



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: Fenceline Drain **Date:** 12/10/2020
WIN/Field ID: G4SD0193 **WBID:** 3201K **ENR:** **Latitude:** 27.1335035
County: Highlands **Org ID:** 21FLFTM **Longitude:** 81.4889351
Receiving Body of Water: Fisheating creek **RQ:** 2020-12-07-63

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Kirby Wolfe			x		
☒	Miranda Carroll	x	x	x	x	x
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☒ Syringe	☐ Pole
Depth measured with: Secchi	
Secchi Equipment ID: 3312B	
Collection Method	
☒ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other _____	☐ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# SNEK					
Photos: NO		Flow: FLOW		Tide:		Tide Times: High: Low:					
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☐ LVI Other:											
SBIO ID Numbers:											
Notes:											

Duplicate Sample

Time Zone: EST	Time: N/A	Field ID: N/A	(WIN ID_DUP)
WIN DMT Activity ID: _____			

Blank

Time Zone: _____	Time: N/A	Field ID: N/A	(Blank Type_DDMMYYYY)
DI Source: N/A		Location: N/A	
DI Type: N/A		Equipment ID: N/A	

LIMS EVENT ID: _____ WIN Import ID: _____
Enter Field Parameters, Verify Station ID In LIMS DMT: _____ QC Station ID, Field Parameters In LIMS DMT: _____
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets _____ Migrate Data to WIN: _____ Verify Data In WIN: _____
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2020-12-07-63

Customer: WQAP

Project ID: SMP

Collected By: Kirby Wolfe, Miranda Carroll

Field Report Prepared By: Kirby Wolfe

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



Fenceline Drain

Location: Fenceline Drain

Comments:

Matrix: Fresh

(Check one)

☒ GRAB☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPT)
12/10/2020	1015 EST	8.52	81.7	13.4	6.24	0.3	0.4 ☐ VOB (S)	0.6	128.4	0.06

Central Lab please use top row for login purposes

	EST									

Parameter Suite	Parameter Methods	Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP Lot # SA0038110 Exp: 2/7/21	☒ Ice ☒ H2SO4*	☒ <2	1	B
Metals (P-500ML)	☐ W-ICPMS ☐ W-ICP ☐ W-HARD Lot # Exp:	☐ Ice ☐ HNO3*	☐ <2		
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter Filter Lot # 17024971 Syringe Lot # 0079931	☒ Ice		1	B
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	B
Physical/Aggregate (Fresh) (P-1L)	☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS	☐ Ice			
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates (PJ-2L)	☐ MI-FW-QLDC	☐ Formalin			
Periphyton (PT-50ML)	☐ ALGAE-ID	☐ Ice			
Microbiology (Contract Lab Bottle)	☐ E Coli ☐ F Coli ☐ Enterococci ☐ Contract Lab	☐ Ice			
Molecular (QPCR-P-500ML)	☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD	☐ Ice			
Tracers (BG-500ML)	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides (BG-500ML) (BG-1L)	☐ W-E8321-DI ☐ WE8321-MS ☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)	☐ Ice			
		☐ Ice			

Name:
Kirby Wolfe
Miranda CarrollSignature:
Kirby WolfeDate:
12/10/20

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

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

SAMPLING AGENCY: Fdep soroc		STORET STATION NUMBER: G4SD0193	DATE (MM/DD/YY): 12/10/2020	RECEIVING BODY OF WATER: Fisheating creek
REMARKS:	COUNTY: Highlands	LOCATION: Fenceline drain	FIELD ID/NAME:	

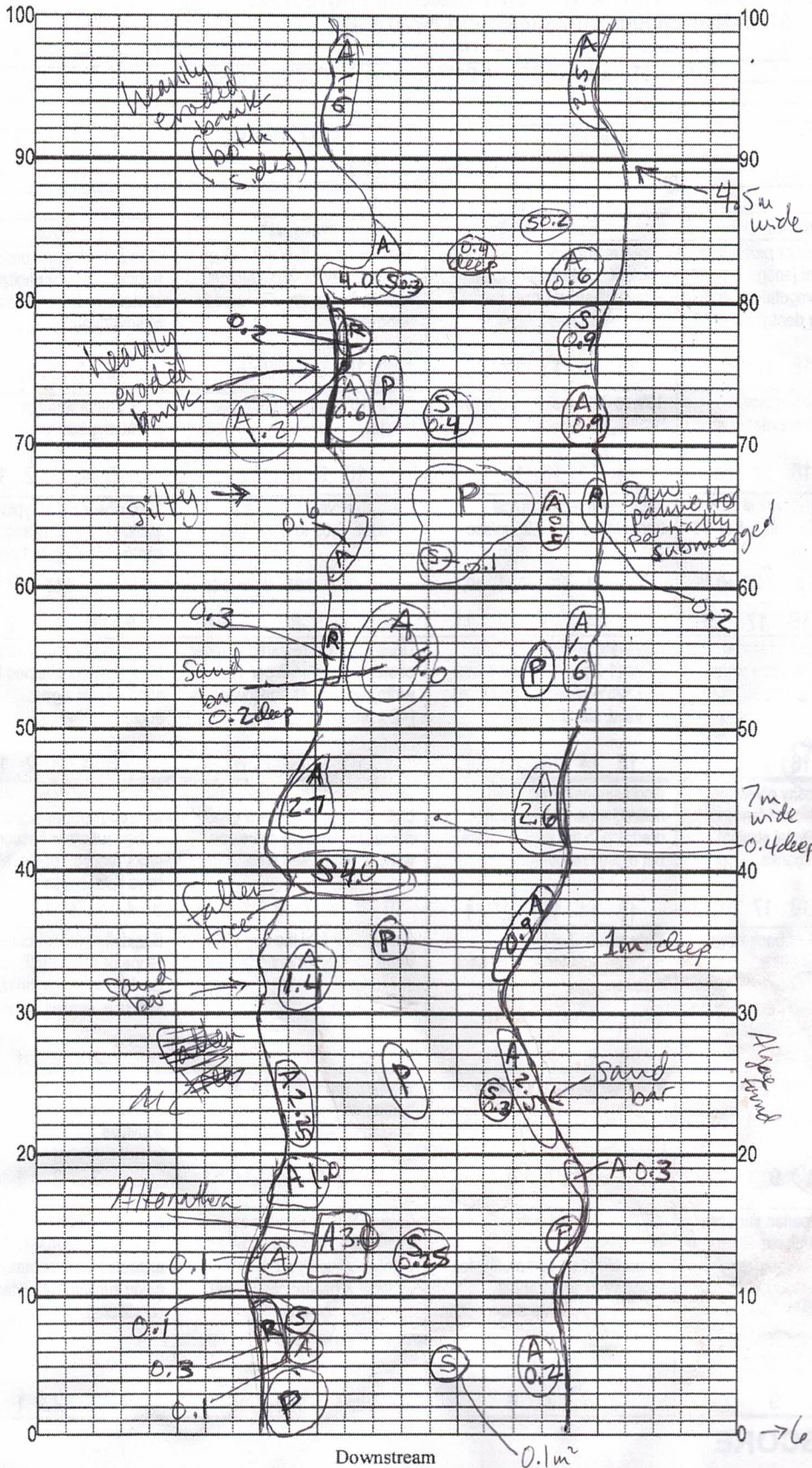
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components Substrate Diversity <u>8</u>	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock) 20 19 18 17 16	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags) 15 14 13 12 11	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed 10 9 8 7 6	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered 5 4 3 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 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
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 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 1
Habitat Smothering <u>12</u> ----- Primary Score <u>40</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 1
Secondary Habitat Components Artificial Channelization <u>13</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 or straightening 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 2 1
Bank Stability Right Bank <u>6</u> Left Bank <u>5</u>	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the woody 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 woody root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank <u>9</u> Left Bank <u>9</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 3 2 1
Riparian Zone Vegetation Quality Right Bank <u>5</u> Left Bank <u>5</u> ----- Secondary Score <u>52</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). 3 2 1

92

TOTAL SCORE

Date: 12/10/2020	Analyst: Wolfe, Carroll	Signature: 
-------------------------	--------------------------------	---

A=3.1
A=4.6
A=2.7
A=1.0
A=5.6
A=5.3
A=2.3
A=4.75
A=4.4
A=0.3



Location: G4SD0193
Fennel Drain

Date: 12/10/20

Sampler: Miranda Carroll + Kirby Wilk

100 m: Latitude _____
Longitude _____

0 m: Latitude 27.1335035
Longitude -81.4887351

Substrates: Code key, draw proportionate habitat abundance. %

<u>S</u>	Snags	<u>1.35</u>	<u>6.75</u>
<u>R</u>	Roots/undercut banks	<u>0.2</u>	<u>1.0</u>
<u>L</u>	Leaf Packs (or mats)	<u>0</u>	<u>0</u>
<u>A</u>	Aquatic Macrophytes	<u>6.81</u>	<u>34.05</u>
<u>P</u>	Pools	<u>7</u>	<u>7</u>

Average width 5 m
Average depth 0.7 m

Velocity measured at 90 meter mark.

WQ & chemistry taken at 100 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:

Panicum Repens + hemo.
Some smothering/moderate
Sandy bottom
Alternanthera -> dying (no leaves)
Exochorda
Frog bit

Sagittaria lanifolia
Utricularia
Hydrophyllum

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

Velocity = 0.1/second
velocity @ 30 = 0.2/s

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: G4SD0193					County: Highlands		Date: 12/10/2020		Investigators: Wolfe, Carroll	
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	STORET Station Number: G4SD0193
0	1	N	NO		60	1	N	NO		
	2	N	NO			2	N	NO		
	3	N	NO			3	N	NO		
	4	N	YES			4	N	NO		
	5	N	YES			5	N	NO		
	6	N	YES			6	N	NO		
	7	N	YES			7	N	NO		
	8	N	YES			8	N	NO		
	9	N	NO			9	N	NO		
10	1	N	NO		70	1	N	NO		
	2	N	NO			2	N	NO		
	3	N	NO			3	N	NO		
	4	N	YES			4	N	NO		
	5	N	YES			5	N	YES		
	6	N	YES			6	N	YES		
	7	N	YES			7	N	YES		
	8	N	NO			8	N	YES		
	9	N	NO			9	N	YES		
20	1	N	NO		80	1	N	NO		
	2	N	NO			2	N	NO		
	3	N	NO			3	N	NO		
	4	N	NO			4	N	NO		
	5	N	NO			5	N	YES		
	6	3	NO			6	N	NO		
	7	N	NO			7	N	NO		
	8	N	NO			8	N	NO		
	9	N	NO			9	N	NO		
30	1	3	NO		90	1	N	NO		
	2	3	NO			2	N	YES		
	3	N	NO			3	N	YES		
	4	N	NO			4	N	YES		
	5	N	YES			5	N	YES		
	6	N	YES			6	N	YES		
	7	N	YES			7	N	NO		
	8	N	NO			8	N	NO		
	9	N	NO			9	N	NO		
40	1	N	NO		100	1	N	NO		
	2	3	NO			2	N	NO		
	3	N	NO			3	N	YES		
	4	N	YES			4	N	YES		
	5	N	YES			5	N	YES		
	6	N	YES			6	N	YES		
	7	N	YES			7	N	YES		
	8	N	YES			8	N	NO		
	9	N	YES			9	N	NO		
50	1	3	NO		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	N	NO							
	3	3	NO							
	4	N	YES							
	5	N	NO							
	6	N	NO							
	7	N	NO							
	8	N	NO							
	9	N	NO							

Secchi depth	0.4
Estimated?	NO

# points ranked 4-6	0
total points assessed	99
% points ranked 4-6	0

Check accompanying data collected at same site/date.	
Algal mat sample	
Linear Veg Survey	X
Habitat Assessment	X
SCI/Biorecon	
Water sample	X
RQ-2020-12-07-63	

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 FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Waterbody: <u>Fenceline Drain</u>	Date: <u>12/10/20</u>	County:	Storet Number:
Analyst: <u>Miranda Carroll + Kirby Wolk</u>	Signature: <u>[Signature]</u>		
Comments: <u>G4SD0/93</u>			
Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1m² 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.			
			Meter Mark

[illegible]

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

SAMPLE ID _____ ORG ID 21 FLFTM LATITUDE _____
 COUNTY Hillsdale STORET # 6350193 LONGITUDE _____
 DATE 12/10/20 TIME 1015 SAMPLING AGENCY FDEP
 SITE NAME Fence Line Drain RECEIVING BODY OF WATER Fishing Crk
 FIELD ID/NAME _____

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								
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>20</u> Right Bank: <u>20</u>				Hydrologic Modification Score (per FT 3101) ☐				Typical Width (m) <u>5</u> m wide Depth (m) <u>0.2</u> m/s <u>0.1</u> m/s <u>0.2</u> m/s Velocity (m/sec) <u>0.75</u> m deep <u>0.9</u> m deep <u>0.5</u> m deep
High Water Mark: ☐ + ☐ = ☐ (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		WATER QUALITY																																																																																			
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		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		System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐																																																																																			
Not Obs. Rare Common Abundant 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>Kirby Wolfe, Miranda Carroll</u>		SIGNATURE 		DATE: <u>12/10/20</u>																																																																																	