



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE 1 OF 1

Boldly mark box if
Data Qualified

Location/STORET Station N

RQ-2017-08-14-57
8/10/2017

G2SD081017-1
Field ID

Date: 8/10/17
(mm/dd/yyyy)

STORET #

WBID 3258G1
Ten Mile Canal @
Old US 41 Above
Weir

STORET #
EVRGWC0125FTM

Latitude: 26.506832
(Decimal Degrees)

County: Lee

Longitude: -81.854703
(Decimal Degrees)

Receiving Body of Water: Gulf of Mexico Field ID:

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Chase Carter									
Ben Whitwater									
Maryann Dugan									

Sampling Equipment									
☒ Sample Container	☐ Van Dorn	☐ Pole							
☐ Carboy	☒ Syringe								
☐ Dipper	☐ Other								
Equipment ID									
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										
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	1430	0.3	3.5	5.3	69	7.5		1.3	494	29.7

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	SA7143030	6/12/18	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <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-CH-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:

78256

SBIO: MD 4/4/2018

Signature: Ben Panto

Place Label Here
(If Available)

Date: 8/10/17

Field Parameters Entered into LIMS: 8/23/17 CC
(Initials/Date)

Field Parameters QC in LIMS: MD 10/24/17
(Initials/Date)

Date Migrated to STORET:
(Initials/Date)

Field Sheets Scanned/Saved: VBP 8/29/17
(Initials/Date)

RQ-2017-08-14-57
8/10/2017

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

WBID 3258G1
Ten Mile Canal @
Old US 41 Above
Fair

G2SD081017-1
Field ID
STORET
EVRGWC0125FTM

STORET STATION
NUMBER:

DATE

(MM/DD/YY)

8/10/17

SAMPLING AGENCY:

FDEP South ROC

FIELD ID/NAME:

77

COUNTY:

Lee

LOCATION:

RECEIVING BODY OF WATER:

Estero Bay

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock]	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags)	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered
Substrate Diversity <u>5</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	(5) 4 3 2 1
Substrate Availability <u>11</u>	Greater than 30% major productive habitat present at site 20 19 18 17 16	16% to 30% major productive habitat, by aerial extent 15 14 13 12 (11)	6% to 15% major productive habitat 10 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>12</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>9</u> ----- Primary Score <u>37</u>	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 20 19 18 17 16	Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae. 15 14 13 12 11	Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth). 10 (9) 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 4 3 2 1
Secondary Habitat Components				
Artificial Channelization <u>2</u>	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. 20 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered. 15 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 (2) 1
Bank Stability <u>4</u> Right Bank <u>4</u> Left Bank <u>4</u>	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the root zone with few raw, eroded areas. 10 9	Only meets 2 of the 3 requirements for optimal bank stability. 8 7 6	Only meets 1 of the 3 requirements for optimal bank stability. 5 (4)	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width <u>3</u> Right Bank <u>3</u> Left Bank <u>3</u>	Width of vegetation greater than 18 m 10 9	Width of vegetation >12 to 18m 8 7 6	Width of vegetation 6 to 12 m. human activities close to system 5 4	Less than 6 m of buffer zone due to intensive human activities (3) 2 1
Riparian Zone Vegetation Quality <u>1</u> Right Bank <u>1</u> Left Bank <u>1</u> ----- Secondary Score <u>18</u>	Over 80% of riparian surfaces consist of normal, expected plant community for given sunlight & habitat conditions (e.g., native plants; tree, shrub, and forbs represented, if appropriate). Minimal disturbance. 10 9	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. 8 7 6	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious. 5 4	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). 3 2 (1)

55 TOTAL SCORE

Date: 8/10/17

Analyst: BLn Paswater

Signature: Ben Paswater

8/10/2017

WBID 3258G1

Ten Mile Canal @

Old US 41 Above

Weir

G2SD081017-1

Field ID

STORET

EVRGWC0125FTM

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site:

County:

Date:

Investigator:

BP, CC, MD

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	⑦			60	1	⑦			
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
10	1				70	1				
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
20	1				80	1				
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
30	1				90	1				
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
40	1				100	1				
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
50	1					1				
	2					2				
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				

Secchi depth
Estimated?

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

Check accompanying data
collected at same site/date.

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

RQ-

Algal Thickness Rank

N	
	rough, no algae,
	slimy, algae up to 1mm
3	>1mm - 6mm
4	>6mm - 20mm
5	>20mm - 10 cm
6	>10 cm

Record "N" and check "Estimated" for points deeper than the Secchi depth; algae are presumed absent. Check "Estimated" if thickness estimated for deep points which can be seen but not reached.

Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank.

Record canopy cover as the number of small densiometer quadrants (out of 96) that HAVE canopy cover. Measure facing upstream at point 4, 5, or 6.

Collect algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.

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8/10/2017WBID 3258G1
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STOBET
EVGRWC0125FTM

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

21FLFTM

LATITUDE

26.506332

LONGITUDE

-81.854703

SAMPLING AGENCY

FDEP South ROC

NAME see sticker

RECEIVING BODY OF WATER

Gulf of Mexico

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)

10 20 60 10

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: 3 Right Bank: 3

Hydrologic Modification Score
(per FT 3101)High Water Mark: .2 + 3.5 = 3.7
(m) (above present water level) (present depth) (above bed)

Artificially Impounded

☒ Yes ☐ No

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

33 m wide

.13 m/s .13 m/s .13 m/s

1 m deep 5 m deep 1 m deep

Artificially

☐ No☐ Mostly recovered, more sinuousChannelized: ☐ Some recovery☒ Recent, severe

Canopy Cover %

☒ Open☐ Lightly Shaded (11-45%)☐ Heavily Shaded☐ Moderate Shaded (46-80%)

SEDIMENT / SUBSTRATE

Sediment Oils

☒ Absent ☐ Slight
☐ Moderate ☐ Profuse

Sediment Odors

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

Smothering of Substrates

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

SUBSTRATE TYPE

Assessment Tool: ☐ SCI ☐ RPS ☒ LVS☐ LCI ☐ BioReconINVERT PERI
% # Times # Times
Coverage Sampled Sampled

Woody Debris (Snags) 400

Undercut Banks / Roots

Leaf Packs or Mat

Aquatic Vegetation 16

Rock or Shell Rubble 400

Sand

Mud / Muck / Silt

Other

Other

WATER
QUALITYDepth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M)
Top: 0.3 29.7 7.5 5.3 69 494 1.3
Mid:
Bottom:
Meter ID: #17
TOTAL DEPTH 3.5Water Odors Normal ☒ Petroleum ☐Sewage ☐ Chemical ☐ Other ☐Water Sample Taken? ☒ Yes ☐ NoSample Preserved? ☒ Yes ☐ No

Lot Number: Exp:

Algae Sample Taken? ☐ Yes ☒ NoSample Preserved? ☐ Yes ☐ No

Lot Number: Exp:

Water Surface Oils Normal ☒ Sheen ☐Globs ☐ Slick ☐ Other ☐Color Tannic ☒ Green (Algae) ☐Clear ☒ Other (Specify) ☐Clarity Clear ☒ Slightly Turbid ☒Turbid ☐ Opaque ☐

ABUNDANCE

Not Obs. Rare Common Abundant

Periphyton: ☒ ☐ ☐ ☐Fish: ☐ ☐ ☒ ☐Aquatic Plants: ☐ ☐ ☒ ☐Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐System Type: Stream ☐ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☒ Canal

AMBIENT FIELD CONDITIONS / NOTES:

☒ The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM

Ben Paswater, Chace Carley, Maryann Dugan

SIGNATURE:

Ben Paswater

DATE:

8/10/17

DEP-SOP-001/01 Form FD 9000-4
Stream/River Habitat Sketch Sheet

RQ-2017-08-14-57

8/10/2017

WBID 3258G1

Ten Mile Canal @

Old US 41 Above

Weir

G2SD081017-1

Field ID

STORE

EVRGWC0125FTM

Location:

Date:

Sampler:

Bl. Pagwiter

100 m: Latitude 26.507342
Longitude -81.854716

0 m: Latitude 26.506438
Longitude -81.854741

Substrates: Code key, draw proportionate habitat abundance.

☐	Snags	<u>few</u>
☐	Roots/undercut banks	<u>—</u>
☐	Leaf Packs (or mats)	<u>—</u>
☒	Aquatic Macrophytes	<u>16</u>
☒	<u>ROCK</u>	<u>few</u>
☐		
☒	Pools	total # observed = <u>0</u> # range expected = <u>0</u>

Average width 32 m

Average depth 3 m

Velocity measured at 0 meter mark.

WQ & chemistry taken at 0 meter mark.

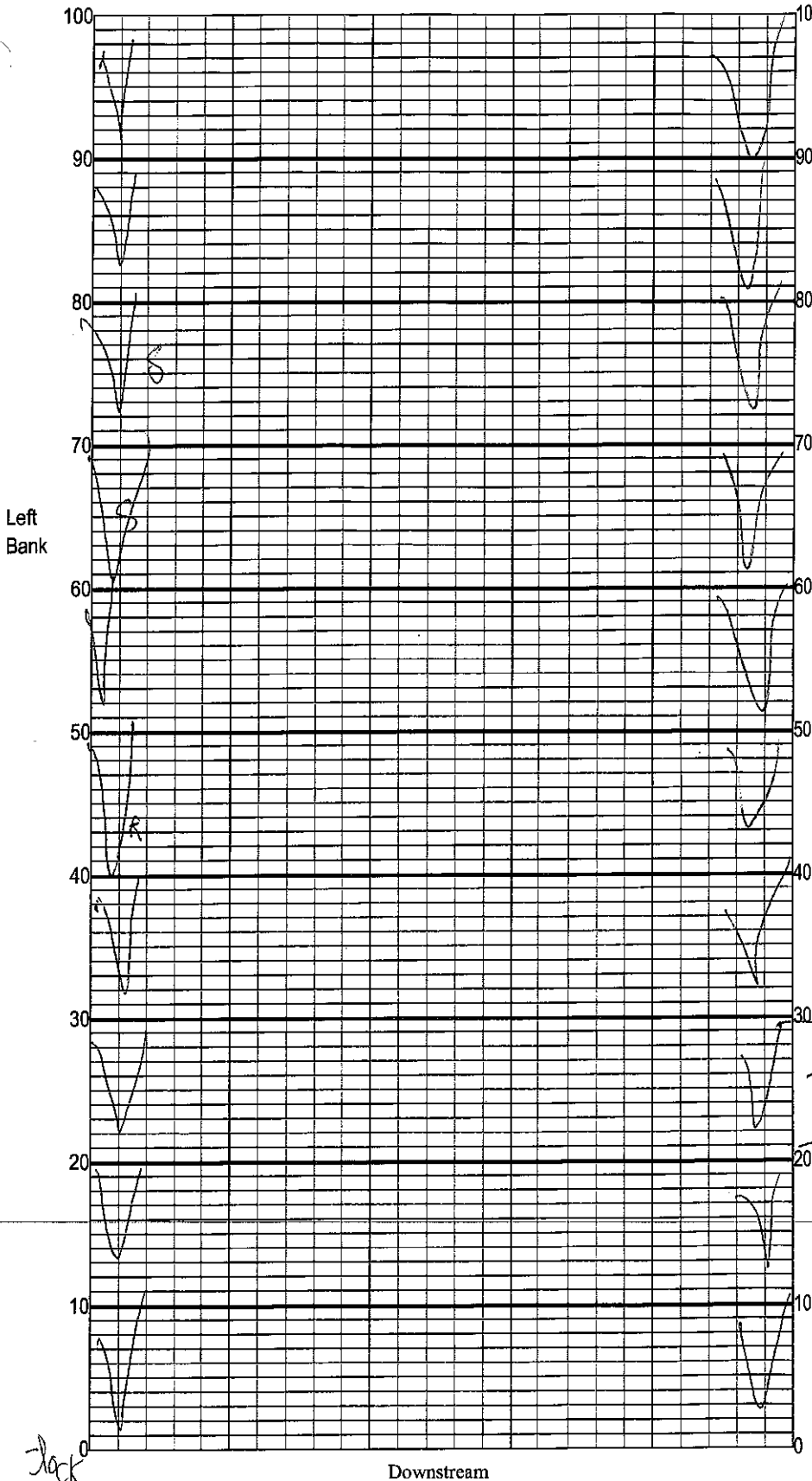
Habitat Smothering:
Note areas (on map) where sand or silt is smothering substrates, limiting habitability.

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:

400 /



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

Revision Date: June 2, 2011