



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: BIG SLOUGH UPSTREAM OF BUTLER

Date: 12/17/20

PARK WIN/Field ID: G3SD0174

WBID: 1976

ENR:

Latitude: 27.073158

County: Sarasota

Org ID: 21FLFTM

Longitude: -82.219252

Receiving Body of Water: Myakka River

RQ: 2020-12-14-49

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Nicole Reistad		x		x	x
☒	Miranda Carroll	x		x		
☐						
☐						

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

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded		Meter ID#	
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_DDDMMYYY)
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:

Scan/Save Field Sheets Migrate Data to WIN: Verify Data In WIN:



RQ-2020-11-14-49

Customer: WQAP

Project ID: SMP

Collected By: Nicole Reistad, Miranda Carroll

Field Report Prepared By: Nicole Reistad

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G3SD0174

Location: BIG SLOUGH UPSTREAM OF BUTLER PARK

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 (PPTH)
12/17/2020	1025 EST	7.08	78.1	20.1	7.29	0.25	0.5 ☒ VOB (S)	0.5	503	0.24

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	☒ Ice ☒ H2SO4*	☒ <2	1	B
	Lot # SA0038110 Exp: 2/7/21				
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD	☒ Ice ☒ HNO3*	☒ <2	1	B
	Lot # NA9354060 Exp: 12/20/20				
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice		1	B
	Filter Lot # 17101170				
	Syringe Lot # 0118593				
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		1	B
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		1	B
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:
Nicole Reistad
Miranda CarrollSignature:
Miranda CarrollDate:
12/17/20

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

DEP-SOP-001/01: Form FD 9000-5
STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION
STREAM/RIVER HABITAT ASSESSMENT FIELD SHEET

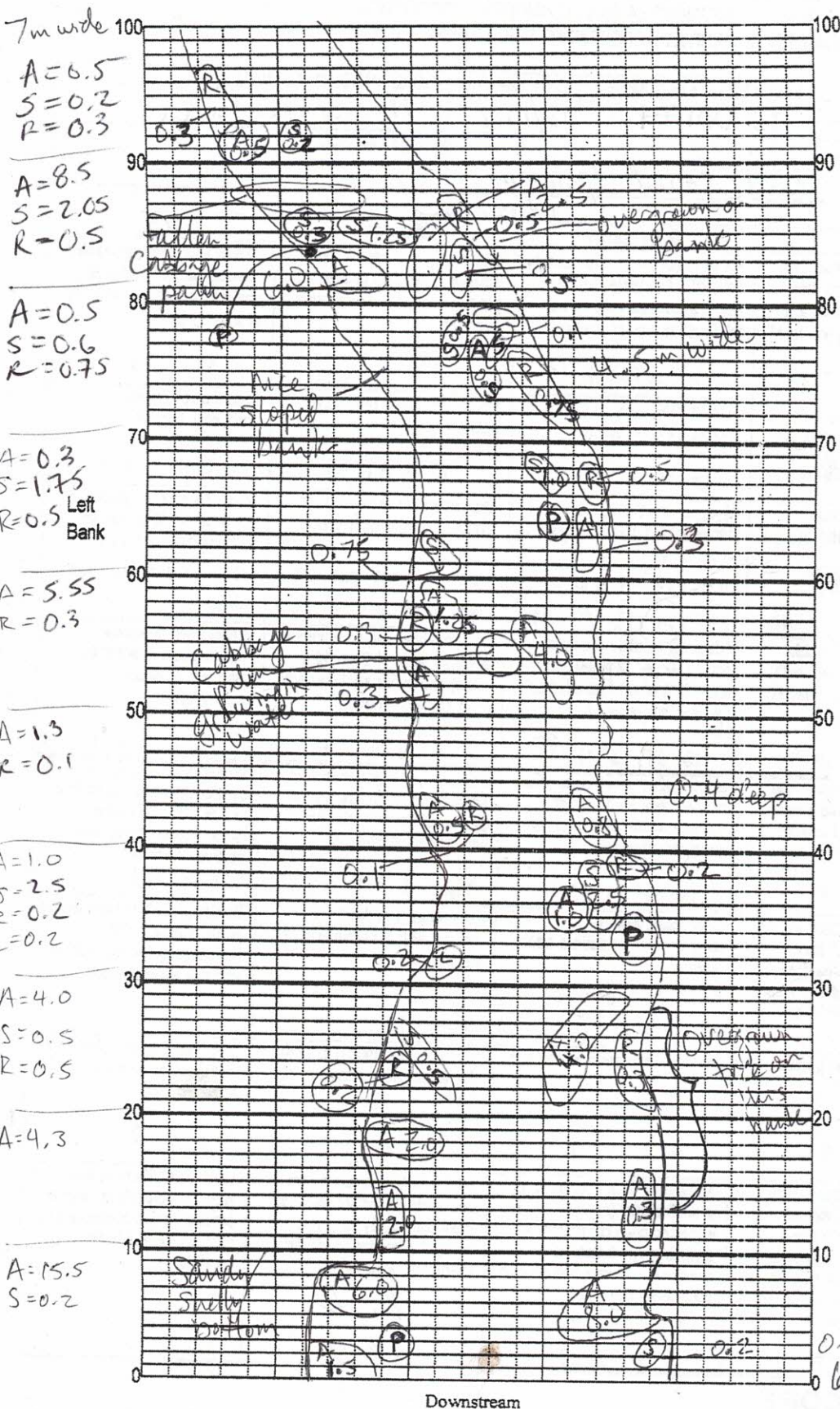
SUBMITTING AGENCY CODE: _____	STORET STATION NUMBER: <u>G3SD0174</u>	DATE (MM/DD/YYYY): <u>12/17/20</u>	RECEIVING BODY OF WATER: <u>Myakka River</u>
SUBMITTING AGENCY NAME: _____		FIELD ID/NAME: _____	
REMARKS: _____	COUNTY: <u>Sarasota</u>	LOCATION: <u>Big Slough Canal Upstream</u> <u>Butler Park</u>	

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>13</u>	20 19 18 17 16	15 14 (13) 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>7</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>11</u> Primary Score <u>45</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>20</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 2 1
Bank Stability Right Bank <u>7</u> Left Bank <u>6</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. R L 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>10</u> Left Bank <u>10</u>	Width of vegetation greater than 18 m L R (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>4</u> Secondary Score <u>62</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. R L (5) (4)	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). 3 2 1

107 **TOTAL SCORE**

Date: <u>12/17/2020</u>	Analyst: <u>Nicole Reistad</u> <u>Miranda Cannoll</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).

TOTAL A = 41.45 m²
S = 7.8 m²
R = 3.15 m²
L = 0.2 m²

Location: Big Slough Upstream of Butte Park
Date: 12/17/20
Sampler: Miranda Conill + Nicole Resto

100 m: Latitude 27.0733553
Longitude -82.2184781

0 m: Latitude 27.073416
Longitude -82.2192597

Substrates: Code key, draw proportionate habitat abundance. %

S	Snags	1.3
R	Roots/undercut banks	0.53
L	Leaf Packs (or mats)	0.03
A	Aquatic Macrophytes	6.91
R ^o	rocks	0
P	Pools	total # observed = 4 # range expected =

Average width 6.0 m
Average depth 1.0 m

Velocity measured at 90 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:

Alternanthera
Erchoria
Polygonum hydropip.
Salix

some sand smothering

bank erosion

0.5 deep

6m wide bank full < 60% of bank height

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Big Slough Canal Upstream Park County: Sarasota Date: 12/17/20 Investigators: Nicole Reistad

STORET Station Number: G3SD0174

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

Secchi depth 0.5
Estimated?

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 ☒
Habitat Assessment ☒
SCI/Biorecon ☒
Water sample ☒
RQ- 2020-12-14-49

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%.

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET																																									
Waterbody: <i>Bia Slough Canal Upstream Park</i>										Date: <i>12/17/20</i>					County: <i>Sarasota</i>					Storet Number: <i>G3SD0174</i>																					
Analyst: <i>Nicole Reistad</i>										Signature: <i>[Handwritten Signature]</i>																															
Comments:																																									
Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1m ² 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																															
HERBACEOUS SPECIES										0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)	HERBACEOUS SPECIES										0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
<i>Alternanthera philoxeroides</i>										P	P	P	P	P	P	P	P	P	P		<i>Micranthemum glomeratum</i>																				
<i>Bacopa caroliniana</i>																					<i>Micranthemum umbrosum</i>																				
<i>Bacopa monnieri</i>																					<i>Myriophyllum aquaticum</i>	P	P										P	P							
<i>Bidens mitis</i>																					<i>Najas guadelupensis</i>																				
<i>Boehmeria cylindrica</i>																					<i>Nuphar luteum</i>																				
<i>Centella asiatica</i>																					<i>Orontium aquaticum</i>																				
<i>Ceratophyllum demersum</i>																					<i>Panicum hemitomon</i>			X	P	P	P	P			P	P	P								
<i>Chara</i>																					<i>Panicum repens</i>																				
<i>Cicuta maculata</i>																					<i>Panicum rigidulum</i>																				
<i>Cladium jamaicense</i>																					<i>Pistia stratioides</i>	P												P	P						
<i>Colocasia esculenta</i>																					<i>Polygonum glabra</i>																				
<i>Commelina diffusa</i>																					<i>Polygonum hydropiperoides</i>	P	P	P	X	P	P						P								
<i>Commelina virginica</i>										P		P			P						<i>Polygonum punctatum</i>																				
<i>Crinum americanum</i>																					<i>Pontedaria cordata</i>																				
<i>Diodia virginiana</i>																					<i>Potamogeton illinoensis</i>																				
<i>Eichhornia crassipes</i>										D	D	P	P		D			P	P		<i>Ruellia simplex</i>																				
<i>Eleocharis (wispy viviparous)</i>																					<i>Sacciolepis striata</i>																				
<i>Hydrilla verticillata</i>																					<i>Sagittaria kurziana</i>																				
<i>Hydrocotyle</i>															P			P	P		<i>Sagittaria lancifolia</i>																				
<i>Hygrophila polysperma</i>																					<i>Sagittaria latifolia</i>																				
<i>Hymenocallis</i>																					<i>Salvinia minima</i>																				
<i>Lachnanthes caroliniana</i>																					<i>Samolus parviflora</i>																				
<i>Landoltia punctata</i>																					<i>Saururus cernuus</i>																				
<i>Lemna</i>													P		P						<i>Sparganium americanum</i> </																				

Revision Date: January 2017

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

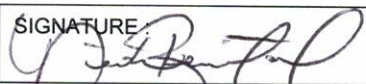
SAMPLE ID	ORG ID	LATITUDE
COUNTY	STORET #	LONGITUDE
DATE	TIME	SAMPLING AGENCY
SITE NAME	RECEIVING BODY OF WATER	
FIELD ID/NAME		

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural 30 Silviculture Field/Pasture 40 Agricultural 10 Residential 20 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) 6 m wide Depth (m) 0.2 m/s Velocity (m/sec) 1.0 m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: Right Bank:		Hydrologic Modification Score (per FT 3101)
High Water Mark: + 1.0 = (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 Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: 0.25 20.1 7.29 7.08 78.1 503 0.24 0.5 Mid: ☒ VOB Bottom: TOTAL DEPTH Meter ID: Friday 0.5			
Woody Debris (Snags) 1.3 Undercut Banks / Roots 0.53 Leaf Packs or Mat 0.03 Aquatic Vegetation 6.91 Rock or Shell Rubble.. 3.0 Sand..... 46 Mud / Muck / Silt 40 Other Other		Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐		Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐	
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☒ ☐ ☐ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☐ ☐ ☒ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐		Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: SA0038110 Exp: 02/07/21		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 ☐	
		System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify)			
AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.					

SAMPLING TEAM Nicole Reistad, Miranda Carroll	SIGNATURE 	DATE 03/31/2021
---	--	---------------------------