



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

WIN Station Name: Butcher Pen Cr @ Blanding Blvd Date: 9/5/2018
(mm/dd/yyyy)
WIN/ Field ID: 20030490FLA-20030580 WBID: 2322 Latitude: 30.25889
(Decimal Degrees)
County: Duval ORG ID: 21FLA Longitude: -81.74202
(Decimal Degrees)
Receiving Body of Water: Cedar River RQ-2018- 09-03-37

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Pann					X	X	X		
B. Pann						X			

Sampling Equipment				
☒ Sample Container	☐ Van Dorn	☒ Pole		
☐ Carboy	☐ Syringe			
☐ Dipper	☐ Other			
Depth Measured with <u>YSI 3</u>				
Equipment ID <u>0215044</u>				

Collection Method				
☒ Wading	☐ Canoe/Kayak			
☐ From Shore	☐ Electric Motor			
☐ Other	☐ Gasoline Motor			

Water Level: Dry / Pooled / Low / <u>Normal</u> / High / Flooded					Meter ID# <u>YSI 3</u>	Matrix: <u>Fresh</u> / Marine / DI
Photos: Yes <u>(No)</u> Flow: No Flow / Interstitial / <u>Flowing</u> / NA					Tide: Rising / Falling / Slack / NA	Tide Times: High / Low

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTH)	Sp COND (µmhos/cm)	Temp. (C°)
EST	0940	0.11	0.1	0.115	5.2	64	7.24	0.15	315	25.56
CEN										

Biological Samples Collected:							
None	<u>HA</u>	SCI	<u>RPS</u>	Algae ID	<u>LVS</u>	LVI	Other:

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

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☐ H2SO4	<u>734/020</u>	<u>12/7/18</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☐ Field Filtered 0.45 µm Filter <u>R714A29005</u>	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☒ 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 <u>W458321-MS</u> <u>W58321-DI</u>	☒ Ice			
Molecular	☒ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD	☒ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☒ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA ☐ W-CARB-AA ☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Contains: 1:1 H2SO4
Lot No.: SA7341020
Expires: 12/07/18
See Safety Data Sheet (SDS)

Active Sticker(s) Here (Available)

Notes:

Charged win # 28
corrected

WIN/ Field ID: 20030490FLA-20030580
**BUTCHER PEN CR @
BLANDING BLVD**

Signature: J. Pann

Date: 9/5/18

Enter Field Parameters, Verify Station ID in LIMS DMT:

QC Station ID, Field Parameters in LIMS DMT: 9/13/18

Scan/Save Field Sheets 9/13/18

Migrate Data to WIN:

Verify Data in WIN:

(Initials/Date)

(Initials/Date)

(Initials/Date)

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

78521

SAMPLING AGENCY: NE ROC		STORET STATION NUMBER: 20030580	DATE (MM/DD/YY): 9/5/18	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: Oswego	LOCATION: Butcher Pen @ Blinding	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>5</u>	20 19 18 17 16	15 14 13 12 11	10 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 5 4 3 2 1
Water Velocity <u>13</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 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>8</u> Primary Score <u>31</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. 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	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>13</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability Right Bank <u>3</u> Left Bank <u>3</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 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 <u>7</u> Left Bank <u>5</u>	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 <u>8</u> Left Bank <u>7</u> Secondary Score <u>45</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. 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

Date: <u>9/5/18</u>	Analyst: <u>Jeremy Parn</u>	Signature: <u>Jeremy Parn</u>
---------------------	-----------------------------	-------------------------------

100 m: Latitude _____	Longitude _____
0 m: Latitude _____	Longitude _____
Substrates: Code key, draw proportionate habitat abundance.	
 Snags	1%
 Roots/undercut banks	3
 Leaf Packs (or mats)	_____
 Aquatic Macrophytes	_____
	_____
	_____
	_____
Pools	total # observed = _____ # range expected = _____
Average width <u>1</u> m	
Average depth <u>0.1</u> m	
Velocity measured at <u>10085020</u> meter mark.	
WQ & chemistry taken at <u>0</u> 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.	

<2 M of Macrophytes was observed while doing the LVS? YES or NO

$$^{10} \text{Roots} = 3.5 + \frac{1}{2} = 4 \text{ m}$$

$$S_{avg} = 1.5m \approx 1.0\%$$

1. Sound

SAMPLE ID _____ ORG ID 21FLA LATITUDE _____
 COUNTY Duval STORET # 20030580 LONGITUDE _____
 DATE 9/5/18 TIME 940 SAMPLING AGENCY _____
 SITE NAME Burden Lane & Blanding
 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 1.5 m wide m/s ☐ 0.18 m/s ☐ m/s m deep ☐ 0.1 m deep ☐ m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>6-12</u> Right Bank: <u>12-18</u>				Hydrologic Modification Score (per FT 3101) <u>7-8</u>			
High Water Mark: <u>0.4</u> + <u>0.1</u> = <u>0.5</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 % Coverage ☐ INVERT # Times Sampled ☐ PERI # Times Sampled			WATER QUALITY Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Mid: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Bottom: <u>0.1</u> <u>25.56</u> <u>7.24</u> <u>5.2</u> <u>64</u> <u>315</u> <u>0.15</u> <u>0.1</u>		
Woody Debris (Snags) <u>1</u> Undercut Banks / Roots <u>2</u> Leaf Packs or Mat Aquatic Vegetation Rock or Shell Rubble.. <u>4</u> Sand..... 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: _____ Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____		
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☒ ☐ ☐ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☐ ☒ ☐ ☐ Iron/Sulfur Bacteria: ☐ ☒ ☐ ☐			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) _____ Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐		
AMBIENT FIELD CONDITIONS / NOTES: <u>< 259 meters plants</u> 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 <u>Jeremy Pan</u>			SIGNATURE: <u>Jeremy Pan</u> <u>9/5/18</u>		

28921

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Burke Peninsula Blanding County: Duval Date: 9/5/18 Investigators: JB

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	Y		60	1	N	Y	
	2					2			
	3					3			
	4					4			
	5			76		5			96
	6					6			
	7					7			
	8					8			
	9					9			
10	1	N			70	1	N		
	2					2			
	3					3			
	4					4			
	5			96		5			96
	6					6			
	7					7			
	8					8			
	9					9			
20	1	N			80	1	N		
	2					2			
	3					3			
	4					4			
	5			96		5			94
	6					6			
	7					7			
	8					8			
	9					9			
30	1	N			90	1	N		
	2					2			
	3					3			
	4					4			
	5			96		5			96
	6					6			
	7					7			
	8					8			
	9					9			
40	1	N			100	1	N	Y	
	2					2			
	3					3			
	4					4			
	5			92		5			86
	6					6			
	7					7			
	8					8			
	9					9			
50	1	N				1			
	2					2			
	3					3			
	4					4			
	5			96		5			
	6					6			
	7					7			
	8					8			
	9					9			

STORET Station Number:

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

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%.

9/2/18

Storet Number:

Signature: _____

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m² 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.

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

BRUIS
BEAR NEP

[illegible]

Group: A	Bottle Type:	P-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-SO4-IC						
	W-TDS						
	W-TSS						
Group: A	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	CHLSUITE-W						
Group: A	Bottle Type:	P-250ML-WI-THI	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2 to ALS
	NE-ALS-ECQ						
Group: A	Bottle Type:	QPCR-P-500ML	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	PCR-FILTER						
Group: A	Bottle Type:	BG-500ML	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	W-E8321-DI						
	W-E8321-MS						
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	2
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 2	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	2
	W-PO4-F						
Group: B	Bottle Type:	P-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	ALKALINITY						
	TURBIDITY						
	W-F						
	W-TSS						
Group: B	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	CHLSUITE-W						

Group: B	Bottle Type: P-250ML-WI-THI	# of Bottles: 2	Preservative: ICE	Enter Number of Bottles Sent to Lab
	NE-ALS-ENQ			2 to ALS
Group: B	Bottle Type: QPCR-P-500ML	# of Bottles: 2	Preservative: ICE	Enter Number of Bottles Sent to Lab
	PCR-FILTER			2
Group: B	Bottle Type: BG-500ML	# of Bottles: 2	Preservative: ICE	Enter Number of Bottles Sent to Lab
	W-E8321-DI			2
	W-E8321-MS			
Group: B	Bottle Type: P-500ML	# of Bottles: 2	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab
	W-NH3			2
	W-NO2NO3			
	W-S-A-TP			
	W-TKN			
	W-TOC			
Group: B	Bottle Type: P-125ML	# of Bottles: 2	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab
	W-PO4-F			2



CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

9143 Phillips Highway, Ste 200 • Jacksonville, FL 32256 (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011

PAGE 1 OF 1

SR#	
CAS Contract	

Project Name BMAP 1						Project Number 2018-09-03-37						Analysis Requested (Include Method Number and Container Preservative)																	
Project Manager Jeremy Lamsch						Email Address jeremy.lamsch@dep.state.or.us																							
Company/Address 8800 Baymeadows way W. JAX. FL. 32256						Phone # 904-256-1700						FAX #																	
Sampler's Signature Jeremy Lamsch						Sampler's Printed Name Jeremy Lamsch																							
CLIENT SAMPLE ID						LAB ID						DATE						SAMPLING TIME						MATRIX					
20030139						20030580						9/5/18						0940						w					
20030848												9/5/18						1055						w					
20030695												9/5/18						1205						w					
SPECIAL INSTRUCTIONS/COMMENTS																													
TURNAROUND REQUIREMENTS																													
RUSH (SURCHARGES APPLY) _____																													
STANDARD _____																													
REQUESTED FAX DATE _____																													
REQUESTED REPORT DATE _____																													
REPORT REQUIREMENTS												INVOICE INFORMATION																	
I. Results Only _____												PO # _____																	
II. Results + QC Summaries (ICS, DUP, MS/MSD as required) _____												BILL TO: _____																	
III. Results + QC and Calibration Summaries _____																													
IV. Data Validation Report with Raw Data _____																													
V. Specialized Forms / Custom Report _____																													
Edata Yes _____ No _____																													
RELINQUISHED BY						RECEIVED BY						RELINQUISHED BY						RECEIVED BY											
Signature _____						Signature _____						Signature _____						Signature _____											
Printed Name _____						Printed Name _____						Printed Name _____						Printed Name _____											
Firm _____						Firm _____						Firm _____						Firm _____											
Date/Time _____						Date/Time _____						Date/Time _____						Date/Time _____											
SAMPLE RECEIPT: CONDITION/COOLER TEMP: D.H.C. CUSTODY SEALS: Y N																													
RELINQUISHED BY						RECEIVED BY						RELINQUISHED BY						RECEIVED BY											
Signature _____						Signature _____						Signature _____						Signature _____											
Printed Name _____						Printed Name _____						Printed Name _____						Printed Name _____											
Firm _____						Firm _____						Firm _____						Firm _____											
Date/Time _____						Date/Time _____						Date/Time _____						Date/Time _____											
Distribution: White - Return to Originator; Yellow - Retained by Client																													