

Field ID:



G2NE0889 09202017

McCoy Creek @
McDuff

STORET



20030881

IT OF ENVIRONMENTAL PROTECTION TORING PROGRAM FIELD SHEET

March 2017

PAGE 1 OF 1

Data Qualified?

Yes / No

Date: 9/20/17
(mm/dd/yyyy)

County: Duval

RQ - 2017 - 09-18-33

WBID: 2257

Latitude: 30.3258

ORG ID: 21FLA

Longitude: 81.6776

Receiving Body of Water:

Field ID: See Label

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
N. Colebreder								
Jeremy Purvix								

Sampling Equipment	
☐ Sample Container	☒ Van Dorn Pole
☐ Carboy	☐ Syringe
☐ Dipper	☐ Other
Equipment ID OrthoKit # 3	

Collection Method	
☐ Wading	☐ Via Boat
☒ From Shore	☐ Canoe/Kayak
☐ Other (note below)	☐ Electric Motor
	☐ Gasoline Motor

Water Level:	Dry / Pooled / Low / Normal / High / Flooded	Matrix:	Fresh / Marine / DI
Meter ID#	#3	Photos:	Yes / No / NA
Tide Falling:	Yes / No / NA		

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (umhos/cm)	Temp. (C)
EST	1140	0.10	0.20	382	48.7	7.22	0.24	0.25	509	27.43
CEN								V03		

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

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

Parameter Suite	Parameter Methods	Preservation	Acid Lot	Expiration	pH check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / 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			
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-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci ☐ qPCR	☐ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R	☐ Ice			
	☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Other			

Notes:

Place Label Here
(If Available)

Signature:

Date:

Field Parameters Entered into LIMS:

Field Parameters QC in LIMS:

Date Migrated to STORET:

Field Sheets Scanned/Saved:

DEPARTMENT OF ENVIRONMENTAL PROTECTION ORING PROGRAM FIELD SHEET

PAGE 1 OF 1

Field ID:



20030580 09202017

March 2017

Butcher Pen Creek

@ Wessnet
Blawie

STORET



02NE0587

WBID: 2322

Latitude:

Date: 9/20/17
(mm/dd/yyyy)

30.2595
(Decimal Degrees)

County: Duval

RQ - 2017 - 09-18-33

ORG ID: 21FLA

Longitude:

81.7395
(Decimal Degrees)

Receiving Body of Water: Cedar River

Field ID: See Label

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Nicole Pedrin		X	X	X	X	X
Jeremy Parrish		X	X	X	X	X

Sampling Equipment	
☐ Sample Container	☒ Van Dorn Pole
☐ Carboy	☐ Syringe
☐ Dipper	☐ Other
Equipment ID OrthoKit # 3	
Collection Method	
☐ Wading	☐ Via Boat
☒ From Shore	☐ Canoe/Kayak
☐ Other (note below)	☐ Electric Motor
	☐ Gasoline Motor

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

Matrix: Fresh Marine / DI

Meter ID# Photos: Yes / No

Tide Falling: Yes / No / NA

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
EST	1040	0.30	0.40	2.79	34.4	7.04	0.17	0.45	355	24.56
CEN								VOB		

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

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

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / 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 µm Filter	☒ Ice			
Chlorophyll	☒ CHL-SUITE-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-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci ☐ qPCR	☐ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Notes:
STORET: 02NE0587
Field ID: 20030580

Place Label Here
(If Available)

Signature: [Signature]

Date: 9/20/17

Field Parameters Entered into LIMS: [Signature] 9/22/17

Field Parameters QC in LIMS: [Signature] 9/25/17

Date Migrated to STORET: [Signature]

Field Sheets Scanned/Saved: [Signature]



McCoy Creek @
McDuff

STORET

20030881

Stream/River Habitat Assessment Field Sheet

REMARKS: J. Parrish NE ROC N. Frederick
COUNTY: Duval

STORET STATION NUMBER: DATE (MM/DD/YY): 9/20/17
RECEIVING BODY OF WATER:
LOCATION: FIELD ID/NAME:

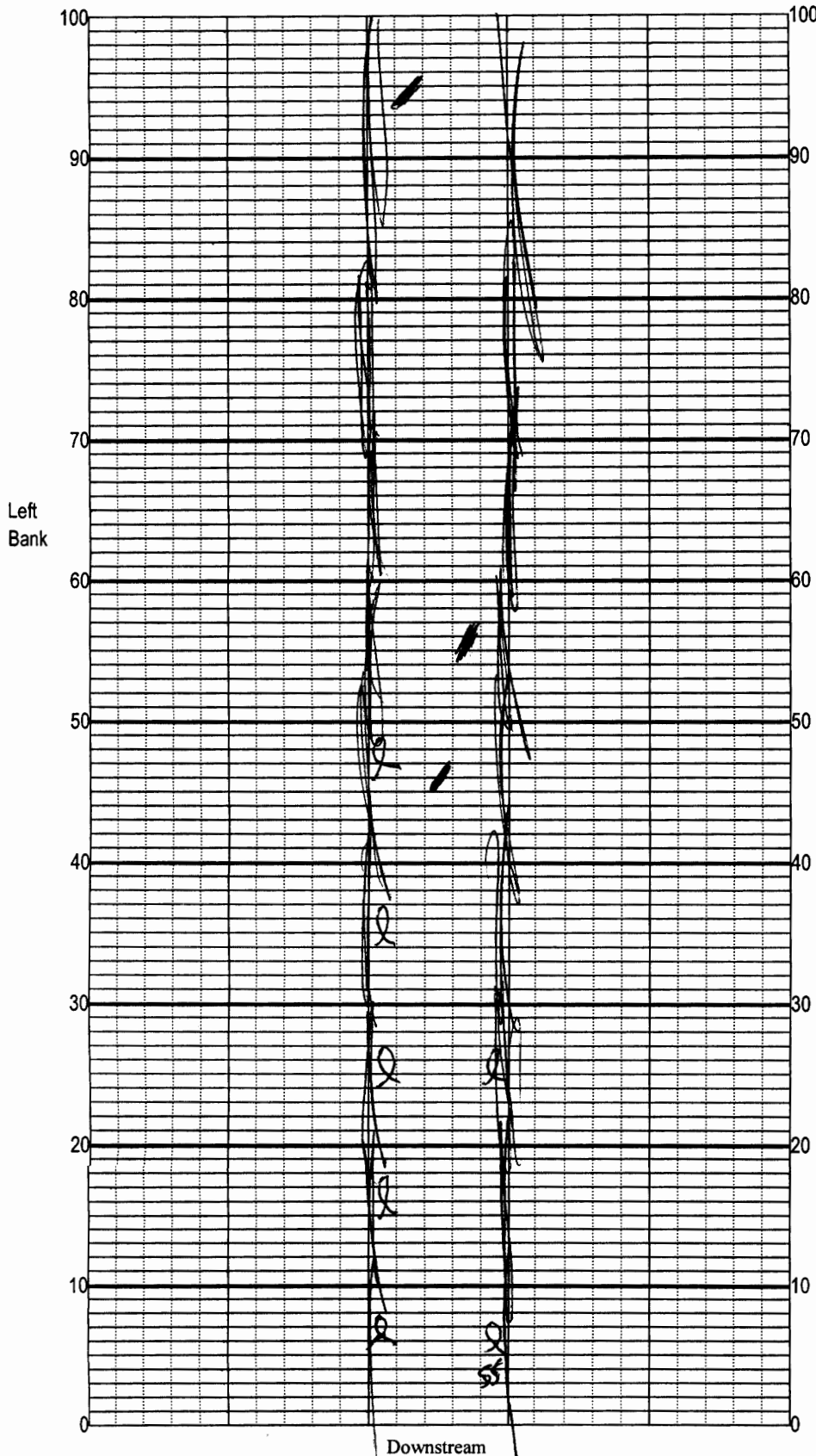
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh 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 6	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 NF
Substrate Availability 2	Greater than 30% major productive habitat present at site 20 19 18 17 16	16% to 30% major productive habitat, by aerial extent 15 14 13 12 11	6% to 15% major productive habitat 10 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1 NF
Water Velocity 12	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 24	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 20 19 18 17 16	Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae. 15 14 13 12 11	Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth). 10 9 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 4 3 2 1 NF
Secondary Habitat Components	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks.	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered.	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area.	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks.
Artificial Channelization 6	20 19 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 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 root zone with raw, eroded areas.
Right Bank 4 Left Bank 4	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 3 Left Bank 3	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 4 Left Bank 4	10 9	8 7 6	5 4	3 2 1
Secondary Score 28				

TOTAL SCORE

54

Date: 9/20/17 Analyst: Nicole L. Signature: Nicole Frederick

DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



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

Location: McCoy Creek
Date: 9/20/17
Sampler: McDuff
N. Fredenick / J. Parish

100 m: Latitude		
Longitude		
0 m: Latitude		
Longitude		
Substrates: Code key, draw proportionate habitat abundance.		
	Snags	2m 1%
	Roots/undercut banks	
	Leaf Packs (or mats)	
	Aquatic Macrophytes	2m 1%
	Pools	total # observed = # range expected =
Average width <u>2</u> m		
Average depth <u>0.25</u> m		
Velocity measured at <u>30</u> meter mark.		
WQ & chemistry taken at <u>20</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: <u>0m</u> 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 NO

total width = 2m
7 sec/m

G2NE0889 09202017

McCoy Creek @
McDuff

STORET

20030881

LINEAR VEGETATION SURVEY FIELD SHEET

e:

County:

Signature: _____

Storet Number:

2003088

COMMENTS:

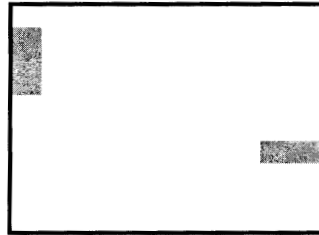
Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m² of taxa present). Note in the boxes below if no dominant are selected, and note total macrophyte abundance rank for each section. Only the most common taxa are listed, so use blank spaces for additional taxa names.

[illegible]

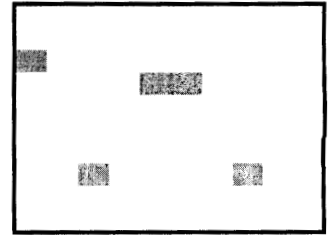
FDEP FORM FD 9000-32 LINEAR VEGETATION SURVEY FIELD SHEET

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

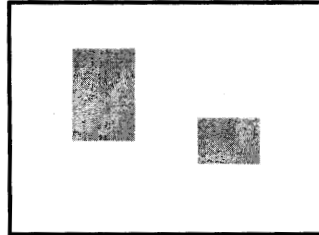
5% Macrophyte Coverage



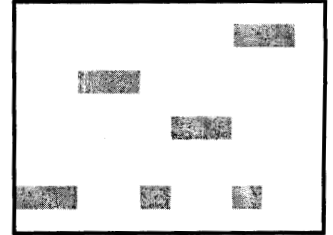
5% Macrophyte Coverage



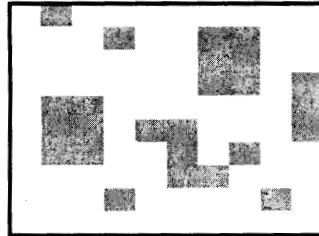
10% Macrophyte Coverage



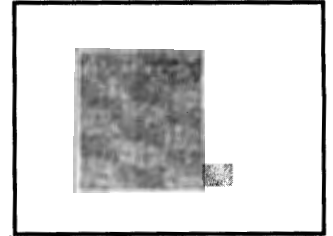
10% Macrophyte Coverage



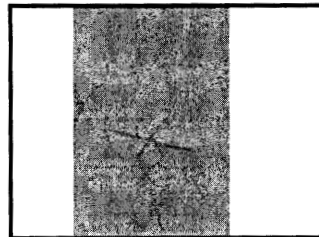
25% Macrophyte Coverage



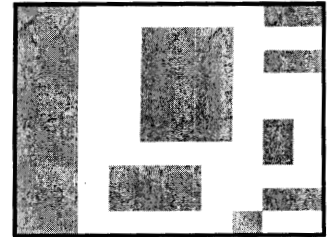
25% Macrophyte Coverage



50% Macrophyte Coverage



50% Macrophyte Coverage



Field ID:



G2NE0889 09202017

Physical/Chemical Characterization Field Sheet

McCoy Creek @
McDuff

STORET

20030881

LATITUDE

30.3258

LONGITUDE

81.6776

SAMPLING AGENCY

NE ROC

FIELD ID/NAME

RECEIVING BODY OF WATER

RIPARIAN ZONE / STREAM FEATURES

Meter ID:

YSI #3

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 ☐ HeavyLocal Watershed NPS Pollution: ☐ No evidence ☐ Slight ☐ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side

Left Bank: Right Bank: Hydrologic Modification Score
(per FT 3101)High Water Mark: + =
(m) (above present water level) (present depth) (above bed)

Artificially Impounded

☐ Yes ☒ No

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

 m wide m/s m/s m/s m deep m deep m deepArtificially ☐ No☐ Mostly recovered, more sinuousCanopy Cover % ☐ Open☐ Lightly Shaded (11-45%)Channelized: ☒ Some recovery☐ Recent, severe☐ Heavily Shaded☒ Moderate Shaded (46-80%)

SEDIMENT / SUBSTRATE

Sediment Oils

☒ Absent ☐ Slight
☐ Moderate ☐ Profuse

Sediment Odors

☒ Normal ☐ Sewage ☐ Petroleum
☐ Chemical ☐ Anaerobic
☐ Other (Specify):

Smothering of Substrates

Sand Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐
Silt Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐
Algae Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐

SUBSTRATE TYPE

Assessment Tool: ☐ SCI ☒ RPS ☒ LVS☐ LCI ☐ BioReconINVERT PERI
% # Times # Times
Coverage Sampled SampledWoody Debris (Snags) Undercut Banks / Roots Leaf Packs or Mat Aquatic Vegetation Rock or Shell Rubble Sand Mud / Muck / Silt Other Other WATER
QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top:								Vob
Mid:	0.10	21.43	7.22	382	48.7	565	0.24	TOTAL DEPTH
Bottom:	0.2							0.20

System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐Water Odors Normal ☒ Petroleum ☐
Sewage ☐ Chemical ☐ Other ☐Water Surface Oils Normal ☒ Sheen ☐
Globs ☐ Stick ☐ Other ☐Water Sample Taken? ☒ Yes ☐ NoSample Preserved? ☒ Yes ☐ NoLot Number: Color Tannic ☐ Green (Algae) ☐
Clear ☒ Other (Specify) ☐Algae Sample Taken? ☐ Yes ☒ NoSample Preserved? ☐ Yes ☒ NoLot Number: Exp: Clarity Clear ☒ Slightly Turbid ☐
Turbid ☐ Opaque ☐

ABUNDANCE

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.

SAMPLING TEAM

SIGNATURE:

Field ID:



G2NE0889 09202017

McCoy Creek @
McDuff

STORET



20030881

Rapid Periphyton Survey Field Sheet

Date:

9/20/17

Investigators:

J. Parrish / N. Fresh

STORET Station Number:

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

 Secchi depth 103
 Estimated?

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

Check accompanying data collected at same site/date.

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

RQ- 2017 -

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%.