



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

February 2016

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Data Qualified?
Yes / No

STORET Station Name: Martin Hwy Canal 100m East of Melear Dairy Rd

Date: 6/21/16
(mm/dd/yyyy)

STORET Station ID: G1SE0016

Latitude: 27.1623805

(Decimal Degrees)

WBID: 3213D

RQ - 2016-06-13-33

ORG ID:

Longitude: -80.67305

(Decimal Degrees)

Receiving Body of Water:

Field ID: G1SE0016

County: Martin

Sampling Team Members						WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Sewell Hinkle Pitt										

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 / Low / Normal / High / Flooded

Matrix: Fresh / Marine / DI

Meter ID# AK3

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	1320	0.3	0.5	5.3	65	6.7	6.13	0.4	273	25.6
CEN										

Biological Samples Collected: None HA SCI LVS RPS LVI Other

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	SJS9020	9/10	☐ <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			
BOD	☐ BOD-UNIN	☐ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / ☐ W-F / ☐ W-TSS / ☐ TURBIDITY / ☐ W-CHIC / ☐ W-COLOR / ☐ W-SO4-IC / ☐ W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / ☐ W-F / ☐ W-TSS / ☐ TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococcus ☐ QPCR	☐ Ice			
Periphyton	☐ ALGAE-ID	☐ Ice			
Pesticides	☒ W-PSNP-TQ ☐ W-AHERB-AA ☒ W-PYR-AA-R ☒ W-PC-AA-SF ☐ W-UHERB-AA ☒ W-GLYPH	☒ Ice ☐ Other			

Notes: SBTD 76267	Place Label Here (If Available)
Signature: [Signature]	Date: 6/21/16

Field Parameters Entered into LIMS: RB 6/21/16

(Initials/Date)

Field Parameters QC in LIMS: WJ 8/29

(Initials/Date)

Date Migrated to STORET: 11/9/86

(Initials/Date)

Field Sheets Scanned/Saved:

(Initials/Date)

GISE0016



Myrtel slough

6/2/16

Index

Longitude

Longitude

5 Snags 0.9

Leaf Packs (or mats) 0.2

	Aquatic Macrophytes	_____
V	rock	0.03

total # observed = 1

Average width 3 m m

Velocity measured at 0 meter mark

WQ & chemistry taken at 0 meter mark.

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

Note areas (on map) with unstable, eroding banks.

Note areas (on map) where natural vegetation is altered or eliminated.

$$\begin{array}{l|l} S - 2.6 & \\ K - 0.1 & 300 \\ R - 0.2 & \\ L - 0.5 & \end{array}$$

3 m

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

SAMPLING AGENCY: <u>21FWPB</u>		STORET STATION NUMBER: <u>61006 G1520016</u>	DATE (MM/DD/YY): <u>8/25/16</u>	RECEIVING BODY OF WATER:
REMARKS: <u>SB# 76767</u>	COUNTY: <u>Marin</u>	LOCATION: <u>Marin Hwy and</u>	FIELD ID/NAME: <u>G1520016</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>2</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 <u>2</u> 1
Substrate Availability <u>3</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 <u>3</u> 2 1
Water Velocity <u>15</u>	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 20 19 18 17 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 <u>15</u> 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering <u>11</u> ----- Primary Score <u>31</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 <u>11</u>	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 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>5</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	<u>5</u> 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 <u>4</u> Left Bank <u>5</u>	10 9	8 7 6	<u>5</u> 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>3</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>2</u> Left Bank <u>2</u> ----- Secondary Score <u>22</u>	10 9	8 7 6	5 4	3 2 1

53

TOTAL SCORE

Date: <u>8/25/16</u>	Analyst: <u>Mark Sed / Hubert</u>	Signature: <u>Cheryl Dwyer</u>
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Waterbody:	Mtata Hunt Creek / Maitai Stream	Date:	6/9/06	County:	Monte	Store Number:	G																	
Analyst:	Hunter/Sentel	Signature:	matt sentel																					
Comments:																								
Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m ² 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		
Alternanthera philoxeroides												Micranthemum glomeratum												
Bacopa caroliniana												Micranthemum umbrosum												
Bacopa monnieri												Myriophyllum aquaticum												
Bidens mitis												Najas guadelupensis												
Boehmeria cylindrica												Nuphar luteum												
Centella asiatica												Orontium aquaticum												
Ceratophyllum demersum												Panicum hemitomon				X	X							
Chara												Panicum repens												
Cicuta maculata												Panicum rigidulum												
Cladium jamaicense	X											Pistia stratioides												
Elocasia esculenta												Polygonum glabra												
Eommelina diffusa												Polygonum hydropiperoides												
Eommelina virginica												Polygonum punctatum												
Erinum americanum												Pontedaria cordata												
Erodia virginiana												Potamogeton illinoensis												
Eichhornia crassipes												Ruellia simplex												
Eleocharis (wispy viviparous)												Sacciolepis striata												
Erdilla verticillata												Sagittaria kurziana												
Eudocote	X				X	X	X					Sagittaria lancifolia												
Eugraphia polysperma												Sagittaria latifolia												
Eumenocallis												Salvinia minima												
Echnanthes caroliniana												Samolus parviflora												
Endoltia punctata												Saururus cernuus												
Eymna												Sparganium americanum												
Eynophila sessiflora												Typha												
Ewigia leptocarpa												Vallisneria americana												
Ewigia palustris												Zizania aquatica												
Ewigia peruviana				X								Salix		X				X	X					
Ewigia repens												Schinus		X	X	X	X	X	X	X	X	X		
Eviola fluitans												Vitis		X	X	X		X	X	X				

SPIO# 76767 JP

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>6750016</u>	County: <u>perm</u>	Date: <u>6/21/16</u>	Investigator: <u>Sewell/Hall</u>
STORET Station Number: <u>6750016</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		60	1	N	N		
	2					2				
	3					3				
	4					4				
	5			96		5			90	
	6					6				
	7					7				
	8					8				
	9					9	N			
10	1	N			70	1	N			
	2					2				
	3					3				
	4					4				
	5			94		5			88	
	6					6				
	7					7				
	8					8				
	9	N				9	N			
20	1	N			80	1	N			
	2					2				
	3					3				
	4					4				
	5			96		5			94	
	6					6				
	7					7				
	8					8				
	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					8				
	9	N				9	N			
40	1	N			100	1	N			
	2					2				
	3					3				
	4					4				
	5			92		5			88	
	6					6				
	7					7				
	8					8				
	9	N				9	N			
50	1	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%.					
	2									
	3									
	4									
	5			96						
	6									
	7									
	8									
	9	N								

Secchi depth	<u>0.4</u>
Estimated?	

# points ranked 4-6	<u>0</u>
total points assessed	<u>99</u>
% points ranked 4-6	<u>0</u>

Check accompanying data collected at same site/date.	
Algal mat sample	
Linear Veg Survey	☒
Habitat Assessment	☒
SCI/Biorecon	
Water sample	☒
RQ- <u>2016-06-13-33</u>	

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 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID <u>SBTD 76767</u>	ORG ID <u>21FWPB</u>	LATITUDE _____
COUNTY <u>WV</u>	STORET # <u>6156016</u>	LONGITUDE _____
DATE <u>6/2/10</u>	TIME <u>1325</u>	SAMPLING AGENCY <u>21FWPB</u>
SITE NAME <u>mytel stream</u>		
FIELD ID/NAME <u>6156016</u>		RECEIVING BODY OF WATER _____

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category) :								Landscape Development Intensity Index (LDI)
Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)	
		<u>90</u>					<u>road</u> 	
Local Watershed Erosion (select one) : ☐ None ☒ Slight ☐ Moderate ☐ Heavy								Typical Width (m) Depth (m)/Velocity (m/sec) Transect m wide
Local 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)				m/s
High Water Mark: + = (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No				m/s <u>0.25</u> m/s m/s
Artificially ☐ No ☐ Mostly recovered, more sinuous Channelized: ☐ Some recovery ☒ Recent, severe				Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%) ☒ Heavily Shaded ☐ Moderate Shaded (46-80%)				m deep <u>0.5</u> m deep m deep

SEDIMENT / SUBSTRATE

Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse		Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify) : _____		Smothering of Substrates Sand Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐ Silt Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐ Algae Smothering: None ☐ Slight ☒ Moderate ☒ Severe ☐	
SUBSTRATE TYPE Assessment Tool: ☐ SCI ☒ RPS ☐ LVS ☐ LCI ☐ BioRecon			WATER QUALITY		
Woody Debris (Snags)			Depth (M)	Temp. (°C)	pH (SU)
Undercut Banks / Roots			Top : <u>0.3</u>	<u>25.6</u>	<u>6.7</u>
Leaf Packs or Mat			Mid:		
Aquatic Vegetation			Bottom:		
Rock or Shell Rubble..			Meter ID: <u>AE3</u>	D.O. (MG/L) <u>5.3</u> D.O. Sat (%) <u>65</u> Cond. (UMHO/CM) <u>273</u> Salinity (PPT) <u>0.13</u> SECCHI (M) <u>0.4</u>	
Sand.....			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐		
Mud / Muck / Silt			Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: _____ Exp: _____		
Other			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐		
Other			Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐		
ABUNDANCE Not Obs. Rare Common Abundant			Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☒ No Lot Number: _____ Exp: _____		
Periphyton: ☐ ☒ ☐ ☐			System Type: Stream ☐ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) <u>canal</u>		
Fish: ☐ ☒ ☐ ☐			AMBIENT FIELD CONDITIONS / NOTES:		
Aquatic Plants: ☐ ☒ ☐ ☐			☒ The antecedent hydrologic conditions have been met to my best knowledge.		
Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			SAMPLING TEAM <u>Hurley / Seall</u>		
SIGNATURE: <u>[Signature]</u>			DATE: <u>6/2/10</u>		