



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE 1 OF 1

RQ-2016-12-26-04



Data Qualified?
Yes / ~~No~~

STORET Station Name: _____

12/27/2016
WBID 1860 C

G4SD12272016-4
Field ID

Date: _____

(mm/dd/yyyy)

STORET Station ID: _____

Jackson Creek
North Above Water

STORET
KISSRV0063FTM

Latitude: _____

(Decimal Degrees)

WBID: _____

RQ - _____

Longitude: _____

(Decimal Degrees)

Receiving Body of Water: _____

Lake Josephine

Field ID: _____

County: _____

Highlands

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Rosemary Murphy									
Corey Anderson									

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# 4515 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	1215	0.3	1.0	3.7	43	6.6	-	1.0	146	22.1
CEN										

Biological Samples Collected: None HA SCI LVS RPS LVI Other _____

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ TKN / TP / Nox / NH3 / TOC Other _____	☒ 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			
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 _____			

Contains
1:1
Sulfuric Acid
SA-620912u
EXP: 07/27/17
Warning!
See SDS

Reservative Sticker(s) Here
(if Available)

Notes:

Blank
Time:
12:30

RQ-2016-12-26-04

12/27/2016

G3SD122716-3

Field ID

Field Blank

STORET
Field Blank

Signature: _____

Date: _____

12-27-16

Field Parameters Entered into LIMS: _____

(Initials/Date)

Field Parameters QC in LIMS: _____

(Initials/Date)

Date Migrated to STORET: _____

(Initials/Date)

Field Sheets Scanned/Saved: _____

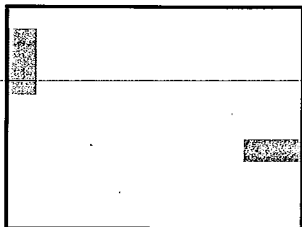
(Initials/Date)

LINEAR VEGETATION SURVEY FIELD SHEET																							
RQ-2016-12-26-04										e:	County: Highlands				Storet Number:								
G4SD12272016-4 Field ID ▲ KISSRV0063FTM STORET ▼										Signature: [Handwritten Signature]													
Ar WBID 1860 C																							
Cc Jackson Creek																							
Ins North Above Weir																							
ent, "D" if dominant, and "C" if codominant (dominance only if 1 m² of taxa present). Note in the 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	P	P	P	P	P	P			P		Micranthemum glomeratum												
Bacopa caroliniana											Micranthemum umbrosum												
Bacopa monneri											Myriophyllum aquaticum												
Bidens mitis											Najas guadelupensis												
Boehmeria cylindrica											Nuphar luteum												
Centella asiatica											Orontium aquaticum												
Ceratophyllum demersum											Panicum hemitomon												
Chara											Panicum repens	P	P	P	P	P	P	P	P	P			
Cicutula maculata											Panicum rigidulum												
Cladium jamaicense											Pistia stratioides												
Colocasia esculenta											Polygonum glabra												
Commelina diffusa					P						Polygonum hydropiperoides												
Commelina virginica											Polygonum punctatum												
Crinum americanum											Pontederia cordata												
Diodia virginiana											Potamogeton illinoensis												
Eichhornia crassipes	P	P	P	P	P	P	P	P	P		Ruellia simplex												
Eleocharis (wispy viviparous)	P	P									Sacciolepis striata												
Hydrilla verticillata											Sagittaria kurziana												
Hydrocotyle											Sagittaria lancifolia												
Hypoglossiphila polysperma											Sagittaria latifolia												
Hymenocallis											Salvinia minima												
Lachnanthes caroliniana											Samolus parviflora												
Landoltia punctata											Saururus cernuus												
Lemna	P	P	P	P	P	P	P	P	P		Sparganium americanum												
Limnophila sessiliflora											Typha												
Ludwigia leptocarpa octovalvis	P						P				Vallisneria americana												
Ludwigia palustris											Zizania aquatica												
Ludwigia peruviana											Cyperus odoratus		P				P						
Ludwigia repens											Oryzopsis latifolia					P							
Luziola fluitans																							
If no Dominant or Co-Dominant were selected, indicate with "X"																							

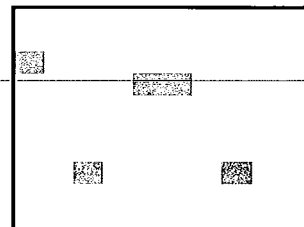
FDEP FORM FD 9000-32 LINEAR VEGETATION SURVEY FIELD SHEET

Percent Cover Categories for macrophytes in a 10 m segment of a stream 5 m wide

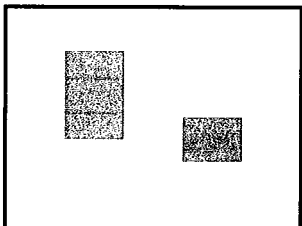
5% Macrophyte Coverage



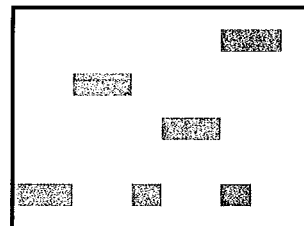
5% Macrophyte Coverage



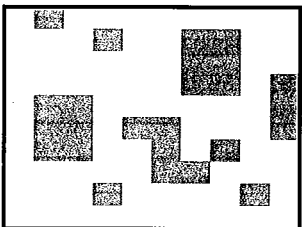
10% Macrophyte Coverage



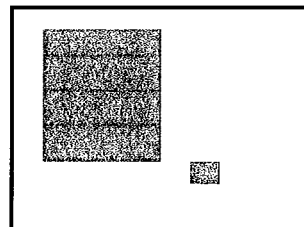
10% Macrophyte Coverage



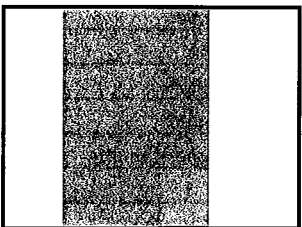
25% Macrophyte Coverage



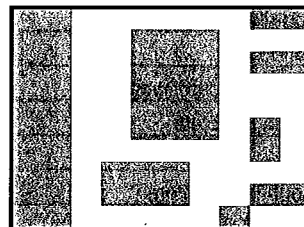
25% Macrophyte Coverage



50% Macrophyte Coverage



50% Macrophyte Coverage



12/27/2016
WBID 1860 C

G4SD12272016-4

Jackson Creek
North Above We

KISSRV0063FTM

D 9000-5 Stream/River Habitat Assessment Field Sheet

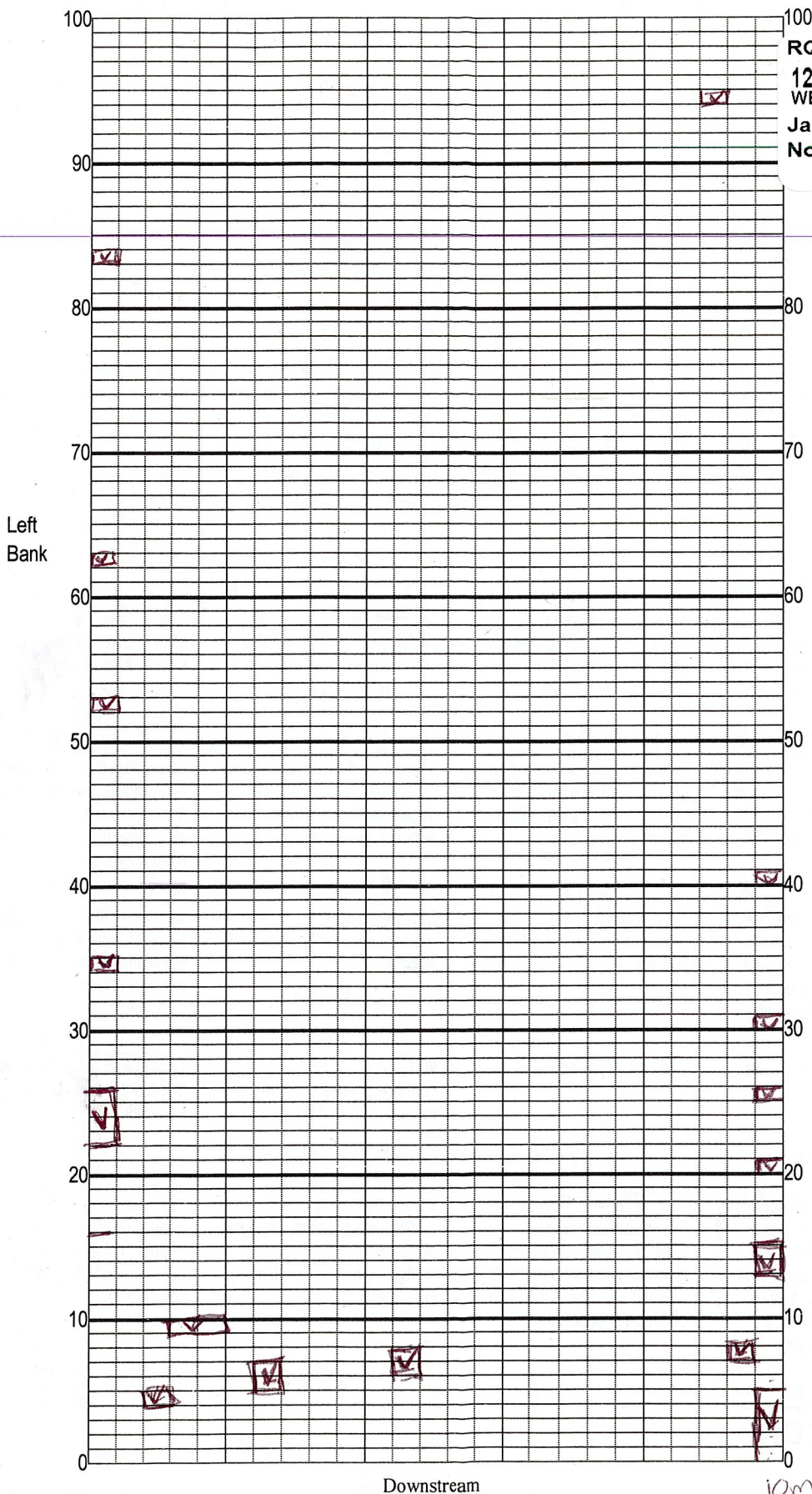
REMARKS:		COUNTY: <u>Highlands</u>	STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER: <u>Josephine, Lake</u>
		LOCATION:	FIELD ID/NAME:		

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>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>1</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 <u>1</u>
Habitat Smothering <u>4</u> ----- Primary Score <u>10</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 <u>4</u> 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>3</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 <u>3</u> 2 1
Bank Stability Right Bank <u>5</u> <u>4</u> Left Bank	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. <u>R</u> <u>L</u> <u>5</u> <u>4</u>	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>1</u> <u>2</u> Left Bank	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 <u>L</u> <u>R</u> 3 <u>2</u> <u>1</u>
Riparian Zone Vegetation Quality Right Bank <u>1</u> <u>2</u> Left Bank ----- 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). <u>L</u> <u>R</u> 3 <u>2</u> <u>1</u>

28 TOTAL SCORE

Date: <u>12/27/16</u>	Analyst: <u>Rosemary Murphy</u>	Signature: <u>Rosemary Murphy</u>
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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).

RQ-2016-12-26-04

12/27/2016
WBID 1860 C

Jackson Creek
North Above Weir

G4SD12272016-4

Field ID
STORET
KISSRV0063FTM

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 _____

☒ veg 1.0%
0.04

☐ _____

☐ Pools total # observed = 0
range expected = 0

Average width 10 m m

Average depth 1 m m

Velocity measured at 60.01 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:

25 v =
* Straight "creek"

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

RQ-2016-12-26-04
 SAMPLE **12/27/2016**
 COUNTY **WBID 1860 C**
 DATE **Jackson Creek**
 SITE NA **North Above Water**
 FIELD ID/NAME **KISSRV0063FTM**

G4SD12272016-4
Field ID
STORET
FTM

LATITUDE _____
 LONGITUDE _____
 SAMPLING AGENCY **DEP South Roc**
 RECEIVING BODY OF WATER **Lake Josephine**

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) ☐							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 10 m wide 0.01 m/s 0.01 m/s 0.01 m/s
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: 0 Right Bank: 0				Hydrologic Modification Score (per FT 3101) ☐		0.2 m deep 1.0 m deep 0.2 m deep	
High Water Mark: 0 + 1.0 = 1.0 (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☒ Yes ☐ No		Canopy Cover % ☒ Open ☐ Lightly Shaded (11-45%) ☐ Heavily Shaded ☐ Moderate Shaded (46-80%)	
Artificiality ☐ No ☐ Mostly recovered, more sinuous Channelized: ☐ Some recovery ☒ Recent, severe							

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		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 22.1 6.6 3.7 43 146 - 1.0 Mid: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☒ VOB Bottom: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ TOTAL DEPTH Meter ID: Y315 1.0			
Woody Debris (Snags) ☐ ☐ ☐ Undercut Banks / Roots ☐ ☐ ☐ Leaf Packs or Mat ☐ ☐ ☐ Aquatic Vegetation ☐ ☐ ☐ Rock or Shell Rubble.. ☐ ☐ ☐ Sand..... ☐ ☐ ☐ Mud / Muck / Silt ☐ ☐ ☐ Other ☐ ☐ ☐ Other ☐ ☐ ☐		Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐		Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐	
		Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: _____ Exp: _____		Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐	
		Algae Sample Taken? ☐ Yes ☒ No Sample 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: ☒ ☐ ☐ ☐		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 Corey Anderson Rosemary Murphy		SIGNATURE: _____		DATE: 12-27-16	

12/27/2016
WBID 1860 CJackson Creek
North Above Weir

G4SD12272016-4

Field ID
STORET
KISSRV0063FTM

0-25 Rapid Periphyton Survey Field Sheet

Site:					County: Highlands		Date: 12-27-16		Investigator: Corey Anderson	
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				60	1				
	2					2				
	3		Y			3		Y		
	4		Y			4		Y		
	5	N	Y	0		5	N	Y	23	
	6		Y			6		Y		
	7		Y			7		Y		
	8					8				
	9					9				
10	1				70	1				
	2					2				
	3		Y			3		Y		
	4		Y			4		Y		
	5	N	Y	0		5	N	Y	0	
	6		Y			6		Y		
	7		Y			7		Y		
	8					8				
	9					9				
20	1				80	1				
	2					2				
	3		Y			3		Y		
	4		Y			4		Y		
	5	N	Y	0		5	N	Y	0	
	6		Y			6		Y		
	7		Y			7		Y		
	8					8				
	9					9				
30	1				90	1				
	2					2				
	3		Y			3		Y		
	4		Y			4		Y		
	5	N	Y	0		5	N	Y	0	
	6		Y			6		Y		
	7		Y			7		Y		
	8					8		Y		
	9					9				
40	1				100	1				
	2					2		Y		
	3		Y			3		Y		
	4		Y			4		Y		
	5	N	Y	0		5	N	Y	0	
	6		Y			6		Y		
	7		Y			7		Y		
	8					8				
	9					9				
50	1				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 densimeter 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		Y							
	4		Y							
	5	N	Y	0						
	6		Y							
	7		Y							
	8									
	9									

STORET Station Number:

Secchi depth	1.0
Estimated?	

# points ranked 4-6	0
total points assessed	42
% points ranked 4-6	

Check accompanying data collected at same site/date.	
Algal mat sample	
Linear Veg Survey	X
Habitat Assessment	Y
SCI/Biorecon	
Water sample	X
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