



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2016

PAGE ____ OF ____

Data Qualified?
Yes / No

STORET Station Name: Taylor Creek @ STA Outfall

Date:

(mm/dd/yyyy)

STORET Station ID: G4SE0091

Latitude: 27.298226°

(Decimal Degrees)

WBID: 3205

RQ - 2016-04-25-24

ORG ID: 21FLWPB

Longitude: -80.829135°

(Decimal Degrees)

Receiving Body of Water: Lake Okeechobee

Field ID: G4SE0091

County: Okeechobee

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Hurley								
Senel								

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 / <u>Normal</u> / High / Flooded				Matrix: <u>Fresh</u> / Marine / DI						
Meter ID# <u>AG3</u>		Photos: <u>Yes</u> / No		Tide Falling: Yes / No / <u>NA</u>						
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	11:00	0.3	1.4	7.5	90	7.2	0.28	5	576	25.0
CEN								0		

Biological Samples Collected:		None	<u>HA</u>	SCI	<u>LVS</u>	<u>RPS</u>	LVI	Other
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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	<u>5254000</u>	<u>9/16</u>	☒ <2
Metals	☒ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO2	<u>5254000</u>	<u>9/16</u>	☐ <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 v.s. 76722

Place Label Here
(If Available)

Signature:

[Signature]

Date:

4/28/16

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)

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 ☐ Entero ☐ 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: <u>930</u>		Field ID: _____		Location: _____	
☐ Field Blank ☐ Equipment Blank ☐ Field Cleaned Equipment Blank		Equipmet 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					
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Notes:

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

Field Parameters Entered into LIMS: _____ (Initials/Date) _____ (Initials/Date)

Date Migrated to STORET: _____ (Initials/Date) _____ (Initials/Date)

Field Parameters QC in LIMS: _____ (Initials/Date) _____ (Initials/Date)

Field Sheets Scanned/Saved: _____ (Initials/Date) _____ (Initials/Date)

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

SAMPLING AGENCY: <u>217 WLB</u>		STORET STATION NUMBER: <u>GISE0018</u>	DATE (MM/DD/YY): <u>4/28/16</u>	RECEIVING BODY OF WATER: <u>Oreochol</u>
REMARKS: <u>SBR v. 7672</u>	COUNTY: <u>Oreochol</u>	LOCATION: <u>Farther Creek</u>	FIELD ID/NAME: <u>GISE0018</u>	

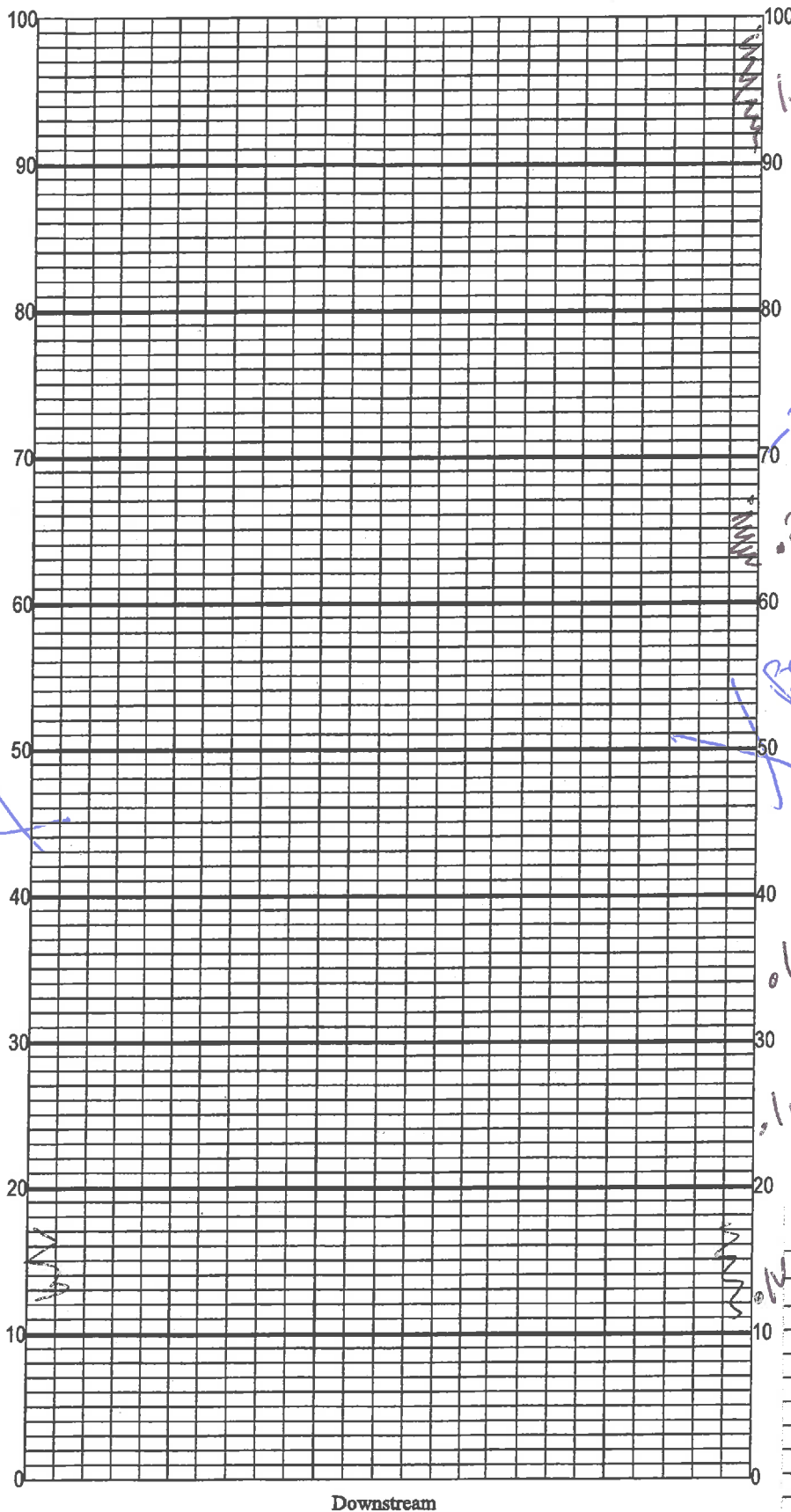
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh 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>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>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 _____ Primary Score <u>2</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>2</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 3 <u>2</u> 1
Bank Stability Right Bank <u>3</u> Left Bank <u>1</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. 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 Right Bank <u>2</u> Left Bank <u>1</u>	Width of vegetation greater than 18 m 10 9	Width of vegetation > 12 to 18 m 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 Right Bank <u>5</u> Left Bank <u>3</u> Secondary Score _____	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

30

TOTAL SCORE

Date: <u>4/28/16</u>	Analyst: <u>Max Scl</u>	Signature: <u>Max Scl</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: GLSE 0018
 Date: 4/28/16
 Sampler: unlabeled

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 = 0
range expected = 1

Average width 8 m
 Average depth 1.4 m

Velocity 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. X

Riparian Buffer Width:
 Note areas (on map) where natural vegetation is altered or eliminated.

Secs/ Meter	Flow m/s	Secs/ Meter	Flow m/s	Plants observed / other notes:
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	

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

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

SBIO # 76720 JP

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: taylor creek County: Greene Date: 4/28/16 Investigators: Small Hiler

STORET Station Number:

6550018

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

Secchi depth 0.5
Estimated?

points ranked 4-6 2
total points assessed 2
% 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- 2016-04-05-04

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%.

SBL 76722 DP
DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID GISE0018 ORG ID FLWPB LATITUDE 27.298226
 COUNTY _____ STORET # GISE0018 LONGITUDE -80.829135
 DATE 4/28/16 TIME _____ SAMPLING AGENCY _____
 SITE NAME GISE0018
 FIELD ID/NAME GISE0018 RECEIVING BODY OF WATER lake - D

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☒ 50 Silviculture ☐ Field/Pasture ☒ 50 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 <u>0</u> m/s _____ m/s			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>0</u> Right Bank: <u>0</u>				Hydrologic Modification Score (per FT 3101) _____				_____ m/s <u>0</u> m/s _____ m/s	
High Water Mark: <u>0.5</u> + <u>1.4</u> = <u>1.9</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☒ Yes ☐ No				_____ m deep <u>1.4</u> 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			WATER QUALITY <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> <th>SECCHI (M)</th> </tr> </thead> <tbody> <tr> <td>Top:</td> <td><u>0.3</u></td> <td><u>25.0</u></td> <td><u>7.2</u></td> <td><u>7.5</u></td> <td><u>90</u></td> <td><u>576</u></td> <td><u>0.28</u></td> <td><u>0.5</u></td> </tr> <tr> <td>Mid:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bottom:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							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>25.0</u>	<u>7.2</u>	<u>7.5</u>	<u>90</u>	<u>576</u>	<u>0.28</u>	<u>0.5</u>	Mid:									Bottom:								
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Bottom:																																												
Woody Debris (Snags) <u>0</u> Undercut Banks / Roots <u>0</u> Leaf Packs or Mat <u>0</u> Aquatic Vegetation <u>0</u> Rock or Shell Rubble.. <u>0</u> 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: <u>50900</u> 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 <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Not Obs.</th> <th>Rare</th> <th>Common</th> <th>Abundant</th> </tr> </thead> <tbody> <tr> <td>Periphyton:</td> <td>☐</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Fish:</td> <td>☐</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Aquatic Plants:</td> <td>☐</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Iron/Sulfur Bacteria:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>				Not Obs.	Rare	Common	Abundant	Periphyton:	☐	☒	☐	☐	Fish:	☐	☒	☐	☐	Aquatic Plants:	☐	☒	☐	☐	Iron/Sulfur Bacteria:	☒	☐	☐	☐	System Type: Stream ☐ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☒ <u>canal</u>																
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Periphyton:	☐	☒	☐	☐																																								
Fish:	☐	☒	☐	☐																																								
Aquatic Plants:	☐	☒	☐	☐																																								
Iron/Sulfur Bacteria:	☒	☐	☐	☐																																								
AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																												
SAMPLING TEAM <u>Sewell / Harte</u>			SIGNATURE: <u>[Signature]</u>			DATE: <u>4/28/16</u>																																						

[Signature]

Storet Number: 6152018

Signature: Zeeshan

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.

LVS less than 2nd