

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: 154177

RQ: 2021-01-18-44

Project: 2021 SMP

- 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 04/21/21 03/30/21

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.	Ben Harden	04/07/21	0748	21.1	758.5	8.9	8.90	100.0		1.030	P / F	L / F
ICV	"	"	0804	20.9	758.8	8.9	8.96	100.4			P / F	L / F
CCV	"	"	1459	23.1	757.7	8.6	8.82	103.0			P / 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 mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Ben Harden	04/07/21	0749	201209D	12/21	1000	1000	P / F	L / F
ICV	"	"	0750	2905F63	05/21	100.0	101.0	P / F	L / F
CCV	"	"	1501	202090	12/21	1000	1003	P / 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.	Ben Harden	04/07/21	0753	201209F	06/22	7.01	20.9	7.02	-33.7	P / F	L / F
Calibr.	"	"	0757	201112A	05/22	4.01	20.8	4.00	145.1	P / F	L / F
Calibr.	"	"	0801	200407A	10/21	10.05	20.8	10.05	-196.2	P / F	L / F
ICV	"	"	0802	"	"	10.05	20.6	10.00	-196.0	P / F	L / F
CCV	"	"	1503	201112A	05/22	4.01	21.8	4.03	141.6	P / F	L / 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 10 162.5, slope from 4 to 7 179.8 (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: #1, #1; Date of last verification: 03/30/21

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						P / 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
CHAIN OF CUSTODY FORM

Date: 4/7/2021
Customer: TLH-DIST
RQ: RQ-2021-01-18-44

Collected By: Ben Harden, Paul Blair
Sampling Agency: FDEP
Project ID: SMP

PLEASE RETURN THE ORIGINAL OF THIS FORM WITH SAMPLE SUBMITTAL
FORMS AND THE COOLER PACKING WORKSHEET TO THE LAB

Number of Coolers Shipped: 1

Delivery Method: HandDelivered

FIELD ID (Labels) submitted under this RQ for this collection date.

Site Location	Field ID/WIN ID
Sugar Creek @ Suwannee River BH	 G1TLHR0047 BH
Parker Creek @ Park	 G3TLHR0040

RELINQUISHED BY(SIGNATURE):

DATE/TIME:

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By:

Rec'd/Inspected Date:





FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: Parker Creek @ Park

Date: 4/7/2021

WIN/Field ID: G3TLHR0040

WBID: 1141A

ENR: -

Latitude: 30.1448

County: BAY

Org ID: 21FLTLHR

Longitude: -85.5854

Receiving Body of Water: Choctawhatchee - St. Andrew

RQ: 2021-01-18-44

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Ben Harden	x	x	x	x	x
☒	Paul Blair		x	x	x	x
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☐ Syringe	☐ Pole
Depth measured with: Secchi	
Secchi Equipment ID: #1	
Collection Method	
☒ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other _____	☐ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# 154177			
Photos: NO	Flow: FLOW	Tide: N/A	Tide Times: High: Low:						
Biological Samples Collected: ☐ None ☒ HA ☒ SCI ☒ RPS ☐ Algae ID ☒ LVS ☐ LVI Other:									
SBIO ID Numbers:									
Notes:									

Duplicate Sample

Time Zone: EST	Time: _____	Field ID: N/A	(WIN ID_DUP)
WIN DMT Activity ID: _____			

Blank

Time Zone: _____	Time: _____	Field ID: _____	(Blank Type_DDDMMYY)
DI Source: _____	Location: _____		
DI Type: _____	Equipment ID: _____		
DI Container (Name/ID):		DI Container Type:	

LIMS EVENT ID: _____ WIN Import ID: _____

Enter Field Parameters, Verify Station ID In LIMS DMT: _____ QC Station ID, Field Parameters In LIMS DMT: _____
(Initials/Date) (Initials/Date)

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



RQ-2021-01-18-44

Customer: WQAP

Project ID: SMP

Collected By: Ben Harden, Paul Blair

Field Report Prepared By: Ben Harden

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G3TLHR0040

Location: Parker Creek @ Park

Comments:

Matrix: Fresh

(Check one)

☒ GRAB☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPT _h)
4/7/2021	1140 EST	4.73	51.6	19.6	5.53	0.3	0.6 ☒ VOB (S)	0.6	117.1	0.05
	EST						Central Lab please use top row for login purposes			

Parameter Suite	Parameter Methods	Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP Lot # SA0293040 Exp: 10/19/21	☒ Ice ☒ H2SO4*	☒ <2	1	A
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD Lot # NA0344060 Exp: 01/04/22	☒ Ice ☒ HNO3*	☒ <2	1	A
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter Filter Lot # 16968882 Syringe Lot # 0079900	☒ Ice		1	A
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice		1	A
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates (PJ-2L)	☒ MI-FW-QLDC	☒ Formalin		2	B
Periphyton (PT-50ML)	☐ ALGAE-ID	☐ Ice			
Microbiology (Contract Lab Bottle)	☒ E Coli ☐ F Coli ☐ Enterococci ☐ Contract Lab	☒ Ice		1	A
Molecular (QPCR-P-500ML)	☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD	☐ Ice			
Tracers (BG-500ML)	☒ W-E8321-DI ☒ W-E8321-MS	☒ Ice		1	A
Pesticides (BG-500ML) (BG-1L)	☐ W-E8321-DI ☐ W-E8321-MS ☒ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution) ☐ W-DIELDRIN	☒ Ice		4	A
Phytoplankton/Periphyton	DTM-QL-C ☐ PEN-QL-C ☐ DTY-QN-C ☐ PKD-QN-C DTM-QN-C ☐ PRN-QN-C ☐ PKD-QN-BV ☐	☐ Ice			

Name:
Ben Harden
Paul Blair

Signature:

Date:

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

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

SAMPLE ID G3TLHR0040 ORG ID _____ LATITUDE _____
 COUNTY Bay STORET # _____ LONGITUDE _____
 DATE 4-7-21 TIME 11:40 SAMPLING AGENCY 8034
 SITE NAME Parker Creek @ Park
 ELD ID/NAME G3TLHR0040 RECEIVING BODY OF WATER East Bay

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						Typical Width (m) Depth (m)/Velocity (m/sec) Transect 3 m wide 0.125 m/s 0.125 m/s 0.125 m/s		
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: 1 Right Bank: 12-18 m				Hydrologic Modification Score (per FT 3101) ☐		0.2 m deep 0.6 m deep 1.3 m deep		
High Water Mark: 0.1 + 0.6 = 0.7 (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
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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			
Aquatic Vegetation	58.3		
Rock or Shell Rubble..			
Sand.....	41.7		
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)	SECCHI (M)
Top:	0.3	19.6	5.53	4.73	51.6	117.1	0.05	0.6
Mid:								☒ VOB
Bottom								
Meter ID:	154177							0.6

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: 553110/34406 Exp: 1-22/1-4-22

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 ☐

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

Blair/Harden

SIGNATURE

Paul B.

DATE:

4-7-21

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Parker Creek @ Park County: Bay Date: 04/07/21 Investigators: Harden, Bar

Transect t (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect t (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N			60	1	N		
	2					2	N		
	3					3			
	4					4			
	5			96		5			3
	6					6			
	7					7			
	8					8	N		
	9	N				9	N		
10	1	N			70	1	N		
	2					2	N		
	3					3			
	4					4			
	5			96		5			96
	6					6			
	7					7			
	8					8	N		
	9	N				9	N		
20	1	N			80	1	N		
	2					2			
	3					3			
	4					4			
	5			96		5			93
	6					6			
	7					7			
	8	N				8	N		
	9	N				9	N		
30	1	N			90	1	N		
	2					2			
	3					3			
	4					4			
	5			96		5			96
	6					6			
	7					7			
	8	N				8	N		
	9	N				9	N		
40	1	N			100	1	N		
	2					2			
	3					3			
	4					4			
	5			96		5			96
	6					6			
	7					7			
	8	N				8	N		
	9	N				9	N		
50	1	N				1	N		
	2					2			
	3					3			
	4					4			
	5			96		5			
	6					6			
	7					7			
	8	N				8	N		
	9	N				9	N		

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%.

STORET Station Number:

Secchi depth 10.6
Estimated? N

points ranked 4-6 13
total points assessed 99
% points ranked 4-6 13.1%

Check accompanying data collected at same site/date.

Algal mat sample ☐
Linear Veg Survey ☒
Habitat Assessment ☒
SCI/Biorecon ☒
Water sample ☒

RQ- 2021-01-18-44

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

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

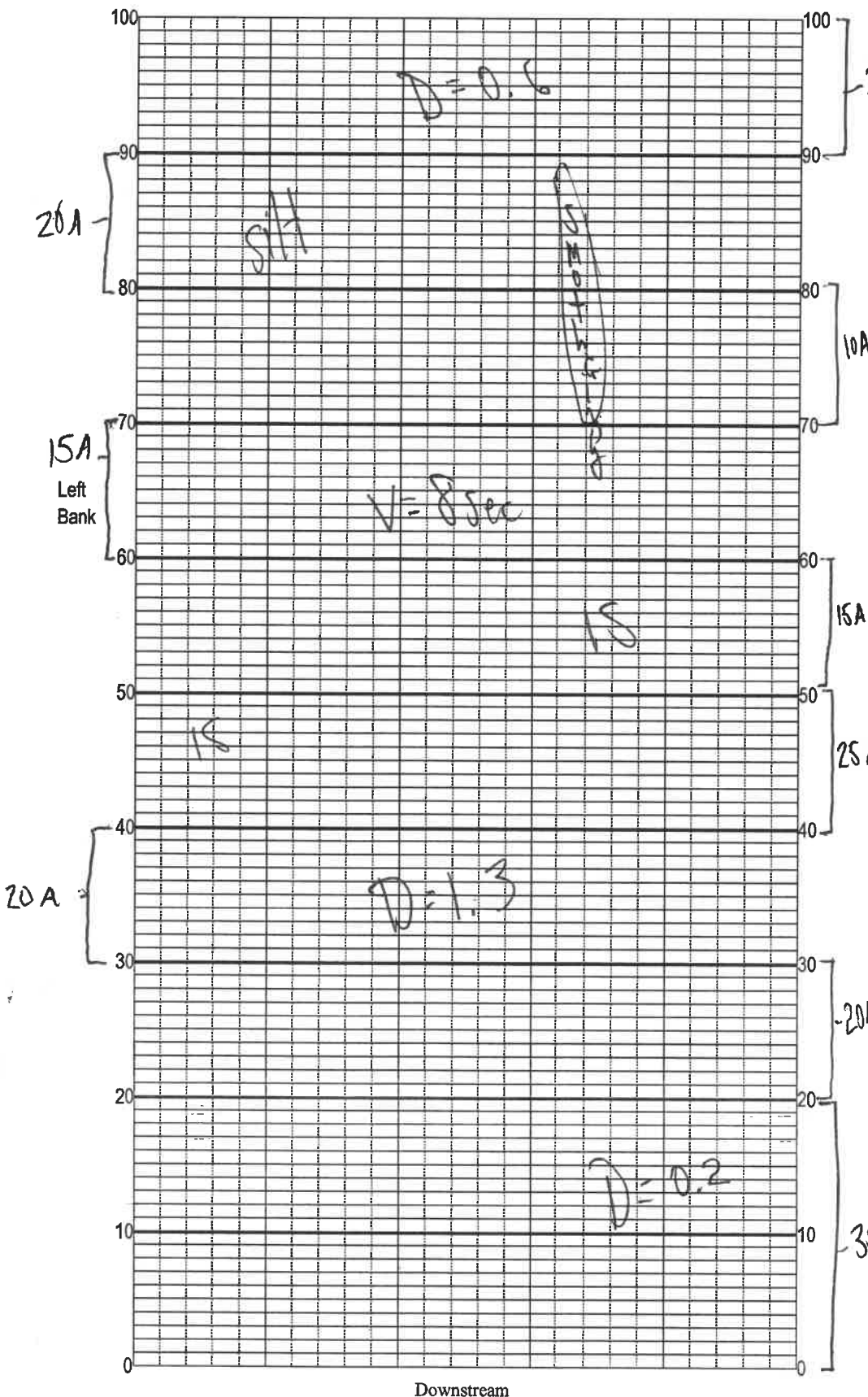
SAMPLING AGENCY: <u>8034</u>		STORET STATION NUMBER:	DATE (MM/DD/YY): <u>4-7-21</u>	RECEIVING BODY OF WATER: <u>East Bay</u>
REMARKS:	COUNTY: <u>Bay</u>	LOCATION: <u>Parker Creek @ Park</u>		FIELD ID/NAME: <u>G3TLHR0040</u>

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	<u>5</u> 4 3 2 1
Substrate Availability <u>20</u>	Greater than 30% major productive habitat present at site <u>20</u> 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>10</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>13</u> ----- Primary Score <u>48</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>1</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 <u>2</u> 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>10</u> Left Bank <u>3</u>	10 9	8 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>8</u> Left Bank <u>1</u>	10 9	8 7 6	5 4	--- 3 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>43</u> Left Bank <u>1</u> ----- Secondary Score <u>28</u>	10 9	8 7 6	5 4	3 2 1

76 TOTAL SCORE

Date: <u>4-7-21</u>	Analyst: <u>Paul Blair</u>	Signature: <u>Paul Blair</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: Parker Creek @ Park
 Date: 4-7-21
 Sampler: Blair/Harden

100 m: Latitude	_____
Longitude	_____
0 m: Latitude	_____
Longitude	_____
Substrates: Code key, draw proportionate habitat abundance. %	
☐ S	Snags _____
☐ R	Roots/undercut banks _____
☐ L	Leaf Packs (or mats) _____
☐ A	Aquatic Macrophytes <u>58.3</u>
☐ K	<u>rock</u> _____
☐	_____
☐	_____
Pools	total # observed = _____ # range expected = _____

Average width	<u>3</u> m
Average depth	<u>0.95</u> m
Velocity measured at <u>65</u> meter mark.	
WQ & chemistry taken at <u>5</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.	

Plants observed / other notes:

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

← 3m →

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

Waterbody: <u>G3TLR0040 / Parker Creek @ Park</u>	Date: <u>4-7-21</u>	County: <u>Bay</u>	Storet Number:
Analyst: <u>Paul Blair</u>	Signature: <u>Paul Blair</u>		

Comments:

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1m² 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										Specimen collected (check)	HERBACEOUS SPECIES	Meter Mark										Specimen collected (check)
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100			0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	
<i>Alternanthera philoxeroides</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		<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>Cicuta 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>												<i>Polygonum hydropiperoides</i>											
<i>Commelina virginica</i>												<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 viviparous)</i>												<i>Sacciolepis striata</i>											
<i>Hydrilla verticillata</i>												<i>Sagittaria kurziana</i>											
<i>Hydrocotyle</i>	✓	✓			✓	✓			✓	✓		<i>Sagittaria lancifolia</i>											
<i>Hygrophila polysperma</i>												<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 sessiflora</i>												<i>Typha</i>	✓		✓	✓	✓			✓	✓		
<i>Ludwigia leptocarpa</i>												<i>Vallisneria americana</i>											

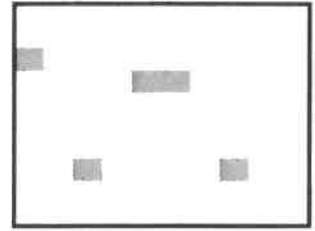
FDEP FORM FD 9000-32 LINEAR VEGETATION SURVEY FIELD SHEET

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

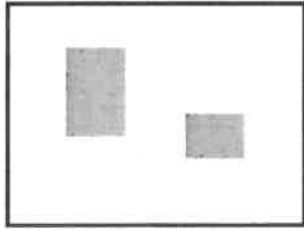
5% Macrophyte Coverage



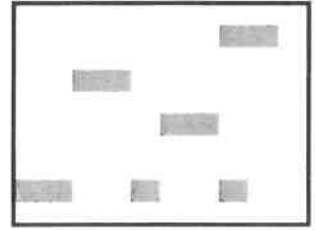
5% Macrophyte Coverage



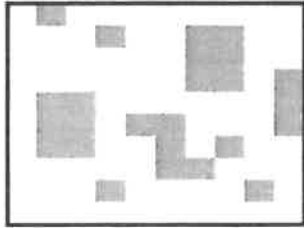
10% Macrophyte Coverage



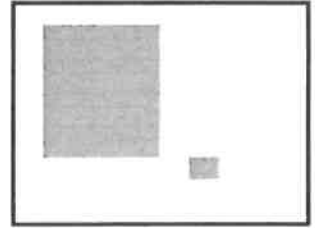
10% Macrophyte Coverage



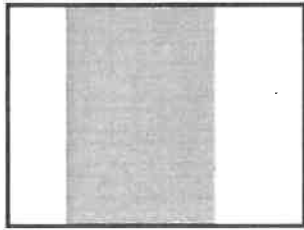
25% Macrophyte Coverage



25% Macrophyte Coverage



50% Macrophyte Coverage



50% Macrophyte Coverage

