



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2016

PAGE ____ OF ____

Data Qualified?
Yes / No

STORET Station Name: L-48 Canal @ Buckhead ridge community center

Date: 04/28/16
(mm/dd/yyyy)

STORET Station ID: G4SE0090

Latitude: 27.144094°

(Decimal Degrees)

WBID: 3214

RQ - 2016-04-25-24

ORG ID: 21FLWPB

Longitude: -80.875084°

(Decimal Degrees)

Receiving Body of Water: Lake Okeechobee

Field ID: G4SE0090

County: Glades

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Ashley Huber									
sewell									

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	1406	0.3	1.1	6.4	86	7.3	0.40	0.7	816	28.9	
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	5259080	2/16	☐ <2
Metals	☒ W-ICPMS ☐ W-ICP		☒ Ice ☐ HNO2	5259030	2/16	☒ <2
Filtered Nutrients	☒ oP ☒ Field Filtered 0.45 µm Filter		☒ Ice	Place Preservative Sticker(s) Here (If Available)		
Chlorophyll	☒ CHLSUITE-W		☒ Ice			
BOD	☐ BOD-INHB ☐ BOD-UNIN		☐ Ice			
Physical/Aggregate	☐ TSS / Turbidity / Alkalinity / Color ☐ Other		☐ 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: SBIO # 76743	Place Label Here (If Available)
Signature: [Signature]	Date: 4/28/16

Field Parameters Entered into LIMS: [Signature] (Initials/Date) 119853	Field Parameters QC in LIMS: [Signature] (Initials/Date) 8/14/16
Date Migrated to STORET: (Initials/Date)	Field Sheets Scanned/Saved: (Initials/Date)

QA/QC Sample Information

Duplicate

Time Zone: EST CEN		Sample Depth (m): _____		Field ID: _____	
Time: _____		Total Depth (m): _____			
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 ☐ H ₂ SO ₄			☐ < 2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO ₃			☐ < 2
Filtered Nutrients	☐ oP ☐ Field Filtered 0.45 µm Filter	☐ Ice	Place Preservative Sticker(s) Here (If Available)		
Chlorophyll	☐ CHLSUITE-W	☐ Ice			
BOD	☐ BOD-INHB ☐ BOD-UNIN	☐ Ice			
Physical/Aggregate	☐ TSS / Turbidity / Alkalinity / Color ☐ Other _____	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enteroc ☐ QPCR	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other _____			

Blank

Time Zone: EST CEN		Time: _____		Field ID: _____		Location: _____	
☐ Field Blank ☐ Equipment Blank ☐ Field Cleaned Equipment Blank		Equipnet ID: _____					
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 ☐ H ₂ SO ₄			☐ < 2		
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO ₃			☐ < 2		
Filtered Nutrients	☐ oP ☐ Field Filtered 0.45 µm Filter	☐ Ice	Place Preservative Sticker(s) Here (If Available)				
Chlorophyll	☐ CHLSUITE-W	☐ Ice					
BOD	☐ BOD-INHB ☐ BOD-UNIN	☐ Ice					
Physical/Aggregate	☐ TSS / Turbidity / Alkalinity / Color ☐ Other _____	☐ Ice					
Microbiology	☐ E Coli ☐ F Coli ☐ Enteroc ☐ QPCR	☐ Ice					
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other _____					

Notes:

Notes:		Place Label Here (If Available)
Signature: _____		Date: _____

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)

SBIO 76723 JP

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: G4 SEC090

County: Okech

Date: 4/28

Investigators: Scott Hines

STORET Station Number: G4 SEC090

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

Secchi depth 0.7
Estimated? 1.0

points ranked 4-6 0
total points assessed 44
% points ranked 4-6 0

Check accompanying data collected at same site/date.
Algal mat sample
Linear Veg Survey
Habitat Assessment
SCI/Biorecon
Water sample
RQ- 2016-04-25-24

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%.

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

SAMPLE ID G45E0010 ORG ID 21F1WAB LATITUDE _____
COUNTY Oneida STORET # G45E0090 LONGITUDE _____
DATE 4/28 TIME _____ SAMPLING AGENCY _____
SITE NAME L-48
FIELD ID/NAME SB10 76723 RECEIVING BODY OF WATER lake - O

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☐ Silviculture ☐ Field/Pasture ☒ <u>60</u> Agricultural ☐ Residential ☐ Commercial ☐ Industry ☐ Other (Specify) ☒ <u>40</u> h/c								Landscape Development Intensity Index (LDI) ☐
Local Watershed Erosion (select one): ☐ None ☒ Slight ☐ Moderate ☐ Heavy Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy				Typical Width (m) Depth (m)/Velocity (m/sec) Transect ☐ m wide <u>14</u> m wide ☐ m/s <u>0.05</u> m/s ☐ m/s ☐ m deep <u>1.1</u> m deep ☐ m deep				
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>12</u> Right Bank: <u>0</u> Hydrologic Modification Score (per FT 3101) ☐								
High Water Mark: <u>0.5</u> + <u>1.1</u> = <u>1.6</u> (m) (above present water level) (present depth) (above bed) Artificially Impounded ☐ Yes ☐ No								
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 # Times Sampled ☐ PERI # Times Sampled		WATER QUALITY Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: <u>0.3</u> <u>28.9</u> <u>7.3</u> <u>6.4</u> <u>86</u> <u>816</u> <u>0.4</u> <u>0.7</u> Mid: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Bottom: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Meter ID: <u>AK-3</u> ☐ VOB TOTAL DEPTH <u>1.1</u>			
Woody Debris (Snags) <u>05</u> Undercut Banks / Roots <u>0</u> Leaf Packs or Mat <u>0</u> Aquatic Vegetation <u>1</u> Rock or Shell Rubble <u>0</u> Sand <u>0</u> Mud / Muck / Silt <u>0</u> Other <u>0</u> Other <u>0</u>		Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☐ Yes ☐ No Sample Preserved? ☐ Yes ☐ No Lot Number: <u>G45E0010</u> Exp: <u>9/16</u> Algae Sample Taken? ☐ Yes ☒ No Sample 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) ☒ <u>canal</u> AMBIENT FIELD CONDITIONS / NOTES: ☐ The antecedent hydrologic conditions have been met to my best knowledge.			

SAMPLING TEAM

Sevell / Hickey

SIGNATURE:

[Signature]

DATE:

4/28

Waterbody: L-48 canal	Date: 4/28	County: Wheeler	Storet Number: 6420090
Analyst: Harvey	Signature: [Signature]		
Comments: SBIO# 76783			

[illegible]

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

SAMPLING AGENCY: <u>SO502IFWPS</u>		STORET STATION NUMBER: <u>64 SE0010</u>	DATE (MM/DD/YY): <u>4/28/16</u>	RECEIVING BODY OF WATER: <u>lake - 0</u>
REMARKS: <u>WD FLOW</u>	COUNTY: <u>Oreghon</u>	LOCATION: <u>L-48 @ Backhaul Road</u>	FIELD ID/NAME: <u>64 SE0010</u>	

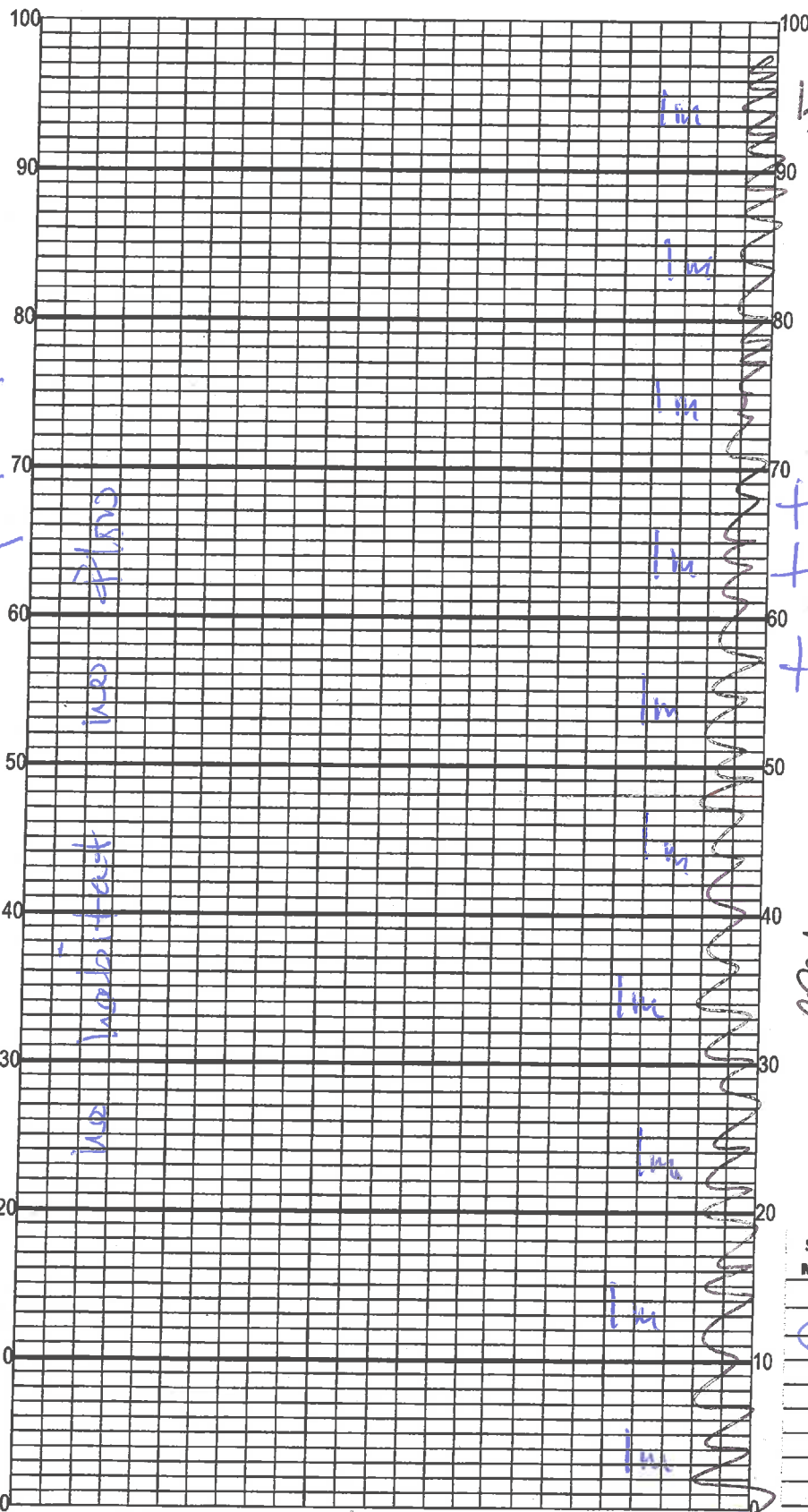
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh 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>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>2</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 <u>2</u> 1
Water Velocity <u>5</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 <u>5</u> 4 3 2 1
Habitat Smothering <u>1</u> ----- Primary Score <u>9</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 <u>1</u>
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>4</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 <u>4</u> 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>10</u> Left Bank <u>4</u>	<u>10</u> 9	8 7 6	5 <u>4</u>	3 2 1
Riparian Buffer Zone Width	Width of vegetation greater than 18 m	Width of vegetation > 12 to 18 m	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>1</u> Left Bank <u>7</u>	10 9	8 <u>7</u> 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> Left Bank <u>3</u> ----- Secondary Score <u>30</u>	10 9	8 7 6	5 4	<u>3</u> 2 1

39

TOTAL SCORE

Date: <u>4/28/16</u>	Analyst: <u>Hurley/Sewell</u>	Signature: <u>[Signature]</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: _____

Date: 4/28/16

Sampler: _____

100 m: Latitude _____

Longitude _____

0 m: Latitude _____

Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

☐ Snags _____

☐ Roots/undercut banks _____

☐ Leaf Packs (or mats) _____

☒ Aquatic Macrophytes _____

☐ _____

☐ _____

☐ Pools total # observed = _____
range expected = _____

Average width 15 m

Average depth _____ m

Velocity measured at _____ meter mark.

WQ & chemistry taken at 0 meter mark.

Habitat Smothering: Heavy
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.

Secs/ Meter	Flow m/s	Secs/ Meter	Flow m/s
1	1	12	0.08
2	0.5	13	0.076
3	0.33	14	0.071
4	0.25	15	0.066
5	0.2	16	0.062
6	0.16	17	0.058
7	0.14	18	0.055
8	0.12	19	0.052
9	0.11	20	0.052
10	0.1	21	0.047
11	0.09	22	No Flow

Plants observed /
other notes:

Prod. Habitat	1	2	3	4	5
Sweeps Major	10	7	5	4	3
Sweeps Minor	10	6	5	4	5

Revision Date: March 1, 2014

15m