



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE 1 OF 1

RQ-2016-09-19-27

9/19/2016
WBID 1937

G3SD09192016-1

Field ID

Data Qualified?
Yes / No

STORET Station Name

Phillippi Creek @
Pinecraft Park

STORET
G3SD0059

Date:

(mm/dd/yyyy)

STORET Station ID:

Latitude:

(Decimal Degrees)

WBID:

RQ:

ORG ID:

Longitude:

(Decimal Degrees)

Receiving Body of Water:

Sarasota Bay

Field ID:

County:

Sarasota

Sampling Team Members

Ben Paswater
Rosemary Murphy
Veronica Ruge

WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	☒	☒	☒	☒
☒	☒	☒	☒	☒
☒	☒	☒	☒	☒
☒	☒	☒	☒	☒

Sampling Equipment

- ☒ Sample Container ☐ Van Dorn ☐ Pole
☐ Carboy ☒ Syringe
☐ Dipper ☐ Other

Equipment ID

Collection Method

- ☒ Wading ☐ From Shore ☐ Other (note below)
☐ Canoe/Kayak ☐ Electric Motor ☐ Gasoline Motor

Via Boat

Water Level: Dry / Low / Normal / High / Flooded

Matrix: Fresh / Marine / DI

Meter ID#

A

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	1130	0.3	1m	5.8	76	6.7	/	.4	320	27.8
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 ☒ H2SO4			☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO2			☐ <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-6209120
EXP: 07/27/17
Warning!
See SDS

Notes:

DUP
Time
1135

DUP taken
Place Label Here
(If Available)
A kit only not pest/herb

Signature:

Ben Paswater

Date:

9/19/16

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)

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY

RQ-2016-09-19-21

9/19/2016
WBID 1937

G3SD09192016-1

Field ID

STORET
G3SD0059

Waterbody:

Date:

County: SwainPhillippi Creek @
Pinecraft ParkAnalyst: Ben PaswaterSignature: Ben Paswater

Comments:

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m² 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 advena											
Centella asiatica												Orontium aquaticum											
Ceratophyllum demersum												Panicum hemitomon											
Ceratopteris												Panicum repens											
Chara												Panicum rigidulum											
Cicuta maculata												Paspalum repens											
Cladium jamaicense												Pistia stratioides											
Colocasia esculenta	✓				✓	✓						Polygonum glabra											
Commelina diffusa												Polygonum hydropiperoides											
Commelina virginica												Polygonum punctatum											
Crinum americanum												Pontedaria cordata					✓						
Diodia virginiana												Potamogeton illinoensis											
Eichhornia crassipes												Ruellia simplex											
Eleocharis (wispy viviparous)												Sacciolepis striata		✓									
Hydrilla verticillata												Sagittaria lancifolia											
Hydrocotyle												Sagittaria latifolia											
Hygrophila polysperma												Salvinia minima											
Hymenachne amplexicaulis												Samolus parviflora											
Hymenocallis												Saururus cernuus											
Juncus												Sparganium americanum					✓	✓					
Lachnanthes caroliniana												Spirodela polyrhiza											
Landoltia punctata												Typha											
Lemna												Urochloa (Brachiaria) mutica											
Limnophila sessiflora												Vallisneria americana											
Ludwigia leptocarpa												Zizania aquatica											
Ludwigia octovalvis												Sagittaria arifolia											
Ludwigia palustris																							
Ludwigia peruviana	✓	✓	✓					✓	✓	✓													
Ludwigia repens																							
Luziola fluitans																							
If no Dominant or Co-Dominant were selected, indicate with "X"																							
Indicate % cover macrophytes per section																							
0-5% Macrophyte Coverage	✓	✓	✓																				
>5 and ≤10% Macrophyte Coverage																							
>10 and ≤25% Macrophyte Coverage																							
>25 and ≤50% Macrophyte Coverage																							
> 50% Macrophyte Coverage																							

9/19/2016
WBID 1937

G3SD09192016-1

Field ID

STORET
G3SD0059

DEP FORM FD 9000-25 Rapid Periphyton Su

Phillippi Creek @
Pinecraft Park

Site: <u>Phillippi Creek</u>					County: <u>Minnesota</u>		Date: <u>9/19/16</u>		STORET Station Number:	
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	X			60	1	X			
	2	N				2	N			
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
10	1	X			70	1	X			
	2	N				2	N			
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
20	1	X			80	1	X			
	2	N				2	N			
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
30	1	X			90	1	X			
	2	N				2	N			
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
40	1	X			100	1	X			
	2	N				2	N			
	3					3				
	4					4				
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
50	1	X			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	N								
	3									
	4									
	5									
	6									
	7									
	8									
	9									

Secchi depth 0.4
Estimated? N

points ranked 4-6 0
total points assessed 96
% 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- ☐

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-SOP-001/01: Form FD 900
STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENT
STREAM/RIVER HABITAT ASSESSMENT FIELD

Phillippi Creek @
Pinecraft Park

STORET
G3SD00059

SUBMITTING AGENCY CODE: _____		STORET STATION NUMBER: _____	DATE (MM/DD/YY): 9/19/16	RECEIVING BODY OF WATER: Sarasota Bay
SUBMITTING AGENCY NAME: _____				
REMARKS: _____	COUNTY: Sarasota	LOCATION: Phillippi Creek	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>1</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 <u>1</u>
Substrate Availability <u>1</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 2 <u>1</u>
Water Velocity <u>14</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 <u>14</u> 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>2</u> ----- Primary Score <u>18</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 <u>2</u> 1
Secondary Habitat Components Artificial Channelization <u>3</u>	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. 20 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered. 15 14 13 12 11	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area. 10 9 8 7 6	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks. 5 4 <u>3</u> 2 1
Bank Stability Right Bank <u>4</u> Left Bank <u>4</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 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>LR</u> 5 <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>3</u> Left Bank <u>3</u>	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>LR</u> <u>3</u> 2 1
Riparian Zone Vegetation Quality Right Bank <u>2</u> Left Bank <u>2</u> ----- Secondary Score <u>21</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>LR</u> 3 <u>2</u> 1

39 TOTAL SCORE

Date: 9/19/16	Analyst: Ben Pagwater	Signature: Ben Pagwater
---------------	-----------------------	-------------------------

9/19/2016
WBID 1937

G3SD09192016-1

Field ID

Phillippi Creek @
Pinecraft ParkSTORET
G3SD0059

Date: _____

Sampler: BR, RM, VR100 m: Latitude 27.32021
Longitude -82.504470 m: Latitude 27.31933
Longitude -82.50449Substrates: Code key, draw
proportionate habitat abundance.

Snags

0.1%



Roots/undercut banks



Leaf Packs (or mats)



Aquatic Macrophytes

0.2%

Pools total # observed = _____
range expected = _____Average width 10.6 mAverage depth 1.6 mVelocity measured at 0 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:

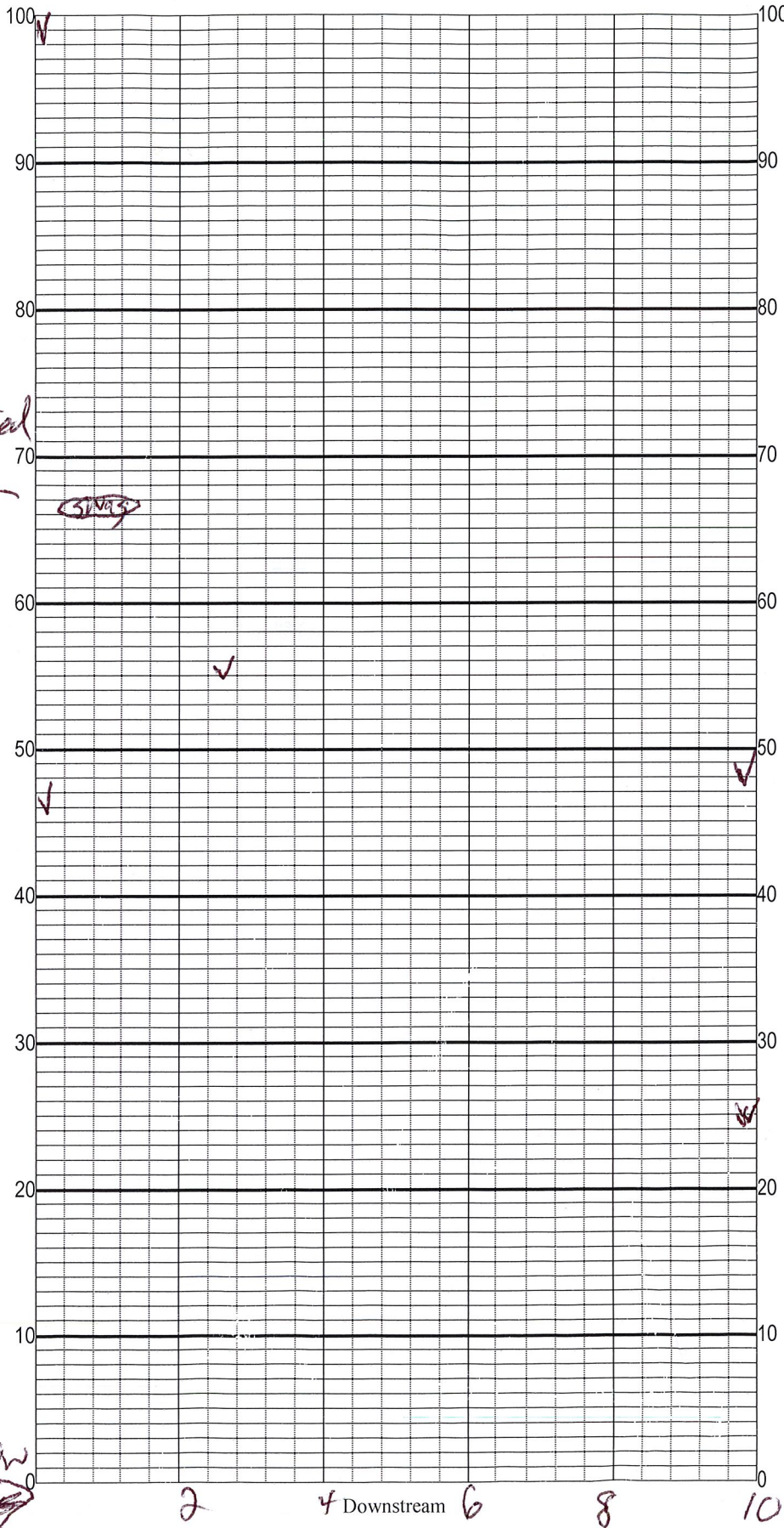
Note areas (on map) where natural vegetation
is altered or eliminated.

Plants observed / other notes:

recently scrapped
edges of veg

6 / 2500

3 / 2500

Length of grid represents 100 m of stream (not linear meters).
(Horizontal scale is double vertical scale, draw proportionately).

9/19/2016

G3SD09192016-1

WBID 1937

Phillippi Creek @

Pinecraft Park

STORET
G3SD0059

SAMPLE ID _____ ORG ID _____

COUNTY _____ STORET # _____

DATE _____ TIME _____

SITE NAME _____

FIELD ID/NAME _____ RECEIVING BODY OF WATER Sutaset Bay

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>5</u> Silviculture _____ Field/Pasture _____ Agricultural <u>80</u> Residential <u>15</u> Commercial _____ Industry _____ Other (Specify) _____							Landscape Development Intensity Index (LDI) _____
Local Watershed Erosion (select one): ☐ None ☒ Slight ☒ Moderate ☒ Heavy							Typical Width (m) Depth (m)/Velocity (m/sec) Transect <u>10</u> m wide
Local Watershed NPS Pollution: ☐ No evidence ☒ Slight ☒ Moderate ☐ Heavy							
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>5</u> Right Bank: <u>5</u>				Hydrologic Modification Score (per FT 3101) _____		<u>1.2</u> m/s <u>.25</u> m/s <u>.2</u> m/s <u>3</u> m deep <u>1</u> m deep <u>3</u> m deep	
High Water Mark: <u>1.2</u> + <u>1</u> = <u>1.2</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 Woody Debris (Snags) _____ Undercut Banks / Roots _____ Leaf Packs or Mat _____ Aquatic Vegetation _____ 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: <u>0.3</u> <u>27.8</u> <u>6.7</u> <u>5.8</u> <u>76</u> <u>320</u> <u>/</u> <u>1.4</u> Mid: _____ Bottom: _____ Meter ID: <u>A</u> <u>Passel</u> Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: _____ Exp: _____ 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: <u>recently had banks scrapped of veg</u> <u>See Pics</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.		
SAMPLING TEAM <u>Ben Paswater, Rosemary Murphy, Veronica R</u>			SIGNATURE: <u>Ben Paswater</u>		DATE: <u>9/19/16</u>