

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:

57164

RQ:

2019-10-222

Project:

LSR ~~SLD~~ ^{EAST}

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

6/20/19

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.	J Parnish	10/22/19	742	23.2	756	8.5	8.5	99.5		1.025	⓪ / F	L / F
ICV	J	J	743	23.1	756	8.5	8.5	99.5		1.025	P / F	L / F
CCV	J Parnish	10/22/19	1359	25.5	754	8.1	8.2	100.3		1.025	⓪ / F	L / 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 hos/cm	Meter Reading μ hos/cm	Pass / Fail	Lab / Field
Calibr.	J Parnish	10/22/19	744	190711B	7/20	1000	1000	⓪ / F	L / F
ICV	J	J	746	147103	7/20	100	104	⓪ / F	L / F
CCV	J Parnish	10/22/19	1400	190711C	7/20	50,000	50862	⓪ / F	L / 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.	J Parnish	10/22/19	749	2902778	1/21	7.00	24.3	7.01	165.8	⓪ / F	L / F
Calibr.	J	J	750	2904 B00	3/21	4.00	24.4	4.00	165.7	⓪ / F	L / F
Calibr.	J	J	751	2910 F55	4/20	10.00	24.4	10.01	184.5	⓪ / F	L / F
ICV	J	J	752	2904 B00	3/21	4.00	24.0	4.02	163.1	⓪ / F	L / F
CCV	J Parnish	10/22/19	1402	2910 F55	4/20	10.00	24.6	9.95	183.8	⓪ / F	L / F
CCV										P / F	L / F

pH Acceptance criteria ± 0.2 SU;

mV pH 7 Range 0 $\pm$ 50;

mV pH 4 Range +180 $\pm$ 50;

mV pH 10 Range -180 $\pm$ 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: _____

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	J Parnish	10/22/19	752	0.00	0.00	⓪ / F	L / 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

Data Qualified?

Yes / No

WIN Station Name: GREENFIELD CREEK @ QUEENS HARBOUR BLVD.

Date: 10/22/2019

(mm/dd/yyyy)

WIN/ Field ID: 20030809

WBID: 2240B

Latitude: 30.33008

(Decimal Degrees)

County: Duval

ORG ID: 21FLA

Longitude: 81.45656

(Decimal Degrees)

Receiving Body of Water: Chicopit Bay

RQ-2019- 10-21-22

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

Sampling Equipment	
☐ Sample Container	☒ Van Dorn ☐ Pole
☐ Carboy	☒ Syringe
☐ Dipper	☐ Other
Depth Measured with <u>Stitch</u>	
Equipment ID <u>Ortho K.T #44</u>	

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

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

Meter ID# Stitch Matrix: Fresh / Marine / DI

Photos: Yes / No Flow: No Flow / Intertidal / Flowing / NA Tide: Rising/ Falling/ Slack/ NA Tide Times: High Low 900

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	905	0.35	0.15	0.35	5.52	67.1	6.74	2.56	4786	24.5
CEN				5						

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-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4	SA9129100	5/2020	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3	NA9189080	7/2020	☒ <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	☒ Ice			
	☒ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD				
Tracers	☒ W-E8321-DI ☒ W-E8321-MS	☒ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI	☐ Ice			
	☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA				
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C	☐ Ice			

Notes:

WIN ID/Field ID: 20030809

GREENFIELD CREEK @ QUEENS HARBOUR BLVD.

Signature: [Signature] Date: 10/22/2019

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: Miller Creek at Atlantic Blvd.

Date: 10/22/2019
(mm/dd/yyyy)

WIN/ Field ID: G2NE0005

WBID: 2287B

Latitude: 30.30598

(Decimal Degrees)

County: Duval

ORG ID: 21FLA

Longitude: 81.62883

(Decimal Degrees)

Receiving Body of Water: SJR

RQ-2019- 10-21-22

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Parrish					☒	☒	☒	☒	☒
K. Appleby					☒	☒	☒	☒	☒

Sampling Equipment		
☐ Sample Container	☒ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Depth Measured with <u>Stitch</u>		
Equipment ID <u>Ortho Kit #44</u>		

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

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded
Photos: Yes ☒ No ☐ Flow: No Flow / Intestinal / Flowing / NA
Tide: Rising/ Falling/ Slack/ NA
Tide Times: High 9:50 Low 5:50

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	9:50	0.3	0.15	0.3	2.0	24.4	6.83	0.66	1325	24.5
CEN				5						

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

S BIO 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	SA9129100	5/2020	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter	☒ Ice	R9BA86875		
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	☐ Ice			

Notes:

WIN ID/Field ID: G2NE0005

Miller Creek at Atlantic Blvd.

Signature: [Signature] Date: 10-22-2019

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)



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified
Yes / No

WIN Station Name: NEWCASTLE CR @ FT CAROLINE HILLS RD

Date: 10/22/19
(mm/dd/yyyy)

WIN/ Field ID: 20030872

WBID: 2235

Latitude: 30.36576

(Decimal Degrees)

County: Duval

ORG ID: 21FLA

Longitude: 81.57967

(Decimal Degrees)

Receiving Body of Water: SJR

RQ-2019- 10-21-22

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment									
<u>J. Harnish</u> <u>K. Appleby</u>					☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☒ Pole							
										☐ Carboy	☐ Syringe								
										☐ Dipper	☐ Other								
Depth Measured with <u>shovel</u>					Equipment ID <u>000014 #44</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>stich</u>					Matrix: <u>Fresh</u> Marine/ DI									
Photos: Yes / <u>No</u>					Flow: No Flow / Intestinal / <u>Flowing</u> / NA					Tide: Rising/ Falling/ Slack/ <u>NA</u>					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	<u>1220</u>	<u>0.1</u>	<u>0.09</u>	<u>0.1</u>	<u>5.76</u>	<u>68.4</u>	<u>6.58</u>	<u>0.13</u>	<u>281</u>	<u>24.0</u>									
CEN				<u>S</u>															
Biological Samples Collected: <u>None</u> 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-NO2NO3 / W-TKN / W-TOC / W-S-A-TP					☒ Ice ☒ H2SO4		<u>SA9129100</u>		<u>5/2020</u>		☒ <2						
Metals		☒ W-ICPMS ☐ W-ICP					☒ Ice ☒ HNO3		<u>NA9199880</u>		<u>7/2020</u>		☒ <2						
Filtered Nutrients		☒ W-PO4-F ☐ Field Filtered 0.45 µm Filter					☒ Ice		<u>R9181988</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					☐ Ice												
		☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD																	
Tracers		☐ W-E8321-DI ☐ W-E8321-MS					☐ Ice												
Pesticides		☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI					☐ Ice												
		☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA																	
Phytoplankton		☐ DTY-QN-C ☐ PKD-QN-C																	

Contains: 1:1 H2SO4
Lot No.: SA9129100
Expires: 05/09/20
See Safety Data Sheet (SDS)

Contains: 1:1 HNO3
Lot No.: NA9199880
Expires: 07/08/20
See Safety Data Sheet (SDS)

THIOMERON FISHES IDENTIFICATION
320 NORTH MAIN STREET
TALLAHASSEE, FL 32304
904-224-1111
1-800-650-2711

Contains: 1:1 H2SO4
Lot No.: SA9129100
Expires: 05/09/20
See Safety Data Sheet (SDS)

THIOMERON FISHES IDENTIFICATION
320 NORTH MAIN STREET
TALLAHASSEE, FL 32304
904-224-1111
1-800-650-2711

Contains: 1:1 HNO3
Lot No.: NA9199880
Expires: 07/08/20
See Safety Data Sheet (SDS)

Notes:

WIN ID/Field ID:



20030872

NEWCASTLE CR @ FT CAROLINE HILLS RD

Signature:

Jerry Bunn

Date:

10/22/19

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:

(Initials/Date)

(Initials/Date)

(Initials/Date)



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: STRAWBERRY CR AT END OF BOWLAN RD.

Date: 10/27/2019
(mm/dd/yyyy)

WIN/ Field ID: 20030579

WBID: 2239

Latitude: 30.32489

(Decimal Degrees)

County: Duval

ORG ID: 21FLA

Longitude: -81.56995

(Decimal Degrees)

Receiving Body of Water: Arlington River

RQ-2019- 10-21-32

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
<u>J. Parrish</u> <u>K. Appleby</u>					☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☐ Pole		
										☐ Carboy	☐ Syringe			
										☐ Dipper	☐ Other			
										Depth Measured with <u>meters</u>				
										Equipment ID <u>ORW KR 44</u>				
										Collection Method				
					☒ Wading			☐ Canoe/Kayak						
					☐ From Shore			☐ Electric Motor						
					☐ Other			☐ Gasoline Motor						
Water Level: Dry/ Pooled/ Low / Normal <u>High</u> / Flooded					Meter ID# <u>Stretch</u>					Matrix: <u>Fresh</u> Marine / DI				
Photos: Yes ☒ No ☐					Flow: No Flow / Intertidal / <u>Flowing</u> / NA					Tide: Rising/ Falling/ Slack <u>NA</u>				
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	1020	0.1	0.05	0.1	5.60	66.6	6.89	0.17	360.4	24.0				
CEN				5										
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-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☒ Ice ☒ H2SO4		<u>SA9129100</u>	<u>5/2020</u>	☒ <2					
Metals	☒ W-ICPMS ☒ W-ICP				☒ Ice ☒ HNO3		<u>NA989080</u>	<u>7/2020</u>	☒ <2					
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice		<u>R98A86575</u>							
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				☐ Ice									

Notes:

WIN ID/Field ID:



20030579

STRAWBERRY CR AT END OF BOWLAN RD.

Signature: [Signature]

Date: 10/27/19

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:

(Initials/Date)

(Initials/Date)

(Initials/Date)



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: 10/22/2019
(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- 10-21-22

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Parrish									
R. Appleby									

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Depth Measured with <u>Stitch</u>		
Equipment ID <u>Ortho Kit #44</u>		

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

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded
Photos: Yes No Flow: No Flow / Intestinal / Flowing / NA
Tide: Rising/ Falling/ Slack NA Tide Times: High Low
Matrix: Fresh / Marine / DI

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°)
<u>EST</u>	<u>1250</u>	<u>0.22</u>	<u>0.11</u>	<u>0.22</u>	<u>6.32</u>	<u>75.8</u>	<u>6.96</u>	<u>0.16</u>	<u>343.6</u>	<u>24.7</u>
CEN				<u>5</u>						

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-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4	<u>SA9129100</u>	<u>5/2020</u>	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3	<u>NA9189080</u>	<u>7/2020</u>	☒ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice	<u>R9RA86875</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:

WIN ID/Field ID:



G2NE1181

Puncheon above Point Meadows Dr

Signature:

Date:

10/22/2019

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)

(Initials/Date)

(Initials/Date)

(Initials/Date)

QA/QC Sample Information Duplicate

Time Zone: EST CEN		Time: _____		Field ID: _____	
(WIN ID + DUP)					
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		Place Preservative Sticker(s) Here (If Available)	
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			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci	☐ 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-AHERB-AA ☐ W-PYR-AA-R ☐ W-CARB-AA ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other _____			

Blank

Time Zone: EST CEN		Time: _____		Field ID: _____	
(BLANK_DDDMMYYYY)					
DI Source: _____		Location: _____			
☐ Field Blank ☐ Equipment Blank ☐ Field Cleaned Equipment Blank		Equipment ID: _____			
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		Place Preservative Sticker(s) Here (If Available)	
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			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci	☐ 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-AHERB-AA ☐ W-PYR-AA-R ☐ W-CARB-AA ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other _____			
Notes: Place Label Here					
Signature: _____					Date: _____

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

(Initials/Date)

Scan/Save Field Sheets _____ Migrate Data to WIN: _____ Verify Data in WIN: _____

(Initials/Date)

(Initials/Date)

(Initials/Date)

LSJR East

Central Laboratory Submittal Form

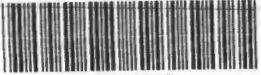
last revised Jan 25, 2018

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

Location	WIN ID/Field ID:  20030809	☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>10/22/2019</u> Time <u>905</u>	☒ Eastern ☐ Central	Composite end Date _____ Time _____	Bottle Group(s) (See pg 2)
Field ID	GREENFIELD CREEK @ QUEENS HARBOUR BLVD.	Matrix (type, e.g., Salt, Fresh, etc) <u>Salt</u>	Diss. Oxygen <u>5.52</u>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L) <u>—</u>	B
WIN/STC		Temp (C) <u>24.5</u>	pH <u>6.71</u>	Sample Depth <u>0.15</u> ☐ ft ☒ m	Sp. Conductance (umho/cm) <u>4786</u>	
Latitude	☐ dd Longitude ☐ dms	☐ dd Salinity (ppt) <u>2.56</u>	Comments			
Loca	WIN ID/Field ID:  G2NE0005	☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>10/22/2019</u> Time <u>950</u>	☒ Eastern ☐ Central	Composite end Date _____ Time _____	Bottle Group(s)
Field	MILLER CREEK AT ATLANTIC BLVD.	Matrix (type, e.g., Salt, Fresh, etc) <u>K-Salt Fresh</u>	Diss. Oxygen <u>2.0</u>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L) <u>—</u>	A
WIN		Temp (C) <u>24.5</u>	pH <u>6.83</u>	Sample Depth <u>0.15</u> ☐ ft ☒ m	Sp. Conductance (umho/cm) <u>1325</u>	
Latitude	☐ dd Longitude ☐ dms	☐ dd Salinity (ppt) <u>0.66</u>	Comments			
Loca	WIN ID/Field ID:  20030872	☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>10/22/2019</u> Time <u>1220</u>	☒ Eastern ☐ Central	Composite end Date _____ Time _____	Bottle Group(s)
Field	NEWCASTLE CR @ FT CAROLINE HILLS RD	Matrix (type, e.g., Salt, Fresh, etc) <u>Fresh</u>	Diss. Oxygen <u>5.76</u>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L) <u>—</u>	D
WIN		Temp (C) <u>24.0</u>	pH <u>6.58</u>	Sample Depth <u>0.09</u> ☐ ft ☒ m	Sp. Conductance (umho/cm) <u>281</u>	
Latitude	☐ dd Longitude ☐ dms	☐ dd Salinity (ppt) <u>0.13</u>	Comments			
Loca	WIN ID/Field ID:  20030579	☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>10/22/2019</u> Time <u>1020</u>	☒ Eastern ☐ Central	Composite end Date _____ Time _____	Bottle Group(s)
Field	STRAWBERRY CR AT END OF BOWLAN RD.	Matrix (type, e.g., Salt, Fresh, etc) <u>Fresh</u>	Diss. Oxygen <u>5.60</u>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L) <u>—</u>	D
WIN		Temp (C) <u>24.0</u>	pH <u>6.89</u>	Sample Depth <u>0.05</u> ☐ ft ☒ m	Sp. Conductance (umho/cm) <u>360.4</u>	
Latitude	☐ dd Longitude ☐ dms	☐ dd Salinity (ppt) <u>0.17</u>	Comments			

Relinquished By: <u>K. Appleby</u>	Date/Time <u>10/22/2019 1530</u>	Shipping Method <u>Fed Ex</u>	Number of Coolers Shipped: <u>2</u>	Received By:	Date/Time
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Group: A	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: 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-120ML-WC-THI	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	<u>2 → sent to ALS</u>
	NE-ALS-ENQ						
Group: A	Bottle Type:	QPCR-P-500ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	<u>1</u>
	PCR-HF183						
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:	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: B	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: B	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	<u>1</u>

LSJR East

Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: NE-DIST

Requester: Jeremy M. Parrish

Field Report Prepared By:

Kimberly Appleby

Project ID: SMP

Collected By: J. Parrish & K. Appleby

Sampling Agency:

FDEP NE ROL

Location	WIN ID/Field ID:  G2NE1181	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 10/22/2019 Time 1250	☒ Eastern ☐ Central	Composite end Date _____ Time _____	Bottle Group(s) (See pg 2)
Field ID		Matrix (type, e.g., Salt, Fresh, etc) Fresh	Diss. Oxygen 6.32	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L) _____	L
WIN/S	Puncheon above Point Meadows Dr	Temp (C) 24.7	pH 6.96	Sample Depth 0.11	Sp. Conductance (umho/cm) 343.6	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt) 0.16	Comments	
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____	Eastern Central	Composite end Date _____ Time _____	Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #		Temp (C)	pH	Sample Depth	Sp. Conductance (umho/cm)	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments	
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____	Eastern Central	Composite end Date _____ Time _____	Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #		Temp (C)	pH	Sample Depth	Sp. Conductance (umho/cm)	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments	
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____	Eastern Central	Composite end Date _____ Time _____	Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #		Temp (C)	pH	Sample Depth	Sp. Conductance (umho/cm)	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments	

Relinquished By: K. Appleby	Date/Time 10/22/2019 1530	Shipping Method Fed Ex	Number of Coolers Shipped: 2	Received By:	Date/Time
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Group: A	Bottle Type: P-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab _____
ALKALINITY				
TURBIDITY				
W-BR-IC				
W-F				
W-TSS				
Group: A	Bottle Type: BP-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab _____
CHLSUITE-W				
Group: A	Bottle Type: P-120ML-WC-THI	# of Bottles: 2	Preservative: ICE	Enter Number of Bottles Sent to Lab _____
NE-ALS-ENQ				
Group: A	Bottle Type: QPCR-P-500ML	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab _____
PCR-HF183				
Group: A	Bottle Type: BG-500ML	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab _____
W-E8321-DI				
W-E8321-MS				
Group: A	Bottle Type: P-500ML	# of Bottles: 1	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab _____
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 _____
W-PO4-F				
Group: B	Bottle Type: P-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab _____
ALKALINITY				
TURBIDITY				
W-CL-IC				
W-COLOR				
W-F				
W-SO4-IC				
W-TDS				
W-TSS				
Group: B	Bottle Type: BP-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab _____

Group: B	Bottle Type: BP-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
CHLSUITE-W					
Group: B	Bottle Type: P-120ML-WC-THI	# of Bottles: 2	Preservative: ICE	Enter Number of Bottles Sent to Lab	2 → sent to ALS
NE-ALS-ECQ					
Group: B	Bottle Type: QPCR-P-500ML	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
PCR-HF183					
Group: B	Bottle Type: BG-500ML	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
W-E8321-DI					
W-E8321-MS					
Group: B	Bottle Type: P-500ML	# of Bottles: 1	Preservative: HNO3	Enter Number of Bottles Sent to Lab	1
W-ICP					
W-ICPMS					
Group: B	Bottle Type: P-500ML	# of Bottles: 1	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
W-NH3					
W-NO2NO3					
W-S-A-TP					
W-TKN					
W-TOC					
Group: B	Bottle Type: P-125ML	# of Bottles: 1	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab	1
W-PO4-F					
Group: C	Bottle Type: P-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	4
ALKALINITY					
TURBIDITY					
W-CL-IC					
W-COLOR					
W-F					
W-SO4-IC					
W-TDS					
W-TSS					
Group: C	Bottle Type: BP-1L	# of Bottles: 1	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
CHLSUITE-W					
Group: C	Bottle Type: P-120ML-WC-THI	# of Bottles: 2	Preservative: ICE	Enter Number of Bottles Sent to Lab	2 → sent to ALS

Group: C	Bottle Type: P-120ML-WC-THI	# of Bottles: 2	Preservative: ICE	Enter Number of Bottles Sent to Lab	1
NE-ALS-ECQ					
Group: C	Bottle Type: P-500ML	# of Bottles: 1	Preservative: HNO3	Enter Number of Bottles Sent to Lab	1
W-ICP					
W-ICPMS					
Group: C	Bottle Type: P-500ML	# of Bottles: 1	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
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	1
W-PO4-F					
Group: D	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: D	Bottle Type: P-120ML-WC-THI	# of Bottles: 4	Preservative: ICE	Enter Number of Bottles Sent to Lab	4 → Sent to ALS
NE-ALS-ECQ					
Group: D	Bottle Type: P-500ML	# of Bottles: 2	Preservative: HNO3	Enter Number of Bottles Sent to Lab	2
W-ICP					
W-ICPMS					
Group: D	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: D

Bottle Type:

P-125ML

of Bottles: 2

Preservative: FILTER-ICE

Enter Number of Bottles Sent to Lab

2

W-PO4-F

Group D
★Add
chl aophyll A
Suite# bottle 1 preserve # bottle
Ice r' kb

2

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

SAMPLING AGENCY:		STORET STATION NUMBER: <u>20530579</u>	DATE (mm/dd/yy): <u>10/22/19</u>	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: <u>Doral</u>	LOCATION: <u>Strawberry Creek @ End of Rowland</u>		FIELD ID/NAME:

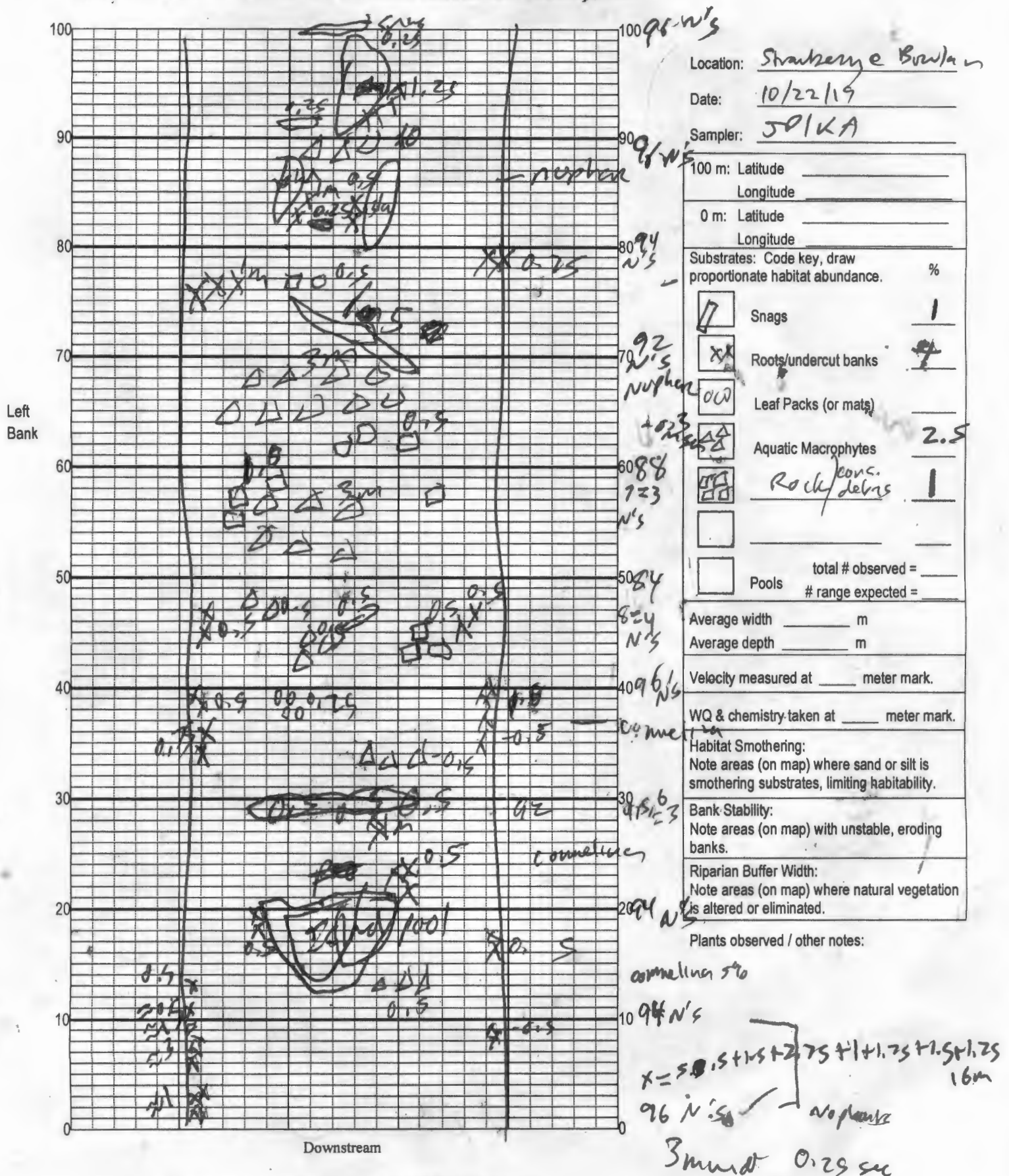
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock]	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh 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>16</u>	20 19 18 17 <u>16</u>	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>7</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 <u>7</u> 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>17</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 <u>17</u> 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>13</u> Primary Score <u>53</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	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 or straightening 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>19</u>	20 <u>19</u> 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the woody root zone with few raw, eroded areas.	Only meets 2 of the 3 requirements for optimal bank stability.	Only meets 1 of the 3 requirements for optimal bank stability.	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the woody root zone with raw, eroded areas.
Right Bank <u>8</u> Left Bank <u>4</u>	10 9	<u>8</u> 7 6	5 4	3 2 1
Riparian Buffer Zone Width	Width of vegetation greater than 18 m	Width of vegetation >12 to 18m	Width of vegetation 6 to 12 m. human activities close to system	Less than 6 m of buffer zone due to intensive human activities
Right Bank <u>5</u> Left Bank <u>3</u>	10 9	8 7 6	<u>5</u> 4	<u>3</u> 2 1
Riparian Zone Vegetation Quality	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.	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed.	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).
Right Bank <u>7</u> Left Bank <u>5</u> Secondary Score <u>55</u>	10 9	8 <u>7</u> <u>5</u>	<u>5</u> 4	3 2 1

108

TOTAL SCORE

Date: <u>10/22/19</u>	Analyst: <u>Jeremy Pann / Kim Appleby</u>	Signature: <u>[Signature]</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).

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

SAMPLE ID _____	ORG ID _____	LATITUDE <u>30.32489</u>
COUNTY _____	STORET # <u>20130579</u>	LONGITUDE <u>-81.56995</u>
DATE <u>10/22/19</u>	TIME <u>1020</u>	SAMPLING AGENCY _____
SITE NAME <u>Shubert's bowler</u>		
FIELD ID/NAME _____ RECEIVING BODY OF WATER _____		

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) ☐		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>3.5</u> m wide _____ m/s <u>0.27</u> m/s _____ m/s _____ m deep <u>0.3</u> m deep _____ m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>4.6</u> Right Bank: <u>6-12</u>		Hydrologic Modification Score (per FT 3101) _____
High Water Mark: <u>0.4</u> + <u>0.3</u> = <u>0.7</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 ☒ TRPS ☒ LVS ☐ LCI ☐ BioRecon		WATER QUALITY <table border="1" style="width:100%"> <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></td> </tr> <tr> <td>Mid:</td> <td><u>0.15</u></td> <td><u>21.0</u></td> <td><u>6.99</u></td> <td><u>5.60</u></td> <td><u>66.6</u></td> <td><u>360</u></td> <td><u>0.17</u></td> <td>☒ VOB</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:									Mid:	<u>0.15</u>	<u>21.0</u>	<u>6.99</u>	<u>5.60</u>	<u>66.6</u>	<u>360</u>	<u>0.17</u>	☒ VOB	Bottom:	<u>0.3</u>							
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Woody Debris (Snags) <u>1</u> Undercut Banks / Roots <u>4</u> Leaf Packs or Mat Aquatic Vegetation <u>2.5</u> Rock or Shell Rubble.. <u>1</u> Sand..... <u>91</u> Mud / Muck / Silt Other Other		Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐ Clarity Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐																																							
System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐		AMBIENT FIELD CONDITIONS / NOTES: <u>No SCI</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																							

SAMPLING TEAM <u>Jerry Rand / Kim Appleby</u>	SIGNATURE: <u>Jerry Rand</u>	DATE: <u>10/22/19</u>
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DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>Strawberry Creek</u>					County: <u>Duval</u>		Date: <u>10/22/19</u>		Investigator: <u>JP/KA</u>		
STORET Station Number: <u>20030579</u>											
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	96	60	1	N	N	88		
	2										
	3										
	4										
	5										
	6										
	7										
	8										
	9										
10	1	N	N	94	70	1	N	N	92		
	2										
	3										
	4										
	5										
	6										
	7										
	8										
	9										
20	1	N	N	94	80	1	N	N	94		
	2										
	3										
	4										
	5										
	6										
	7										
	8										
	9										
30	1	N	N	92	90	1	N	N	96		
	2	N									
	3	N									
	4	3									
	5	3									
	6	3									
	7	N									
	8	N									
	9	N									
40	1	N	N	96	100	1	N	N	96		
	2										
	3										
	4										
	5										
	6										
	7										
	8										
	9										
50	1	N	N	84 96 96	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%.						
	2										
	3										
	4										
	5										
	6										
	7										
	8										
	9										

Secchi depth 2.3
Estimated?

points ranked 4-6 1
total points assessed 97
% points ranked 4-6 1%

Check accompanying data collected at same site/date.
Algal mat sample N
Linear Veg Survey 7
Habitat Assessment Y
SCI/Biorecon N
Water sample
RQ- 2019-10-21-22

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

Waterbody: <u>Strawberry Creek of Boulton</u>	Date: <u>10/21/13</u>	County: <u>Overseas</u>	Store Number: <u>20031519</u>
Analyst: <u>J. Parnish</u>	Signature: <u>[Signature]</u>		
Comments: <u>.</u>			

	Meter Mark										Meter Mark												
HERBACEOUS SPECIES	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)	HERBACEOUS SPECIES	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
<i>Alternanthera philoxeroides</i>					X							<i>Micranthemum glomeratum</i>											
<i>Bacopa caroliniana</i>												<i>Micranthemum umbrosum</i>											
<i>Bacopa monnieri</i>												<i>Myriophyllum aquaticum</i>											
<i>Bidens mitis</i>												<i>Najas guadelupensis</i>											
<i>Boehmeria cylindrica</i>												<i>Nuphar luteum</i>											
<i>Centella asiatica</i>												<i>Orontium aquaticum</i>											
<i>Ceratophyllum demersum</i>												<i>Panicum hemitomon</i>											
<i>Chara</i>												<i>Panicum repens</i>											
<i>Cicutula maculata</i>												<i>Panicum rigidulum</i>											
<i>Cladium jamaicense</i>												<i>Pistia stratioides</i>											
<i>Colocasia esculenta</i>												<i>Polygonum glabra</i>											
<i>Commelina diffusa</i>					x	p x						<i>Polygonum hydropiperoides</i>											
<i>Commelina virginica</i>					x	D x						<i>Polygonum punctatum</i>											
<i>Crinum americanum</i>												<i>Pontedaria cordata</i>											
<i>Diodia virginiana</i>												<i>Potamogeton illinoensis</i>											
<i>Eichhornia crassipes</i>												<i>Ruellia simplex</i>											
<i>Eleocharis (wispy viviparus)</i>												<i>Sacciolepis striata</i>											
<i>Hydrilla verticillata</i>												<i>Sagittaria kurziana</i>											
<i>Hydrocotyle</i>												<i>Sagittaria lancifolia</i>											
<i>Hypochaeris polysperma</i>					x	D X						<i>Sagittaria latifolia</i>											
<i>Hymenocallis</i>												<i>Salvinia minima</i>											
<i>Lachnanthes caroliniana</i>												<i>Samolus parviflora</i>											
<i>Landoltia punctata</i>												<i>Saururus cernuus</i>											
<i>Lemna</i>												<i>Sparganium americanum</i>											
<i>Limnophila sessiliflora</i>												<i>Typha</i>											
<i>Ludwigia leptocarpa</i>												<i>Vallisneria americana</i>											
<i>Ludwigia palustris</i>												<i>Zizania aquatica</i>											
<i>Ludwigia peruviana</i>																							
<i>Ludwigia repens</i>																							
<i>Luziola fluitans</i>																							
If no Dominant or Co-Dominant were selected, indicate with "X"																							
Indicate % cover macrophytes per section																							