

field ID



G1NE0208 12052017

Bivens Arm Outlet
@ SR 331

storet ID



G3NE0012

DEPARTMENT OF ENVIRONMENTAL PROTECTION **DRINKING PROGRAM FIELD SHEET**

October 2017

PAGE 1 OF 1

Data Qualified?

Yes / No

Date:

12/18/17

(mm/dd/yyyy)

WBID:

2718

Latitude:

29.6166

(Decimal Degrees)

Longitude:

82.3358

(Decimal Degrees)

County: Alachua RQ - 2017-12-04-34 ORG ID: 21 FLAReceiving Body of Water: Sweetwater treatment Field ID: See label

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment			
<u>B - D</u> <u>J Pelliss</u>				☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☒ Pole	
									☐ Carboy	☐ Syringe		
									☐ Dipper	☐ Other		
								Equipment ID ORTHO # <u>2</u>				
Collection Method												
				☐ Wading				☐ Canoe/Kayak				
				☒ From Shore				☐ Electric Motor				
				☐ Other				☐ Gasoline Motor				
Water Level: Dry ☐ Low ☒ Normal ☐ Above Normal ☐ Flooded				Meter ID# <u>YSI #4</u>				Matrix: Fresh / Marine / DI				
Photos: Yes / ☒ No				Flow: No Flow / Intestinal / ☒ Flowing / NA				Tide: Rising / Falling / Slack / NA				
								Tide Times: High ☒ Low ☐				
Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Secchi Disk (m)	Sp COND (µmho/cm)	Temp. (C)		
CEN	1245	0.3	0.4	4.54	46.2	7.54	0.10	VOB	203	16.26		
								(S) 0.4				
Biological Samples Collected: None ☐ HA ☒ SCI ☐ RPS ☒ Algae ID ☐ LVS ☒ LVI ☐ Other ☐												
SBIO ID Numbers: SBIO-ID: HA-ID: RPS-ID: Macrophyte-ID: LIMS#:												
Parameter Suite	Parameter Methods				Preservation	Lot#	Expiration	pH Check				
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☒ Ice ☐ H2SO4			☐ <2				
Metal	☐ 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				☐ Ice							
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD				☐ Ice							
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA				☐ Ice							
Pesticides	☐ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA				☐ Ice							
	☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R				☐ Other							

Notes:

Place Label Here
(If Available)

Signature:

B - D

Date:

12/18/17

Field Parameters Entered into LIMS:

12/21/17
(Initials/Date)

Field Parameters QC in LIMS:

(Initials/Date)

Date Migrated to STORET:

(Initials/Date)

Field Sheets Scanned/Saved:

(Initials/Date)

Contains: 1:1 Sulfuric Acid
 Lot No.: SA7275010
 Expires: 10/02/18
 See Safety Data Sheet (SDS)

1:1 Sulfuric Acid
 Lot No.: SA7275010
 Expires: 10/02/18
 See Safety Data Sheet (SDS)

Place Preservation
(If Available)

field ID



G1NE0208 12052017

cal/Chemical Characterization Field Sheet

78149

Bivens Arm Outlet
@ SR 331

store ID



G3NE0012

LATITUDE 29.6166

LONGITUDE 82.3358

SAMPLING AGENCY DEAK NEZ

SITE NAME

FIELD ID/NAME

RECEIVING BODY OF WATER

Sloop Lagoon Back

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

Width of Riparian Vegetation (m) on Each Buffer Side

Left Bank: 18 Right Bank: 18

Hydrologic Modification Score
(per FT 3101)

5-6

High Water Mark: 0.8 + 0.8 = 1.6
(m) (above present water level) (present depth) (above bed)Artificially Impounded
☐ Yes ☒ No

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

3.0 m wide

m/s 0.05 m/s m/s

m deep 0.4 m deep m deep

Artificially ☐ 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) 12% ☐ ☐Undercut Banks / Roots 0 ☐ ☐Leaf Packs or Mat 1% ☐ ☐Aquatic Vegetation 0 ☐ ☐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:	0.3	16.26	7.54	4.54	46.2	203	0.1	10.3
Mid:								
Bottom:								0.4

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 ☐ NoSample Preserved? ☒ Yes ☐ No

Lot Number: SA7275010 Exp: 10/2/18

Color Tannic ☐ Green (Algae) ☐
Clear ☐ Other (Specify) ☐Algae Sample Taken? ☐ Yes ☒ NoSample Preserved? ☐ Yes ☒ No

Lot 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

Brian Davis, J. P. P. P.

SIGNATURE:

B-D

78149

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>Biver's Arm</u>					County: <u>Alachua</u>		Date: <u>12/18/17</u>		Investigators: <u>B. Davis, J. Pelliss</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	STORET Station Number: <u>G3NE0012</u>
0	1	N		96	60	1	N		90	
	2	N								
	3		X							
	4									
	5									
	6									
	7									
	8	N								
	9	N								
10	1	N		66	70	1	N		79	
	2	N								
	3		X							
	4									
	5									
	6									
	7									
	8	N								
	9	N								
20	1	N		88	80	1	N		96	
	2	N								
	3		X							
	4									
	5									
	6									
	7									
	8	N								
	9	N								
30	1	N		74	90	1	N		93	
	2	N								
	3		X							
	4									
	5									
	6									
	7									
	8	N								
	9	N								
40	1	N		96	100	1	N		96	
	2	N								
	3									
	4									
	5									
	6									
	7									
	8									
	9									
50	1	N		94		1	N			
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

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%.

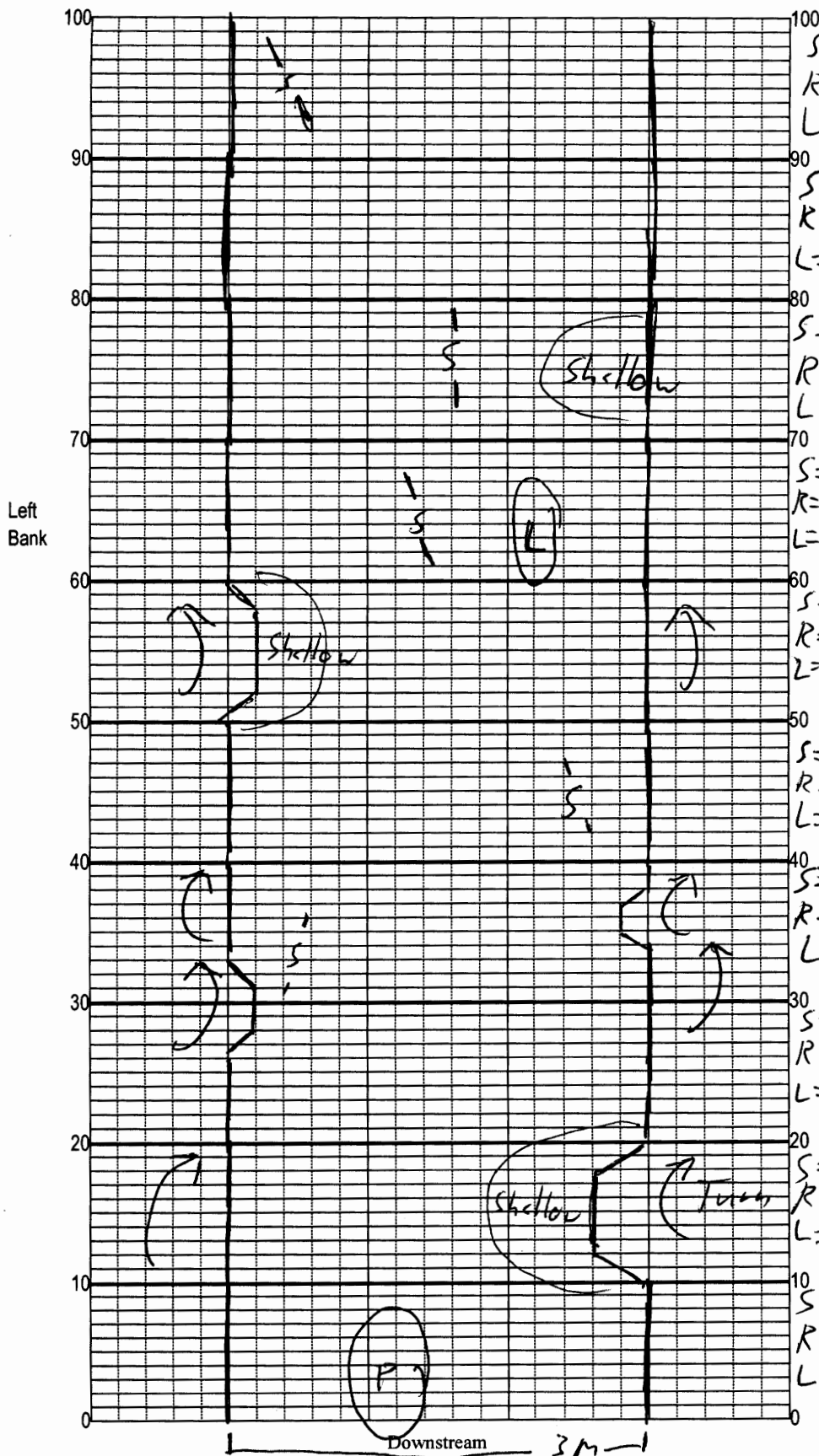
Secchi depth	<u>LOB</u>
Estimated?	

# 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- 2017-12-04-54	

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 9000-4 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).

$S=0.5$ Location: River's Alley
 $R=0$ Date: 12/18/17
 $L=0$ Sampler: B. R. J. Perri

100 m: Latitude	
Longitude	
0 m: Latitude	
Longitude	

Substrates: Code key, draw proportionate habitat abundance.

☐ S	Snags	1%
☐ R	Roots/undercut banks	0
☐ L	Leaf Packs (or mats)	<1%
☒	Aquatic Macrophytes	
☐		
☐		
☐ P	Pools	total # observed = # range expected =

Average width 3 m
 Average depth 0.8 m
 Velocity measured at 100 meter mark.
 WQ & chemistry taken at 100 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:

<2 M of Macrophytes was observed while doing the LVS? YES or NO

$S=3h$
 $R=0$
 $L=0.75$

78149

Stream/River Habitat Assessment Field Sheet

field ID



G1NE0208 12052017

Bivens Arm Outlet
@ SR 331

storet ID



G3NE0012

STORET STATION NUMBER:

DATE (MM/DD/YY):

12/18/17

RECEIVING BODY OF WATER:

Sweet Water Branch

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 } <u>3</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 <u>3</u> 2 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>6</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 <u>6</u>	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>21</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 <u>9</u> 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>14</u>	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 <u>5</u> } <u>3</u> Left Bank	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>3</u> } <u>2</u> Left Bank	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>3</u> } <u>2</u> Left Bank	10 9	8 7 6	5 4	3 2 1
Secondary Score <u>50</u>				

71

TOTAL SCORE

Date: 12/18/17

Analyst: Brian Davis

Signature: B. Davis