

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

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

Meter ID: YSI #3

RQ: 2019-09-16-13

Project: SCI Penhleen and Miller Marine

- Notes: (1) Always wait for meter to stabilize before recording any readings.
 (2) Report all digits displayed. Do not round before reporting measurements. (See special instructions for depth).
 (3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 6/2019

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro-meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	K. Appleby	9/17/19	748	23.18	760	8.5	8.44	99.1	-	-	☒ F	☒ F
ICV	↓	↓	750	23.26	760	8.5	8.52	100.1	-	-	☒ F	☒ F
CCV	↓	↓	1420	25.32	760	8.2	8.19	99.8	-	-	☒ F	☒ F
CCV											P / F	L / F

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 (Pro DSS 0.75 to 1.50); 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 μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	K. Appleby	9/17/19	756	1907113	7/2020	1000	999/1000	☒ F	☒ F
ICV	↓	↓	758	1903198	3/2020	100	104	☒ F	☒ F
CCV	↓	↓	1422	719820	12/2019	24,820	24,760	☒ F	☒ F
CCV								P / F	L / F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	K. Appleby	9/17/19	802	2902778	1/2021	7.00	23.88	7.00	-20.0	☒ F	☒ F
Calibr.	↓	↓	805	2904800	3/2021	4.00	24.08	4.00	155.7	☒ F	☒ F
Calibr.	↓	↓	809	2901851	7/2020	10.00	24.09	10.00	-188.0	☒ F	☒ F
ICV	↓	↓	811	2904300	3/2021	4.00	24.06	4.00	156.2	☒ F	☒ F
CCV	↓	↓	1425	2901851	7/2020	10.00	24.48	10.00	188.2	☒ F	☒ F
CCV										P / F	L / F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50 ; mV pH 4 Range $+180 \pm 50$; mV pH 10 Range -180 ± 50 ;

If mV are recorded: slope from 7 to 10 _____, slope from 4 to 7 _____ (both must be between 165 and 180 mV)

Does meter have a depth sensor that will be used to measure total depth & sample depth? ☒ YES / NO / NA (not surf. water project)

If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: 6/2019

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last verification: _____

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	K. Appleby	9/17/19	815	0.00	0.00	☒ F	☒ F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Date Qualified?

Yes ☒ No ☐

WIN Station Name: Miller Creek at Atlantic Blvd.

Date: 9/17/19
(mm/dd/yyyy)

WIN/ Field ID: G2NE0005

WBID: 2287B

Latitude: 30.30598

(Decimal Degrees)

County: Duval

ORG ID: 21FLA

Longitude: 81.82883

(Decimal Degrees)

Receiving Body of Water: SJR

RQ-2019- 09-16-13

Sampling Team Members						WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Parish						X	X	X		
K. Appleby							X	X	X	X

Sampling Equipment	
☐ Sample Container	☒ Van Dorn ☐ Pole
☐ Carboy	☐ Syringe
☐ Dipper	☐ Other <u>0mo#44</u>
Depth Measured with <u>YSI</u>	
Equipment ID	

Collection Method	
☐ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☒ Other <u>Bridge</u>	☐ Gasoline Motor

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

Photos: Yes ☒ No ☐ Flow: No Flow / Intestinal / Flowing / NA Flowing

Meter ID# YSF#3 Matrix: Fresh / Marine / DI Marine

Tides: Rising / Falling / Slack / NA Rising Tide Times: High 1200 Low

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (umhos/cm)	Temp. (C°)
EST	1225	1.4	0.3	0.6	7.6	105	7.88	7.41	12970	29.95
CEN										

Biological Samples Collected: None HA SCI RPS Algae ID LVS 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-NO3NO3 / ☒ W-TKN / ☒ W-TOC / ☒ W-S-A-TP	☒ Ice ☒ H2SO4			☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3			☒ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter	☒ Ice	<u>R9 BA 86875</u>		
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☐ Alkalinity / ☐ W-F / ☐ W-TSS / ☐ TURBIDITY / ☐ W-CI-IC / ☐ W-COLOR / ☐ W-SO4-IC / ☐ W-TDS	☐ Ice			
Physical/Aggregate (Marine)	☒ Alkalinity / ☐ W-BR-IC / ☐ W-F / ☐ W-TSS / ☐ TURBIDITY	☒ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☒ Enterococci	☒ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☒ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD	☒ Ice			
Tracers	☒ W-E8321-DI ☒ W-E8321-MS	☒ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA	☐ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C	☐ Ice			

Notes:

Contains: 1:1 H2SO4
Lot No.: SA9010030
Expires: 04/10/20
See Safety Data Sheet (SDS)

Place Preservation (If)

WIN ID/Field ID: G2NE0005

Miller Creek at Atlantic Blvd.

Signature: Jeremy Parish

Date: 9/17/19

LIMS EVENT ID:

WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT:

QC Station ID, Field Parameters In LIMS DMT:

Scan/Save Field Sheets

Migrate Data to WIN:

Verify Data in WIN:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: Puncheon above Point Meadows Dr

Date: 9/17/19
(mm/dd/yyyy)

WIN/ Field ID: G2NE1181

WBID: 2271

Latitude: 30.23382

(Decimal Degrees)

County: Duval

ORG ID: 21FLA

Longitude: 81.52043

(Decimal Degrees)

Receiving Body of Water: Mill Creek

RQ-2019- 09-16-13

Sampling Team Members

J. Parrish
K. Appleby

WQ Measurements
Sample Collection
Documentation
Preservation
Preservation Check

Sampling Equipment

☒ Sample Container ☐ Van Dorn ☐ Pole
☒ Carboy ☐ Syringe
☐ Dipper ☐ Other 0.1m2 #44
Depth Measured with 0.1m2
Equipment ID 0.1m2

Collection Method

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

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

Meter ID# YET #3

Matrix: Fresh / Marine / DI

Photos: Yes / No

Flow: No Flow / Intertidal / Flowing / 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 (PPT)	Sp COND (µmhos/cm)	Temp. (C°)
EST	920	0.28	0.14	0.28 S	6.05	73.0	7.25	0.19	391	24.65
CEN										

Biological Samples Collected: None HA CSI RPS Algae ID LVS 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 ☒ H ₂ SO ₄			☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO ₃			☒ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ 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-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci	☒ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD	☐ Ice			
Tracers	☒ W-E8321-DI ☒ W-E8321-MS	☒ Ice			
Pesticides	☒ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA	☒ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C				

Contains: 1:1 H₂SO₄
Lot No.: SA9010030
Expires: 04/10/20
See Safety Data Sheet (SDS)

Contains: 1:1 HNO₃
Lot No.: NA8344050
Expires: 12/10/19
See Safety Data Sheet (SDS)

Notes:

WIN ID/Field ID:



G2NE1181

Puncheon above Point Meadows Dr

Signature: Jeran Parrish

Date: 9/17/19

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID in LIMS DMT: QC Station ID, Field Parameters in LIMS DMT:

Scan/Save Field Sheets (Initials/Date) Migrate Data to WIN: (Initials/Date) Verify Data in WIN: (Initials/Date)

SCI Puncheon, and Miller Marine

Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: NE-DIST

Requester: Jeremy M. ParrishField Report Prepared By: Kimberly Appleby

Project ID: SMP

Collected By: J. Parrish + K. ApplebySampling Agency: FDEP NE ROL

Loc:	WIN ID/Field ID:		G2NE0005	☐ Comp ☒ Grab	Collection (comp begin or grab)	☒ Eastern ☐ Central	Composite end	Bottle Group(s)
Field:	Miller Creek at Atlantic Blvd.			Date	9/17/19	Time	1225	(See pg 2)
WIN:				Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen		☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C)	29.95	pH	7.88	Sample Depth
Loc:	WIN ID/Field ID:		G2NE1181	☐ Comp ☒ Grab	Collection (comp begin or grab)	☒ Eastern ☐ Central	Composite end	Bottle Group(s)
Field:	Puncheon above Point Meadows Dr			Date	9/17/19	Time	920	(See pg 2)
WIN:				Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen		☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C)	24.65	pH	7.25	Sample Depth
Loc:	WIN ID/Field ID:			☐ Comp ☐ Grab	Collection (comp begin or grab)	☐ Eastern ☐ Central	Composite end	Bottle Group(s)
Field:				Date		Time		
WIN:				Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen		☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C)		pH		Sample Depth
Loc:	WIN ID/Field ID:			☐ Comp ☐ Grab	Collection (comp begin or grab)	☐ Eastern ☐ Central	Composite end	Bottle Group(s)
Field:				Date		Time		
WIN:				Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen		☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C)		pH		Sample Depth

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
<u>R. Appleby</u>	<u>9/17/19 1530</u>	<u>Fed Ex</u>	<u>2</u>		

Group: A	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab <u>1</u>
	ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS					
Group: A	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab <u>1</u>
	CHLSUITE-W					
Group: A	Bottle Type:	P-250ML-WI-THI	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab <u>1 → sent to ALS</u>
	NE-ALS-ECQ					
Group: A	Bottle Type:	BG-500ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab <u>1</u>
	W-E8321-DI W-E8321-MS					
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	HNO3	Enter Number of Bottles Sent to Lab <u>1</u>
	W-ICP W-ICPMS					
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab <u>1</u>
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC					
Group: A	Bottle Type:	P-125ML	# of Bottles: 1	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab <u>1</u>
	W-PO4-F					
Group: A	Bottle Type:	BG-1L	# of Bottles: 4	Preservative:	ICE	Enter Number of Bottles Sent to Lab <u>KA 4 4</u>
	W-PSNP-TQ					
Group: B	Bottle Type:	PT-50ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab <u>0</u>
	ALGAL_ID					
Group: B	Bottle Type:	PJ-2L	# of Bottles: 2	Preservative:	Formalin	Enter Number of Bottles Sent to Lab <u>2</u>

Group: B	Bottle Type:	PJ-2L	# of Bottles: 2	Preservative:	Formalin	Enter Number of Bottles Sent to Lab	<u>1</u> KA
	MI-FW-QLDC						
Group: C	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	<u>1</u>
	ALKALINITY TURBIDITY W-BR-IC W-F W-TSS						
Group: C	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	<u>1</u>
	CHLSUITE-W						
Group: C	Bottle Type:	P-250ML-WI-THI	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	<u>1</u> → sent to ALS
	NE-ALS-ENQ						
Group: C	Bottle Type:	QPCR-P-500ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	<u>1</u>
	PCR-HF183						
Group: C	Bottle Type:	BG-500ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	<u>1</u>
	W-E8321-DI W-E8321-MS						
Group: C	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	<u>1</u>
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC						
Group: C	Bottle Type:	P-125ML	# of Bottles: 1	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	<u>1</u>
	W-PO4-F						

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

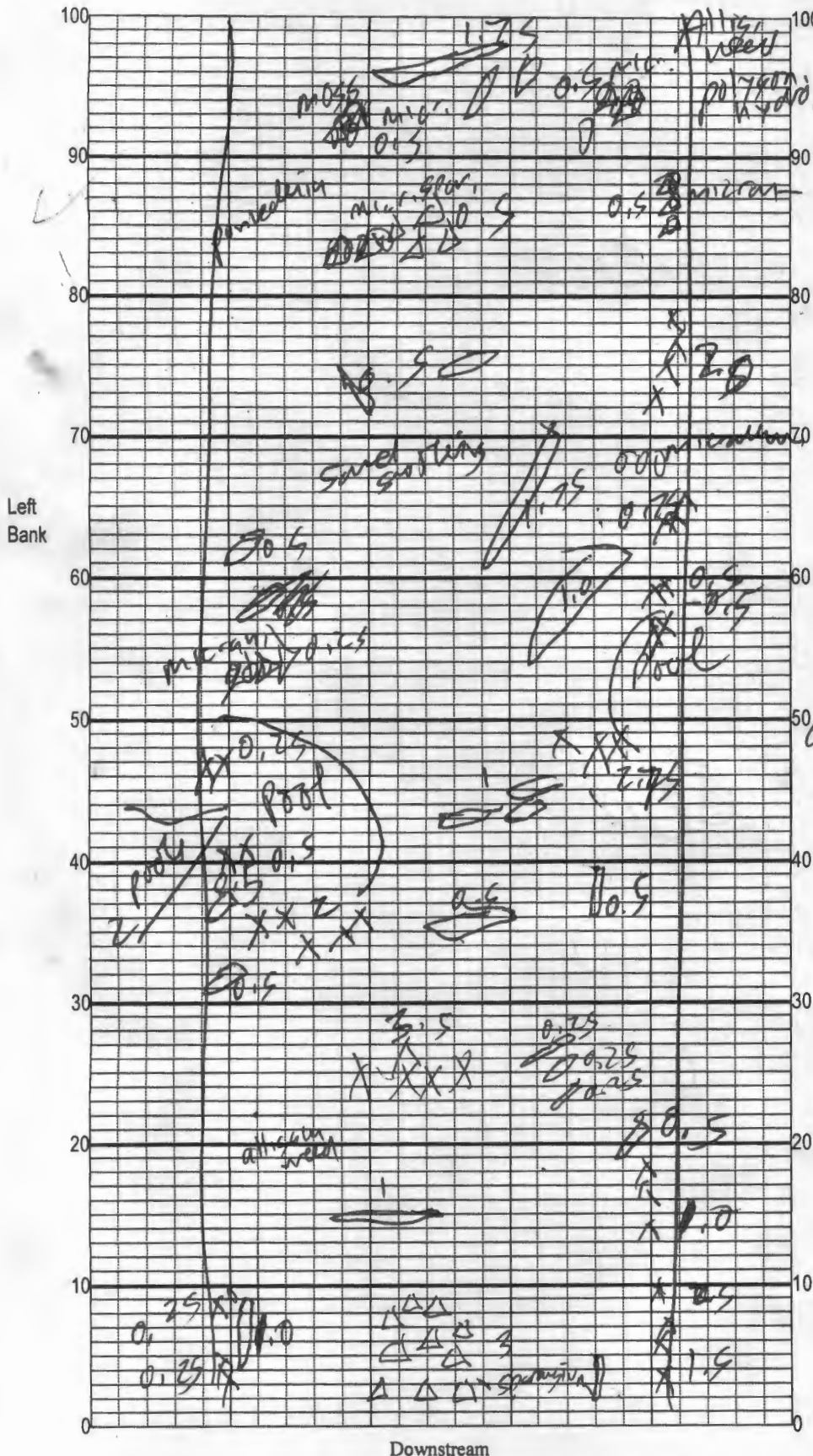
SAMPLING AGENCY: NE ROC		STORET STATION NUMBER: 62NE1181	DATE (MM/DD/YY): 9/17/19	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: Oval	LOCATION: Punchon @ Pt Meadows	FIELD ID/NAME:	

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>13</u>	20 19 18 17 16	15 14 <u>13</u> 12 11	10 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 <u>10</u> 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>15</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 <u>15</u> 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>13</u> Primary Score <u>50-49</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 <u>13</u> 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 <u>15-14</u>	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. 20 19 18 <u>17</u> 16	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered. <u>15</u> 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 <u>7</u> Left Bank <u>6</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> <u>6</u>	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>8</u> Left Bank <u>8</u>	Width of vegetation greater than 18 m 10 <u>8</u>	Width of vegetation >12 to 18m <u>8</u> 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>8</u> Secondary Score <u>63-62</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 <u>8</u>	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. <u>8</u> 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: 9/17/19	Analyst: Jerry Pann	Signature: Jerry Pann
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: Pondona Point meadows

Date: 9/12/19

Sampler: JParrish

100 m: Latitude _____
Longitude _____

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

☐ Snags 2%

☐ Roots/undercut banks 4.5%

☐ Leaf Packs (or mats) < 2.5%

☐ Aquatic Macrophytes 1.5%

☐ _____

☐ _____

☐ Pools total # observed = 3
range expected 2-4

Average width 0.4 m

Average depth 0.4 m

Velocity measured at 0850 meter mark.

WQ & chemistry taken at 30 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:

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

12 4 = 1%

0.25 1.25 2 1 1.5 1.25 8 = 2%

1.5 2.5 3.5 12.75 1.25 12

0.25 6 m

0.25

some smothering middle stream snags

4m wide

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 30.23382
 COUNTY Duval STORET # 62 NE 1161 LONGITUDE 81.52043
 DATE 9/17/19 TIME 920 SAMPLING AGENCY _____
 SITE NAME Pondwone Pt meadows
 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 ☐ <u>4</u> m wide		
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>12</u> Right Bank: <u>12</u>				Hydrologic Modification Score (per FT 3101) ☐		m/s <u>0.25</u> m/s ☐ m/s ☐ m deep <u>0.3</u> m deep ☐ m deep ☐		
High Water Mark: <u>0.6</u> + <u>0.4</u> = <u>1.0</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☒ Yes ☐ No		Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%) ☒ Heavily Shaded ☐ Moderate Shaded (46-80%)		
Artificially ☐ No ☒ Mostly recovered, more sinuous Channelized: ☐ Some recovery ☐ Recent, severe								

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></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>0.35</u></td> </tr> <tr> <td>Mid:</td> <td><u>0.14</u></td> <td><u>24.69</u></td> <td><u>7.25</u></td> <td><u>6.05</u></td> <td><u>73</u></td> <td><u>391</u></td> <td><u>0.19</u></td> <td>TOTAL DEPTH</td> </tr> <tr> <td>Bottom:</td> <td><u>0.3</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></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:								<u>0.35</u>	Mid:	<u>0.14</u>	<u>24.69</u>	<u>7.25</u>	<u>6.05</u>	<u>73</u>	<u>391</u>	<u>0.19</u>	TOTAL DEPTH	Bottom:	<u>0.3</u>							
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Woody Debris (Snags) <u>4.5</u> <u>5</u> <u>—</u> Undercut Banks / Roots <u>4.5</u> <u>5</u> <u>—</u> Leaf Packs or Mat Aquatic Vegetation <u>1.5</u> <u>5</u> <u>—</u> Rock or Shell Rubble..... Sand..... <u>89</u> <u>5</u> <u>—</u> Mud / Muck / Silt Other Other		System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐		Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐																																					
		Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐		Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____																																					
		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 <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.														
	Not Obs.	Rare	Common	Abundant																																					
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SAMPLING TEAM Jerry Parrott / Kim Appleby SIGNATURE: [Signature] 9/17/19

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Punchon @ Paintready County: Doral Date: 9/12/19 Investigators: J Parrish

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	N		60	1	N	N		
	2					2				
	3					3				
	4					4				
	5					5				76
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N	N		70	1	N	N		
	2					2				
	3					3				
	4					4				
	5					5				88
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N	N		80	1	N	N		
	2					2				
	3					3				
	4					4				
	5					5				96
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N	N		90	1	N	N		
	2					2				
	3					3				
	4					4				
	5					5				85
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N	N		100	1	N	N		
	2					2				
	3					3				
	4					4				
	5					5				96
	6					6				
	7					7				
	8					8				
	9					9				
50	1	N	N			1	N	N		
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				

STORET Station Number: 62NE1181

Secchi depth 100
Estimated?

points ranked 4-6 0
total points assessed 99
% points ranked 4-6 0

Check accompanying data collected at same site/date.
 Algal mat sample N/A
 Linear Veg Survey Y
 Habitat Assessment Y
 SCI/Biorecon Y
 Water sample
 RQ- 2019-09-16-13

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 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Waterbody: <u>Pond on Branch Point Meadows</u>	Date: <u>9/17/14</u>	County: <u>Bural</u>	Storet Number: <u>62 Mc 1181</u>
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Analyst: <u>Jerem Cassa</u>	Signature: <u>Jerem Cassa</u>
Comments:	

Comments:

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

[illegible]