



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PLAN FIELD SHEET

January 2020

Meter Passed End
of Day CCV
☒ Yes / ☐ No

WIN Station Name: Thirtymile Creek @ Train Tracks Mosiac **Date:** 12/16/2021
WIN/Field ID: G2SW0047 **WBID:** 1639 **ENR:** - **Latitude:** 27.873990
County: POLK **Org ID:** 21FLTPA **Longitude:** -82.04887
Receiving Body of Water: Tampa Bay Tributaries **RQ:** 2021-12-13-50

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Ben Paswater	x		x		
☒	Jacob Yodzis		x		x	x
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☐ Syringe	☐ Pole
Depth measured with: Secchi	
Secchi Equipment ID: Secchi #3	
Collection Method	
☒ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other _____	☐ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# SWD					
Photos: NO		Flow: FLOW		Tide:		Tide Times: High: Low:					
Biological Samples Collected: ☐ None ☒ HA ☒ SCI ☒ RPS ☐ Algae ID ☒ LVS ☐ LVI Other:											
SBIO ID Numbers: Visit ID: 83693 HA: 17169 RPS: 9867											
Notes:											

Duplicate Sample

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

Blank

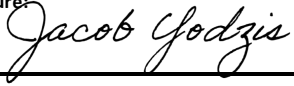
Time Zone:	Time:	Field ID:	(Blank Type_DDDMMYYY)
DI Source:		Location:	
DI Type:		Equipment ID:	
DI Container (Name/ID):		DI Container Type:	

LIMS EVENT ID: 2021-12-17-01 WIN Import ID: 32469
Enter Field Parameters, Verify Station ID In LIMS DMT: NA 4/5/22 QC Station ID, Field Parameters In LIMS DMT: SM 04/28/2022
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets SM 05/23/2023 Migrate Data to WIN: SM 04/28/2022 Verify Data In WIN: SM 05/23/2023
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2021-12-13-50
Customer: ~~WQAP~~ SW-Dist
Project ID: SMP

Collected By: Ben Paswater, Jacob Yodzis
Field Report Prepared By: Ben Paswater
Sampling Agency: FDEP

Place Label Here						Comments:				
WIN ID/Field ID:  G2SW0047 Location: Thirtymile Creek @ Train Tracks Mosiac										
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 _h)
	1120 EST	7.84	86.5	20.1	7.58	0.3	0.6 ☒ VOB (S)	0.6	366	0.18
12/16/2021										
	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	A
		Lot #	SA1105060		Exp:	4/22				
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☒ HNO3*		☐ <2	1	A
		Lot #	SA1105100		Exp:	6/22				
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A
		Filter Lot #								
		Syringe Lot #								
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice			1	A
Physical/Aggregate (Fresh) (P-1L)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice			1	A
Physical/Aggregate (Marine) (P-1L)		☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY				☐ Ice				
Macroinvertebrates (PJ-2L)		☐ MI-FW-QLDC	Formalin Lot #	10.0092616		☒ Formalin			2	B
Periphyton (PT-50ML)		☐ ALGAE-ID				☐ Ice				
Microbiology (Contract Lab Bottle)		☒ E Coli ☐ F Coli ☐ Enterococci ☐ Contract Lab				☒ Ice			1	A
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		☒ Ice	5 or 3	A	
Phytoplankton/Periphyton		☐ W-PCL-TQ-R	W-CARB-AA (5 ml of MCAA** Buffer Solution)		DTY-QN-C PKD-QN-BV		☐ Ice			
Name: Ben Paswater Jacob Yodzis						Signature: 			Date: 12-16-21	

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

STORET STATION
NUMBER: see stickerDATE (MM/DD/YY): 12/16/2021
see bottom of page

SAMPLING AGENCY:

FDEP SWROC

COUNTY:

Polk

RECEIVING BODY OF WATER:

Alafia

Site Name: Thirtymile Creek @ Train Tracks Mosiac

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>12</u>	20 19 18 17 16	15 14 13 <u>12</u> 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 <u>7</u> 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>15</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 <u>15</u> 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>13</u> ----- Primary Score <u>57</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 <u>13</u> 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	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>20</u>	<u>20</u> 19 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.	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>	<u>10</u> 9 LR	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>10</u> Left Bank <u>10</u>	<u>10</u> 9 LR	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>10</u> Left Bank <u>10</u> ----- Secondary Score <u>80</u>	<u>10</u> 9 LR	8 7 6	5 4	3 2 1

TOTAL SCORE

Date: 12/16/2021	Analyst: Ben Paswater	Signature: Ben Paswater
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RPS: 9867

Visit ID: 83693

HA: 17169

County: **Polk**Waterbody: **See Sticker**Date: **12/16/2021**Signature: **[Signature]**Analyst: **[Signature]**Site Name: **Thirtymile Creek @ Train Tracks Mosiac**

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. **BOLD is exotic invasive**

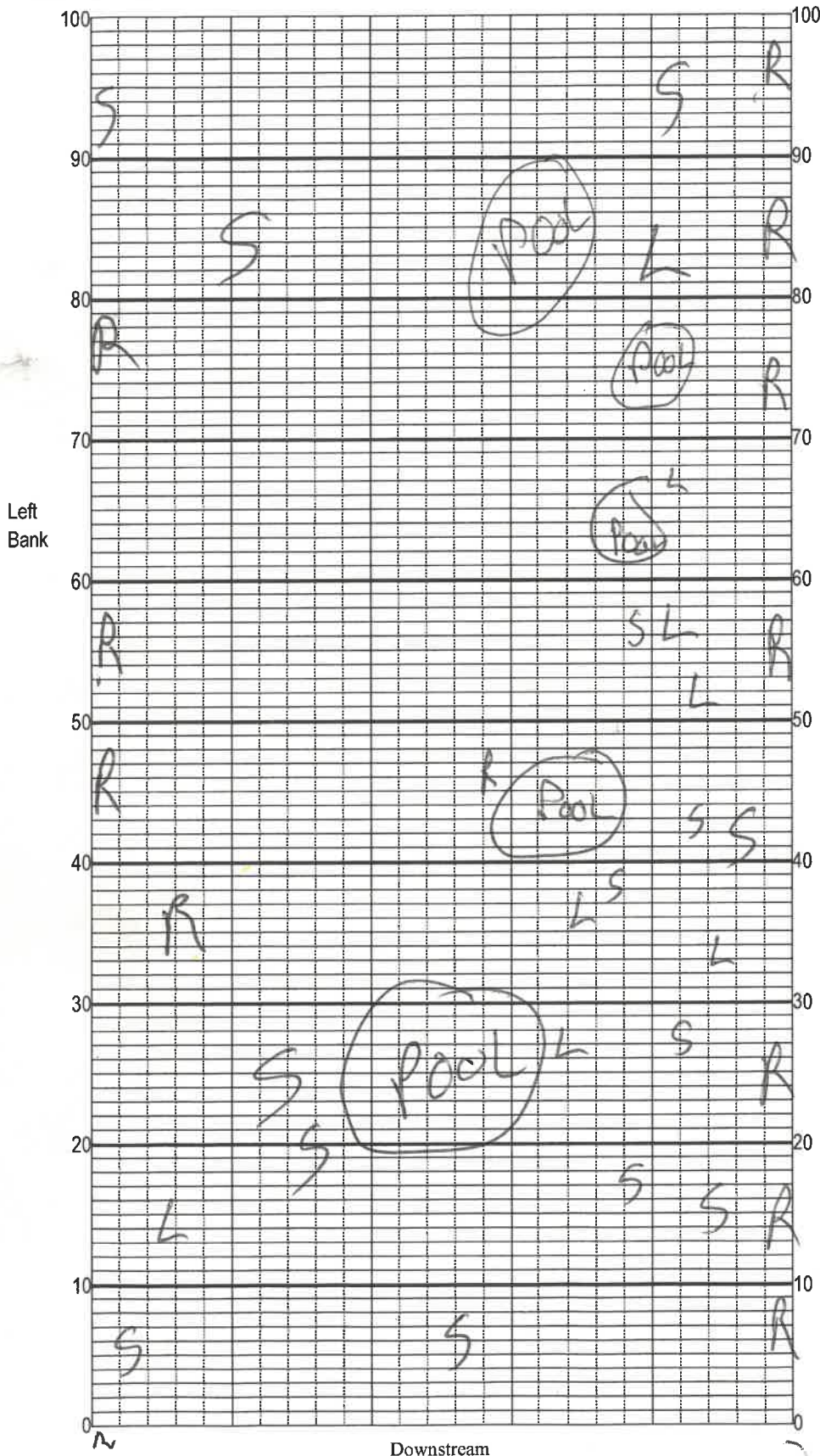
HERBACEOUS SPECIES	Meter Mark										Specime n collected (check)	HERBACEOUS SPECIES	Meter Mark										Specime n collected (check)						
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100			0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100							
Alternanthera philoxeroides												Micranthemum glomeratum																	
Bacopa caroliniana (Lemon)												Micranthemum umbrosum																	
Bacopa monnieri												Myriophyllum aquaticum																	
Bidens mitis												Najas guadelupensis																	
Boehmeria cylindrica												Nitella sp.																	
Centella asiatica												Nuphar luteum																	
Ceratophyllum demersum												Orontium aquaticum																	
Chara sp.												Panicum hemitomon																	
Cicuta maculata												Panicum repens																	
Cladium jamaicense												Panicum rigidulum																	
Colocasia esculenta												Pistia stratioides																	
Commelina diffusa												Polygonum glabra																	
Commelina virginica												Polygonum hydropiperoides																	
Crinum americanum												Polygonum punctatum																	
Cyperus												Pontedaria cordata																	
Diodia virginiana												Potamogeton illinoensis																	
Eichhornia crassipes												Ruellia simplex (Mex Petunia)																	
Eleocharis (wispy viviparous)												Sacciolepis striata																	
Fontinalis sp. (Aquatic Moss)												Sagittaria kurziana																	
Fraxinus caroliniana												Sagittaria lancifolia																	
Hydrilla verticillata												Sagittaria latifolia																	
Hydrocotyle sp.												Salvinia minima																	
Hygrophila polysperma												Samolus parviflora																	
Hymenachne amplexicaulis												Saururus cernuus																	
Hymenocallis												Sparganium americanum																	
Lachnanthes caroliniana												Schoenoplectus americanus																	
Landoltia punctata												Sphagneticola trilobata(Wedelia)																	
Lemna sp.												Typha sp.																	
Limnophila sessiflora												Urochloa mutica (Brachiaria)																	
Ludwigia leptocarpa												Vallisneria americana																	
Ludwigia palustris												Zizania aquatica																	
Ludwigia peruviana																													
Ludwigia repens																													
Luziola fluitans																													
If no Dominant or Co-Dominant were selected, indicate with "X"																													
Indicate % cover macrophytes per section																													
0-5% Macrophyte Coverage																													
>5 and ≤10% Macrophyte Coverage																													
>10 and ≤25% Macrophyte Coverage																													
>25 and ≤50% Macrophyte Coverage																													
> 50% Macrophyte Coverage																													

No plants



Site Name: Thirtymile Creek @ Train Tracks Mosiac

DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet

Location: Date: 12/16/2021Sampler: Ben Paswater

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

100 m: Latitude	_____
Longitude	_____
0 m: Latitude	_____
Longitude	_____

Substrates: Code key, draw proportionate habitat abundance.		%
☒ S	Snags	2.7
☒ R	Roots/undercut banks	3.0
☒ L	Leaf Packs (or mats)	1.9
☐	Aquatic Macrophytes	_____
☐	ROCKS	_____
☐	_____	_____
☒ 5	Pools	total # observed = 5 # range expected = 4-6

Average width	2 m
Average depth	1.5 m
Velocity measured at	0.50 1.00 meter mark.

WQ & chemistry taken at	0 meter mark.
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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:

L = 48 1.9%
R = 76 3.5%
S = 68 2.7%



Site Name: Thirtymile Creek @ Train Tracks Mosiac

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sh

Investigators: BP JY

County: Polk

STORET Station Number: see label

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				60	1			
	2					2			
	3					3			
	4	N				4			
	5			80		5			
	6					6			
	7					7			
	8					8			
	9					9			
10	1				70	1			
	2					2			
	3					3			
	4					4			
	5			86		5			
	6					6			
	7					7			
	8					8			
	9					9			
20	1				80	1			
	2					2			
	3					3			
	4					4			
	5			75		5			
	6					6			
	7					7			
	8					8			
	9					9			
30	1				90	1			
	2					2			
	3					3			
	4					4			
	5			63		5			
	6					6			
	7					7			
	8					8			
	9					9			
40	1				100	1			
	2					2			
	3					3			
	4					4			
	5			82		5			
	6					6			
	7					7			
	8					8			
	9					9			
50	1					1			
	2					2			
	3					3			
	4					4			
	5			78		5			
	6					6			
	7					7			
	8					8			
	9					9			

 Secchi depth ☒
 Estimated? No

 # points ranked 4-6 ☒
 total points assessed
 % points ranked 4-6

Check accompanying data collected at same site/date.

 Algal mat sample
 Linear Veg Survey ☒
 Habitat Assessment ☒
 SCI/Biorecon ☒
 Water sample

RQ: 2021-12-13-60

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%.

Field ID/WIN

G2SW0047

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

21FLTPA
12/16/2021

LATITUDE 27.87472

LONGITUDE -82.04570

Site Name: Thirtymile Creek @ Train Tracks Mosiac

SAMPLING AGENCY FDEP SW ROC

RECEIVING BODY OF WATER

Ala Fia

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category) : Forest/Natural ☐ 25 ☐ Silviculture ☐ Field/Pasture ☐ Agricultural ☐ Residential ☐ Commercial ☐ Industry ☐ 75 ☐ 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 2 m wide 0.5 m/s 0.6 m/s 0.8 m/s 0.25 m deep 0.25 m deep 0.25 m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank : 718 Right Bank : 718				Hydrologic Modification Score (per FT 3101) 3			
High Water Mark: 1.1 + 0.6 = 1.6 (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 Invert PERI % # Times # Times Coverage Sampled Sampled Woody Debris (Snags) 2.7 5 Undercut Banks / Roots 3.0 5 Leaf Packs or Mat 1.9 5 Aquatic Vegetation Rock or Shell Rubble Sand 5 Mud / Muck / Silt Other Other			WATER QUALITY Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: 0.3 20.1 7.58 7.84 86.5 366 1.8 0.6 Mid: Bottom: Meter ID: SWD TOTAL DEPTH 1.6 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: see Water Datasheet Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: Exp: System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify)		
ABUNDANCE 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

Ben Paswater, Jacob Yodzis

SIGNATURE :

Ben Paswater

DATE :

12/16/2021

V entered in SP10