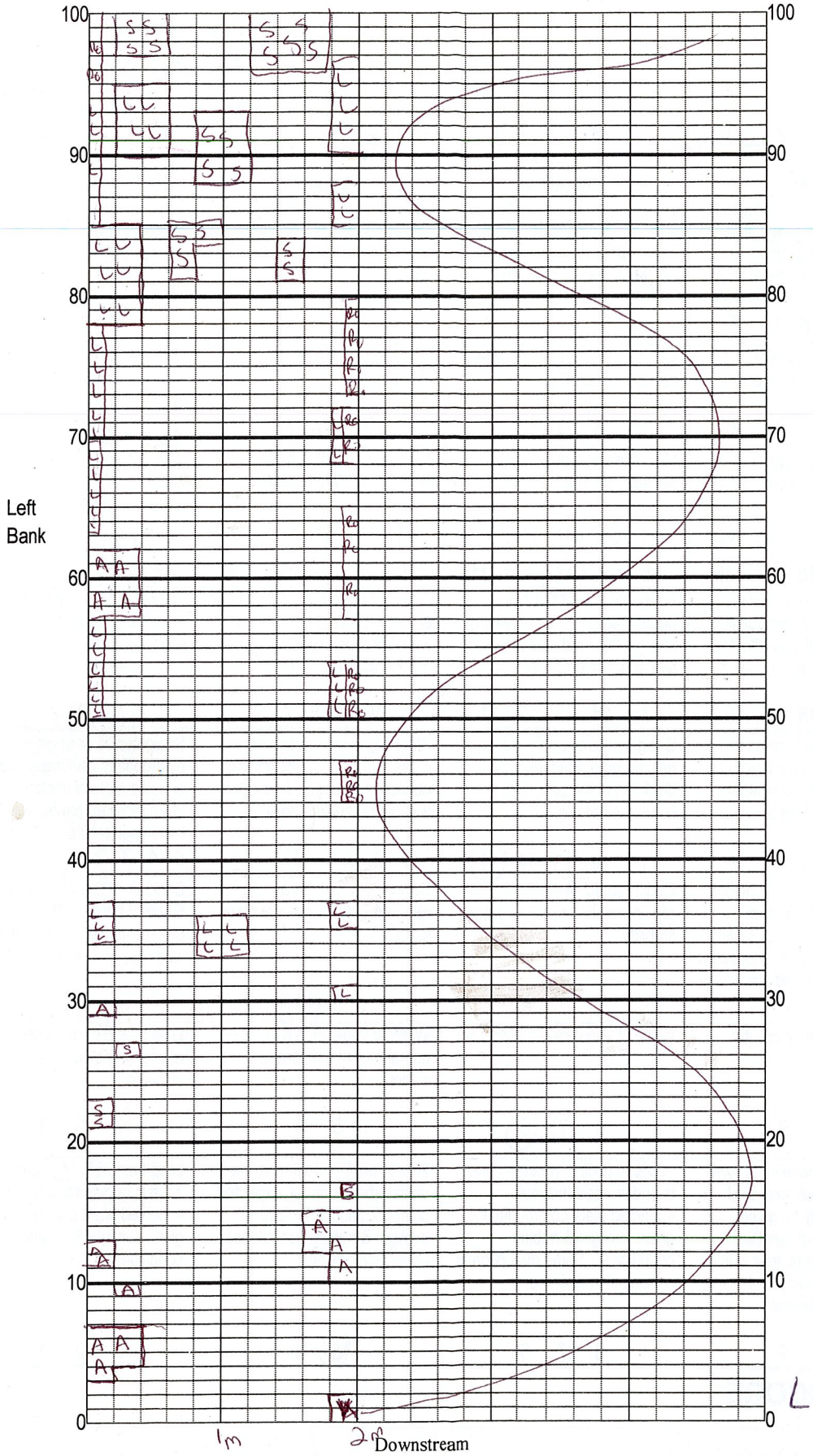
SAMPLING AGENCY:		STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER:
SROC		25010009	4/19/17	Alligator Creek
REMARKS:	COUNTY: Charlotte	LOCATION: Alligator Creek		FIELD ID/NAME:

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 10	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 4	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 4 Primary Score 31	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** 11	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 4 Left Bank 4	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 7 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 5 Left Bank 5 Secondary Score 42	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

73 **TOTAL SCORE**

Date: 4/19/17	Analyst: K. Depeth	Signature:

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: Alligator Creek 2074

Date: 4/19/17

Sampler: K. Defeth

100 m:	Latitude	26.884776
	Longitude	-81.978740
0 m:	Latitude	26.885289
	Longitude	-81.979547

Substrates: Code key, draw proportionate habitat abundance. %

S	Snags	
Ro	Roots/undercut banks	
L	Leaf Packs (or mats)	.71
A	Aquatic Macrophytes	.36
V	Veg	
⊘	Pools	total # observed = ___ / # range expected = ___

Average width 2 m

Average depth 0.5 m

Velocity measured at 0 meter mark.

WQ & chemistry taken at 0 meter mark.

Habitat Smothering: Sand, all over
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: = 12m, = 12m
Note areas (on map) where natural vegetation is altered or eliminated.

Plants observed / other notes:

Velocity: 0.2m/sec

* Ludwigia repens

L 71/1000 =

A 36/1000 =

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Alligator Creek South Br @ SR768 | County: Charlotte | Date: 4-19-17 | Investigators: Corey Anderson, Kaitlin De'Aeth

STORET Station Number: 25010009

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1			
	2			
	3			
	4			
	5	N	N	55
	6			
	7			
	8			
	9			
10	1			
	2			
	3			
	4			
	5	N		96
	6			
	7			
	8			
	9			
20	1			
	2			
	3			
	4			
	5	N		95
	6			
	7			
	8			
	9			
30	1	4	N	
	2	4	N	
	3	4	N	
	4	N	N	
	5	N	N	86
	6	4	N	
	7	N	N	
	8	N	N	
	9	N	N	
40	1	6	N	
	2	6	N	
	3	6	N	
	4	N	N	
	5	N	N	25
	6	4	N	
	7	N		
	8	N		
	9	N		
50	1			
	2			
	3			
	4			
	5	N	N	96
	6			
	7			
	8			
	9			

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
60	1	N		
	2	N		
	3	N		
	4	N		
	5	5		96
	6	N		
	7	N		
	8	N		
	9	N		
70	1			
	2			
	3			
	4			
	5	N	N	96
	6			
	7			
	8			
	9			
80	1	N		
	2	N		
	3	N		
	4	4		
	5	5		90
	6	6		
	7	5		
	8	N		
	9	N		
90	1	N		
	2	N		
	3	N		
	4	N		
	5	5	N	96
	6	6		
	7	N		
	8	N		
	9	N		
100	1	N		
	2	N		
	3	5		
	4	6		
	5	6		40
	6	6		
	7	5		
	8	N		
	9	N		

Secchi depth	0.4 5
Estimated?	

# points ranked 4-6	20
total points assessed	99
% points ranked 4-6	20

Check accompanying data collected at same site/date.	
Algal mat sample	✓
Linear Veg Survey	✓
Habitat Assessment	✓
SCI/Biorecon	
Water sample	✓

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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%.

Algae ID collected

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Waterbody: Alligator Creek 2074, South Branch | Date: 4/19/17 | County: Charlotte | Storet Number: 25alc009

Analyst: Corey Anderson | Signature:

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									X		
Bidens mitis											
Boehmeria cylindrica											
Centella asiatica											
Ceratophyllum demersum											
Chara											
Cicuta maculata											
Cladium jamaicense											
Colocasia esculenta											
Commelina diffusa											
Commelina virginica											
Crinum americanum											
Diodia virginiana											
Eichhornia crassipes											
Eleocharis (wispy viviparous)											
Hydrilla verticillata											
Hydrocotle											
Hygrophila polysperma											
Hymenocallis											
Lachnanthes caroliniana											
Landoltia punctata											
Lemna											
Limnophila sessiflora											
Ludwigia ~~leptocarpa~~ octovalvis									X		
Ludwigia palustris											
Ludwigia peruviana											
Ludwigia repens	X		X	X	X	X	X	X	X	X	
Luziola fluitans											
If no Dominant or Co-Dominant were selected, indicate with "X"											
Indicate % cover macrophytes per section											
0-5% Macrophyte Coverage	X	X	X	X	X	X	X	X	X	X	
>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	X	X				X			X	X	
Orontium aquaticum											
Panicum hemitomon											
Panicum repens											
Panicum rigidulum											
Pistia stratioides											
Polygonum glabra											
Polygonum hydropiperoides											
Polygonum punctatum											
Pontedaria cordata											
Potamogeton illinoensis											
Ruellia simplex											
Sacciolepis striata											
Sagittaria kurziana											
Sagittaria lancifolia											
Sagittaria latifolia											
Salvinia minima											
Samolus parviflora											
Saururus cernuus											
Sparganium americanum											
Typha											
Vallisneria americana											
Zizania aquatica											
Echinochloa sp.									X	X	
Wedelia		X		X					X		