



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

February 2016

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Data Qualified?
Yes / No

STORET Station Name: Jerry Brice ZSA

Date: 3/17/16
(mm/dd/yyyy)

STORET Station ID: 21020136

Latitude: 30 22 20.9
(Decimal Degrees)

WBID: 3423 RQ: 2016-03-14-16

ORG ID: 21FLA

Longitude: 82 51 51.3
(Decimal Degrees)

Receiving Body of Water: Sunmanee

Field ID: _____

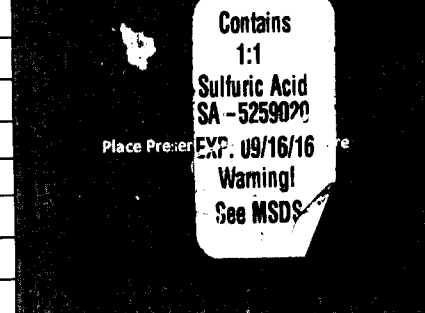
County: Hamilton

Sampling Team Members					
	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
<u>J. Brice</u>	☒				
<u>B. Brice</u>		☒			
<u>A. Brice</u>			☒	☒	☒

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 / <u>Normal</u> / High / Flooded						Matrix: <u>Fresh</u> / Marine / DI				
Meter ID# _____		Photos: Yes / <u>No</u>		Tide Falling: Yes / <u>No</u> / 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	1000	0.5	0.6	5.95	66.8	6.86	0.03	0.4	52	21.1
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			☒ <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			
BOD	☒ BOD-UNIN					☒ Ice			
Physical/Aggregate (Kit A)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CHC / W-COLOR / W-SO4-IC / W-TDS					☒ Ice			
Physical/Aggregate (Kit B)	☐ Alkalinity / W-F / W-TSS / TURBIDITY					☐ Ice			
Macroinvertebrates	☒ MI-FW-QLDC					☒ Formalin			
Microbiology	☐ E Coli ☐ F Coli ☐ Entero ☐ 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:					
Place Label Here (If Available)					
Signature: <u>Jerry Brice</u>					Date: <u>3/17/16</u>

Field Parameters Entered into LIMS: _____ (Initials/Date)	Field Parameters QC in LIMS: _____ (Initials/Date)
Date Migrated to STORET: _____ (Initials/Date)	Field Sheets Scanned/Saved: _____ (Initials/Date)

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

75847

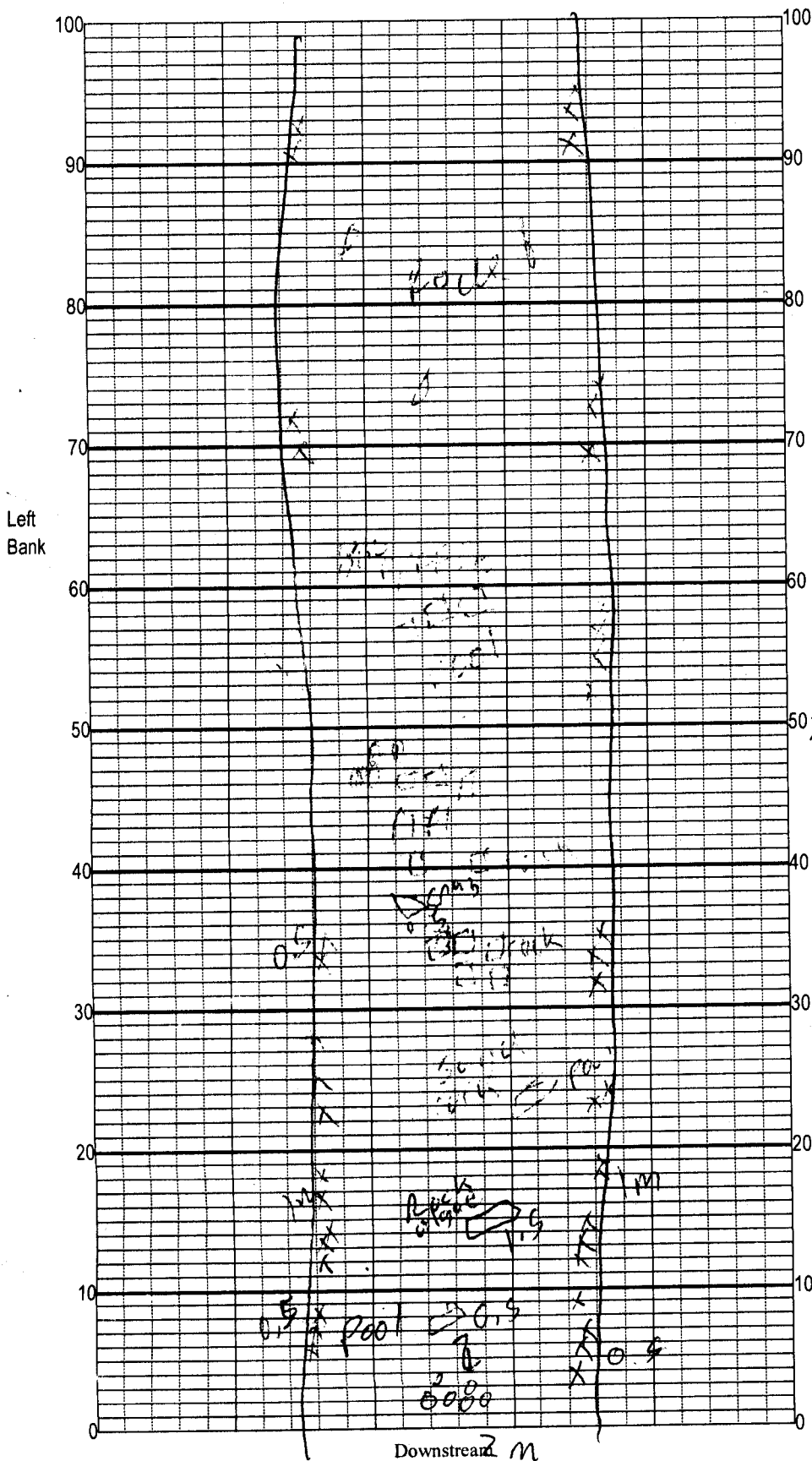
SAMPLING AGENCY:		STORET STATION NUMBER: 21020136	DATE (MM/DD/YY): 3/17/16	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: Hamilton?	LOCATION: Jerrye 25A		FIELD ID/NAME:

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>16</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 <u>11</u>	6% to 15% major productive habitat <u>10</u> 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>13</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 <u>13</u> 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>12</u> ----- Primary Score <u>52</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 <u>12</u> 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 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>20</u>	<u>20</u> 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability Right Bank <u>9</u> Left Bank <u>9</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 <u>9</u> 8	Only meets 2 of the 3 requirements for optimal bank stability. <u>8</u> 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 Right Bank <u>10</u> Left Bank <u>10</u>	Width of vegetation greater than 18 m <u>10</u> 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 Right Bank <u>10</u> Left Bank <u>10</u> ----- Secondary Score <u>76</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

128 TOTAL SCORE

Date: 3/17/16	Analyst: Jerrye Carruth	Signature: Jerrye Carruth
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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).

Location: Jerry @ ZSA

Date: _____

Sampler: _____

100 m: Latitude _____
Longitude _____

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

	Snags	3.5	2
	Roots/undercut banks	3.5	30
	Leaf Packs (or mats)		2
	Aquatic Macrophytes		
	Rock	5	
	Pools		
		total # observed =	
		* range expected =	

Average width _____ m

Average depth _____ m

Velocity measured at _____ meter mark.

WQ & chemistry taken at _____ 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:

7 seconds

200
2 = 1%
4 = 2%

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

SAMPLE ID _____ ORG ID _____ LATITUDE _____
COUNTY _____ STORET # 21020136 LONGITUDE _____
DATE 3/17/16 TIME 1000 SAMPLING AGENCY _____
SITE NAME Jerry e 25 A
FIELD ID/NAME _____ RECEIVING BODY OF WATER _____

RIPARIAN ZONE / STREAM FEATURES

Meter ID: _____

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

Width of Riparian Vegetation (m) on Each Buffer Side

Left Bank: >18m Right Bank: >18m

Hydrologic Modification Score (per FT 3101) ☐

High Water Mark: 0.5 + 0.5 = 1
(m) (above present water level) (present depth) (above bed)

Artificially Impounded

☐ Yes ☒ No

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

2 m wide

0.17 m/s

0.5 m deep

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 ☐ RPS ☐ LVS

☐ LCI ☐ BioRecon

% Coverage ☐ INVERT ☐ PERI
Times Sampled # Times Sampled

Woody Debris (Snags) 3.5 4

Undercut Banks / Roots 3.5 4

Leaf Packs or Mat 2 4

Aquatic Vegetation 5 4

Rock or Shell Rubble.. 89 4

Sand 89 4

Mud / Muck / Silt 89 4

Other 89 4

Other 89 4

WATER QUALITY

Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M)
Top: ☐ ☐ ☐ ☐ ☐ ☐ ☐
Mid: ☐ ☐ ☐ ☐ ☐ ☐ ☐
Bottom: ☐ ☐ ☐ ☐ ☐ ☐ ☐

System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐

Water Odors Normal ☒ Petroleum ☐
Sewage ☐ Chemical ☐ Other ☐

Water Surface Oils Normal ☒ Sheen ☐
Globs ☐ Slick ☐ Other ☐

Water Sample Taken? ☒ Yes ☐ No
Sample Preserved? ☒ Yes ☐ No

Color Tannic ☒ Green (Algae) ☐
Clear ☐ Other (Specify) ☐

Lot Number: _____ Exp: _____

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

Clarity Clear ☒ Slightly Turbid ☒
Turbid ☐ Opaque ☐

Lot Number: _____ Exp: _____

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

Jerry Lank / B Davis / A Kalmbacher

SIGNATURE

[Signature]

3/17/16

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Jerry Pro 25A County: _____ Date: 3/17/16 Investigators: Starrish

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		87	60	1	N		93
	2	N							
	3	N							
	4	N							
	5	N							
	6	N							
	7	N							
	8	N							
	9	N							
10	1	N		95	70	1	N		88
	2	N							
	3	N							
	4	N							
	5	N							
	6	N							
	7	N							
	8	N							
	9	N							
20	1	N		94	80	1	N		92
	2	N							
	3	N							
	4	N							
	5	N							
	6	N							
	7	N							
	8	N							
	9	N							
30	1	N		96	90	1	N		92
	2	N							
	3	N							
	4	N							
	5	N							
	6	N							
	7	N							
	8	N							
	9	N							
40	1	N		93	100	1	N		95
	2	N							
	3	N							
	4	N							
	5	N							
	6	N							
	7	N							
	8	N							
	9	N							
50	1	N		91		1	N		
	2	N							
	3	N							
	4	N							
	5	N							
	6	N							
	7	N							
	8	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 0.11
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