



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

February 2016

PAGE ____ OF ____

Data Qualified?
Yes / No

STORET Station Name: L63 at SE 59th Blvd/6B

Date: 6/21/16
(mm/dd/yyyy)

STORET Station ID: G1SE0005

Latitude: 27.218083

WBID: 3203C

RQ - 2016-06-13-33

ORG ID: 21F1WPS

Longitude: -80.768417

Receiving Body of Water: Lake - O

Field ID: G1SE0005

County: Okeechobee

Sampling Team Members						WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Sewell										
James P. H.										
Hurley										

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# 4E3

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	1200	0.3	4.4	5.5	71	6.8	0.15	0.4	320	29.1
CEN	1201	3.9		4.9	61	6.8	0.18		382	27.0

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	259020	7/16	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☐ Ice			
Chlorophyll	☒ CHLSUITE-W	☐ Ice			
BOD	☐ BOD-UNIN	☐ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CHC / W-COLOR / W-SO4-IC / W-TDS	☐ Ice			
Physical/Aggregate (Marine)	☐ 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:

Flow 0.03 m/s

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)

SPID 76675 B.D. Removed

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: L-63 @ 55m nl

County: Cheshel

Date: 6/21/16

Investigators: Huxley / Sevel

STORET Station Number: 61510005

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	3			60	1	3			
	2	10	X			2	3	X		
	3		X			3		X		
	4		X			4		X		
	5		X			5		X		0
	6		X			6		X		
	7		X			7		X		
	8		X			8		X		
	9		X			9		X		
10	1	3			70	1	3			
	2	2	X			2	2	X		
	3		X			3		X		
	4		X			4		X		
	5		X			5		X		0
	6		X			6		X		
	7		X			7		X		
	8		X			8		X		
	9		X			9		X		
20	1	3			80	1	3			
	2	2	X			2	2	X		
	3		X			3		X		
	4		X			4		X		0
	5		X			5		X		
	6		X			6		X		
	7		X			7		X		
	8		X			8		X		
	9		X			9		X		
30	1	3			90	1	2			
	2		X			2	2	X		
	3		X			3		X		
	4		X			4		X		
	5		X			5		X		0
	6		X			6		X		
	7		X			7		X		
	8		X			8		X		
	9		X			9		X		
40	1	3			100	1	3			
	2		X			2	2	X		
	3		X			3		X		
	4		X			4		X		
	5		X			5		X		0
	6		X			6		X		
	7		X			7		X		
	8		X			8		X		
	9		X			9		X		
50	1	3				1	3			
	2	2	X			2	2	X		
	3		X			3		X		
	4		X			4		X		
	5		X			5		X		
	6		X			6		X		
	7		X			7		X		
	8		X			8		X		
	9		X			9		X		

Secchi depth 0.4
Estimated?

points ranked 4-6 0
total points assessed 92
% 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- 2016-06-13-30

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%.

BIO Remant SR20 76675

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

SAMPLING AGENCY: <u>21FLWPD</u>		STORET STATION NUMBER: <u>6150005</u>	DATE (MM/DD/YY): <u>6/2/16</u>	RECEIVING BODY OF WATER: <u>Lake O</u>
REMARKS:	COUNTY: <u>Greene</u>	LOCATION: <u>L-63C</u>	FIELD ID/NAME: <u>6150005</u>	

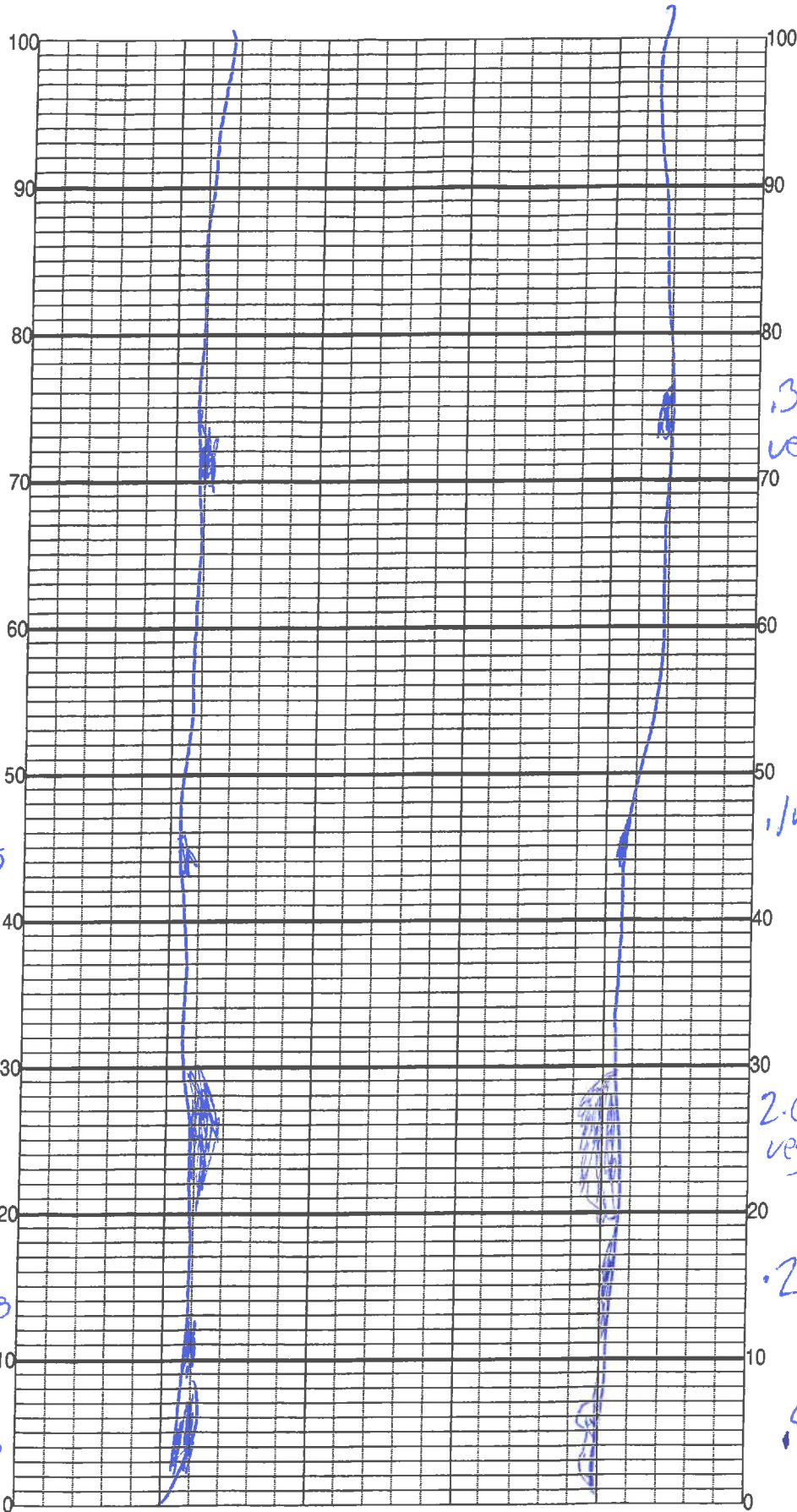
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock]	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh 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>2</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 <u>2</u> 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>6</u> ----- Primary Score <u>15</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 <u>6</u>	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>1</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 <u>1</u>
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>10</u>	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>1</u> Left Bank <u>1</u>	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>1</u> Left Bank <u>1</u> ----- Secondary Score <u>25</u>	10 9	8 7 6	5 4	3 2 1

40 TOTAL SCORE

Date: <u>6/2/16</u>	Analyst: <u>A. Hurley</u>	Signature: <u>Ashley Hurley</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet

BSO Removal



Location: L-63
 Date: _____
 Sampler: Hortex/Senell

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 <u>0.2</u>
☐	_____
☐	_____
☐	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:

veg- 6.2/3500

2 veg

1.5 veg

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Waterbody: <u>L-63</u>	Date: <u>6/21/16</u>	County: <u>Orleans</u>	Storet Number: <u>6151005</u>
Analyst: <u>Senell/Haley</u>	Signature: <u>Senell</u>		
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.

Species for additional data names.													Species for additional data 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 luteum		✓	✓	✓	✓								
Centella asiatica												Orontium aquaticum													
Ceratophyllum demersum												Panicum hemitomon	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Chara												Panicum repens				✓	✓	✓							
Cicuta maculata												Panicum rigidulum													
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 kurziana													
Hydrocotyle	✓											Sagittaria lancifolia													
Hygrophila polysperma												Sagittaria latifolia													
Hymenocallis												Salvinia minima		✓	✓										
Lachnanthes caroliniana												Samolus parviflora													
Landoltia punctata												Saururus cernuus													
Lemna			✓					✓				Sparganium americanum													
Limnophila sessiflora												Typha													
Ludwigia leptocarpa												Vallisneria americana													
Ludwigia palustris												Zizania aquatica													
Ludwigia peruviana		</																							

Bio Removal

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

SAMPLE ID GISE0005 ORG ID 21FLWPPS LATITUDE 27.216083
 COUNTY Oregon STORET # GISE0005 LONGITUDE -80.768417
 DATE 6/21/16 TIME 12:00 SAMPLING AGENCY _____
 SITE NAME _____
 FIELD ID/NAME GISE0005 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 ☐ 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 ☐ m wide ☐ m/s ☐ m/s ☐ m/s			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: ☐ Right Bank: ☐				Hydrologic Modification Score (per FT 3101) ☐				☐ m/s ☐ m/s ☐ m/s	
High Water Mark: ☐ + ☐ = ☐ (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☒ Yes ☐ No				☐ m deep ☐ m deep ☐ 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 # 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: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Mid: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Bottom: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Meter ID: ☐								
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) ☒ <u>Canal</u>								
AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.											
SAMPLING TEAM <u>Matt Seel</u>			SIGNATURE: <u>Matt Seel</u>						DATE: <u>6/21/16</u>		