



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

June 2016

PAGE 1 OF 1

Data Qualified?

Yes / No

STORET Station Name: Popash Slough @ SR70

Date: 8/24/16

(mm/dd/yyyy)

STORET Station ID: G1SE0017

WBID: 3205C

Latitude: 27.243611

(Decimal Degrees)

County: Okeechobee RQ - 2016-08-22-52

ORG ID: 21FLWPB

Longitude: -80.896917

(Decimal Degrees)

Receiving Body of Water: L-62 Canal

Field ID: G1SE0017

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment			
James Pitts Matt Sevel				X	X	X	X	X	☒ Sample Container	☐ Van Dorn	☐ Pole	
									☐ Carboy	☐ Syringe		
									☐ Dipper	☐ Other		
Equipment ID								Collection Method				
				X	X	X	X	X	☒ 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# AE3				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 (umhos/cm)	Temp. (C°)		
EST	1130	0.3	0.5	3.6	45	6.7	0.50	0.3	1006	27.3		
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		6209120		7/27/17 <2		
Metals		☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO2				☐ <2		
Filtered Nutrients		☒ W-PO4-F ☒ Field Filtered 0.45 um Filter				☒ Ice						
Chlorophyll		☒ CHLSUITE-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						
Microbiology		☐ E Coli ☐ F Coli ☐ Enteroc ☐ QPCR				☐ Ice						
Periphyton		☐ ALGAE-ID				☐ Ice						
Pesticides		☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R				☐ Ice						
		☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH				☐ Other						

Notes:

SR70 T1065

Place Label Here
(If Available)

Signature:

James Pitts

Date:

8/24/16

Field Parameters Entered into LIMS:

JP 9/22/2016

Field Parameters QC in LIMS:

W 10/16

Date Migrated to STORET:

(Initials/Date)

Field Sheets Scanned/Saved:

(Initials/Date)

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>Plashy</u>					County: <u>Deerfield</u>		Date: <u>8/24/16</u>		Investigators: <u>Hurley/Sewell/Fitts</u>	
					STORET Station Number: <u>6786077</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	
0	1	N	N		60	1	N	N		
	2					2				
	3					3				
	4					4				
	5			80		5				44
	6					6				
	7					7				
	8					8				
	9					9				
10	1				70	1				
	2					2				
	3					3				
	4					4				
	5			40		5				68
	6					6				
	7					7				
	8					8				
	9					9				
20	1				80	1				
	2					2				
	3					3				
	4					4				
	5			90		5				48
	6					6				
	7					7				
	8					8				
	9					9				
30	1				90	1				
	2					2				
	3					3				
	4					4				
	5			80		5				0
	6					6				
	7					7				
	8					8				
	9					9				
40	1				100	1				
	2					2				
	3					3				
	4					4				
	5			90		5				0
	6					6				
	7					7				
	8					8				
	9					9				
50	1	N				1				
	2					2				
	3					3				
	4					4				
	5			90		5				
	6					6				
	7					7				
	8					8				
	9	N	N			9				

Secchi depth	<u>23</u>
Estimated?	
# points ranked 4-6	<u>0</u>
total points assessed	<u>90</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-	

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%.

8/30/16 77065

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

SAMPLING AGENCY: <u>8050</u>		STORET STATION NUMBER: <u>6150017</u>	DATE (MM/DD/YY): <u>8/24/16</u>	RECEIVING BODY OF WATER:
REMARKS:	COUNTY:	LOCATION: <u>Pop Ash</u>	FIELD ID/NAME: <u>6150017</u>	

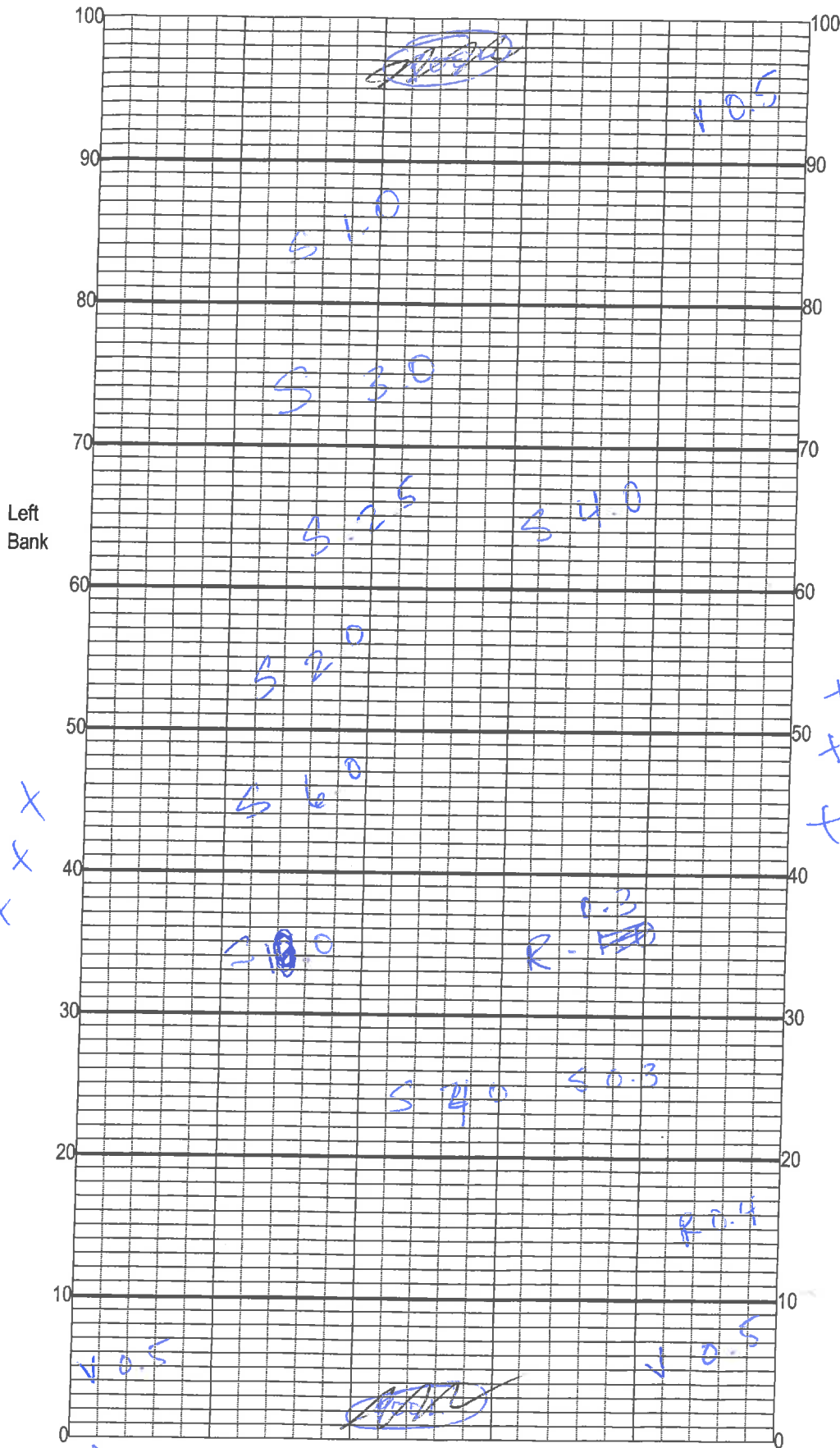
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh 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>6</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 <u>8</u> 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>4</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>31</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 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>19</u>	20 <u>19</u> 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. 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. 5 4	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	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 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. 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). 3 2 1
Right Bank <u>8</u> Left Bank <u>8</u> ----- Secondary Score <u>75</u>				

103 93 TOTAL SCORE

SBP# 7065

Date: <u>8/24/16</u>	Analyst: <u>DEP Hurley, Sewell, Petts</u>	Signature: <u>[Signature]</u>
----------------------	---	-------------------------------

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).

3-4 m

Location: Popash Slough
Date: 8/24/2016
Sampler: Hurley / Sewell

100 m: Latitude	_____
Longitude	_____
0 m: Latitude	_____
Longitude	_____
Substrates: Code key, draw proportionate habitat abundance. %	
☒ S	Snags 9.7
☒ R	Roots/undercut banks 0.2
☒ L	Leaf Packs (or mats) —
☒ V	Aquatic Macrophytes 0.4
☐	_____
☐	<u>Pot</u> 10.3%
☐	total # observed = <u>0</u>
☐	# range expected = <u>6</u>
Average width <u>3.4</u> m	
Average depth <u>0.9</u> m	
Velocity measured at <u>100</u> meter mark.	
WQ & chemistry taken at <u>100</u> 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:

S - 34
V - 1.5
R - 0.7
350

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

Waterbody: Papaya Date: 7/24/16 County: Quebec Storet Number: 618E007

Analyst: Sever Signature: [Signature]

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 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												<u>Acer</u>											
Ludwigia repens												<u>Sax</u>											
Luziola fluitans												<u>frax</u>											
<u>hymenachne amplexicaulis</u>												<u>Giant</u>											
												<u>Sh. 205</u>											
												<u>Fern 1</u>											
												<u>Thalys</u>											
												<u>Betula herbacea</u>											
												<u>Fern 1</u>											
If no Dominant or Co-Dominant were selected, indicate with "X"																							
Indicate % cover macrophytes per section																							
0-5% Macrophyte Coverage												<u>Baccharis serrulatum</u>											
>5 and ≤10% Macrophyte Coverage												<u>Woodswardia</u>											
>10 and ≤25% Macrophyte Coverage												<u>virginica</u>											
>25 and ≤50% Macrophyte Coverage																							
> 50% Macrophyte Coverage																							

less than 2 m

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

SAMPLE ID 6150017 ORG ID 21FLWPR3 LATITUDE _____
COUNTY Oneida STORET # 6150017 LONGITUDE _____
DATE _____ TIME _____ SAMPLING AGENCY DEP SE
SITE NAME _____
FIELD ID/NAME 6150017 RECEIVING BODY OF WATER _____

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 <u>3.5</u> m wide ☐ m/s <u>0.05</u> m/s ☐ m/s ☐ m deep <u>6.8</u> m deep ☐ m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>18</u> Right Bank: <u>18</u>				Hydrologic Modification Score (per FT 3101) ☐				
High Water Mark: <u>6.9</u> + <u>0.5</u> = <u>1.4</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 PERI # Times # Times Sampled Sampled Woody Debris (Snags) <u>10</u> <u>—</u> <u>—</u> Undercut Banks / Roots <u>0</u> <u>—</u> <u>—</u> Leaf Packs or Mat <u>—</u> <u>—</u> <u>—</u> Aquatic Vegetation <u>1</u> <u>—</u> <u>—</u> Rock or Shell Rubble.. <u>—</u> <u>—</u> <u>—</u> Sand..... <u>—</u> <u>—</u> <u>—</u> Mud / Muck / Silt <u>—</u> <u>—</u> <u>—</u> Other <u>—</u> <u>—</u> <u>—</u> Other <u>—</u> <u>—</u> <u>—</u>			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>17.3</u> <u>6.7</u> <u>3.6</u> <u>45</u> <u>1006</u> <u>0.5</u> <u>0.3</u> Mid: <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> Bottom: <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> <u>—</u> Meter ID: <u>AE3</u> VOB <u>0.5</u> Water Odors Normal ☐ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Surface Oils Normal ☐ Sheen ☐ Globs ☐ Slick ☐ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>62400</u> Exp: _____ Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☒ No Lot Number: _____ Exp: _____ System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐ _____ AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.					
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☐ ☒ ☐ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☐ ☐ ☒ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐								

SAMPLING TEAM

Seved / Hurley

SIGNATURE:

matthias

DATE:

8/24/16