

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

STRATEGIC MONITORING PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV☒ Yes / ☐ No

WIN Station Name:	Nonsense Cr @ Lingerlodge Rd				Sample Date:	12/21/2022	
WIN / Field ID:	G2SW0041	ORG ID:	21FLTPA	ENR:			
County:	Manatee	WBID:	1913	STREAM	1	Latitude:	27.43012
Receiving Body of Water:	Ward Lake / Braden River				Longitude:	-82.47103	
					RQ-	2022-08-22-11	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Ben Paswater					x
Devin Mathias	x		x		
Ken Turman		x		x	

Sampling Equipment			
x	Sample Container		Carboy
	Dipper		Van Dorn
	Syringe		Pole
Syringe Lot# 1145497		Filter Lot# 17232873	
Secchi Equipment ID:		Secchi #3	
Collection Method			
x	Wading		Canoe/Kayak
	From Shore		Electric Motor
			Gasoline Motor
Depth Measured With		Secchi	

Water Level:	Normal
Flow:	Flowing
Matrix:	Fresh
Tide Stage:	
High Tide:	
Low Tide:	
Photos:	Yes
Meter ID:	Leia
Depth Gauge ID:	depth_gauge

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPTth)
EST	1400	0.8	0.3	6.19	65.1	17.8	7.23	0.8	480.7	0.23
								VOB (s)		

Biological Samples Collected: HA LVS RPSSBIO Visit ID: 85918 HA ID: 18074 RPS ID: 10021 Macrophyte ID: 12347 LIMS Sample ID Entered 2377270
Into The Macrophyte Module:

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation				
	Type	Lot#	Expiration Date	pH Check				
Microbiology								
Chlorophyll	CHLSUITE-W			ICE				
Physical/Aggregate	ALKALINITY, TURBIDITY, W-F, W-TSS			ICE				
Nutrients	W-CL-IC, W-COLOR, W-SO4-IC, W-TDS			ICE				
Filtered Nutrients	W-PO4-F	Field Filtered 0.45 µm Filter		ICE		Syring Lot#:1145497; Filter Lot#:17232873		
Acid Preserved Nutrients	W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP			ICE	H2SO4*	SA2229010	8/30/23	H2SO4 pH<2
Metals	W-ICPMS	W-ICP	W-HARD	ICE	HNO3**	NA2126030	6/02/23	HNO3 pH<2
Organics (LC)	W-E8321-DI	W-E8321-MS		ICE				
Macroinvertebrates								
Organics (GC)	W-PSNP-TQ	W-TR-SQ-R		Ice	*2.0 ml of H2SO4 Used Unless Noted Otherwise **2.0 ml of HNO3 Used Unless Noted Otherwise			
Molecular								
Periphyton								
Phytoplankton								
BOD								
DOC								
Other(s)								
Field Comments:	Partly cloudy, sunny							
Comments on COC:								
Relinquish Date:	12/21/2022	Signature:						

LIMS EVENT ID: SW-DIST-2022-12-22-01

WIN Import ID: 38724

Enter Field Parameters, Verify Station ID In LIMS DMT: DM 12/29/2022

QC Station ID, Field Parameters In LIMS DMT: MM 1/5/2023

Save Field Sheets on Network: MM 3/27/2023 (Initials/Date)

Migrate Data to WIN: MM 3/27/2023 (Initials/Date)

(Initials/Date)

(Initials/Date)



Site Name: Nonsense Cr @ Lingerlodge Rd

STORET STATION
NUMBER:DATE
(MM/DD/YYYY):

SAMPLING AGENCY:

FDEP SWROC

FIELD ID/NAME:

COUNTY:

LOCATION:

RECEIVING BODY OF WATER:

AQ-2022-08-22-11 (1406)

manatee

nord Lake/ Braden River

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 8 <u>7</u> 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>2</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 <u>2</u> 1
Habitat Smothering <u>11</u> ----- Primary Score <u>22</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 <u>11</u>	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>16</u>	20 19 18 17 <u>16</u>	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>8</u> Left Bank <u>8</u>	10 9	<u>8</u> 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	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>8</u> Left Bank <u>8</u>	10 9	<u>8</u> 7 6	5 4	3 2 1
Secondary Score <u>68</u>				

TOTAL SCORE

90

Date: 12/21/2022

Analyst: Ben Paschke, Devin Mathias

Signature:

Ben Paschke

Site Name: Nonsense Cr @ Lingerlodge Rd

21FLTPA

LATITUDE

LONGITUDE

SAMPLING AGENCY FDEP SW ROC

RECEIVING BODY OF WATER

Ward Lake / Braden River

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☒ 30 Silviculture ☐ Field/Pasture ☐ Agricultural ☐ Residential ☒ 50 Commercial ☒ 20 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 8 m wide .02 m/s .02 m/s .02 m/s			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: 718 Right Bank: 718				Hydrologic Modification Score (per FT 3101) 4		1 m deep 2 m deep 1 m deep			
High Water Mark: 0 + 1 = 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 Woody Debris (Snags) ☐ ☐ ☐ Undercut Banks / Roots ☐ ☐ ☐ Leaf Packs or Mat ☐ ☐ ☐ Aquatic Vegetation ☐ ☐ ☐ Rock or Shell Rubble.. ☐ ☐ ☐ Sand..... ☐ ☐ ☐ 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 17.8 7.23 6.19 65.1 48.7 .23 0.8 Mid: ☒ VOB Bottom: Meter ID: Lein TOTAL DEPTH 0.8			Water Odors Normal ☐ Petroleum ☐ Sewage ☐ Chemical ☐ 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:		
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☐ ☐ ☒ ☐ Fish: ☐ ☐ ☐ ☒ Aquatic Plants: ☐ ☐ ☒ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐ Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐			System Type: Stream ☒ Lake ☒ Wetland ☒ Estuary ☐ Other(Specify) ☐		
AMBIENT FIELD CONDITIONS / NOTES: Too close to Ward Lake pooled not flowing much .02 ☒ The antecedent hydrologic conditions have been met to my best knowledge.								
SAMPLING TEAM Ben Swater, Kenturmm, Devin Mathis			SIGNATURE: Ben Swater			DATE: 12/21/2022		

Site Name: Nonsense Cr @ Lingerlodge Rd

Rapid Periphyton Survey Field Sheet

Site: ↑					County: Manatee					Date: 12/21/2022					Investigators: Ben Paswater				
										STORET Station Number: 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	N		92	60	1	N		10	Secchi depth 1.0 Estimated? 10 # points ranked 4-6 0 total points assessed 10 % 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- 2022-08-22-11									
	2																		
	3																		
	4																		
	5																		
	6																		
	7																		
	8																		
	9																		
10	1			91	70	1			27										
	2																		
	3																		
	4																		
	5																		
	6																		
	7																		
	8																		
	9																		
20	1			86	80	1			54										
	2																		
	3																		
	4																		
	5																		
	6																		
	7																		
	8																		
	9																		
30	1			82	90	1			78										
	2																		
	3																		
	4																		
	5																		
	6																		
	7																		
	8																		
	9																		
40	1			42	100	1			92										
	2																		
	3																		
	4																		
	5																		
	6																		
	7																		
	8																		
	9																		
50	1	V		4	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%.														
	2																		
	3																		
	4																		
	5																		
	6																		
	7																		
	8																		
	9																		

Secchi depth 1.0
Estimated? 10

points ranked 4-6 0
total points assessed 10
% 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- 2022-08-22-11

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

Site Name: Nonsense Cr @ Lingerlodge Rd

County: Monroe

Waterbody: See Sticker

Date: 12/31/2022

Signature: Ben D. Swider

Analyst: Ben D. Swider

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. **BOLD is exotic invasive**

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 (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																							

enter in SBIO



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

Site Name: Nonsense Cr @ Lingerlodge Rd

Location:

Date: 12/21/2022

Sampler: Ben Paswater

100 m: Latitude ~~22-43-01~~Longitude ~~-82-15-11~~0 m: Latitude ~~22-45-01~~Longitude ~~-82-15-11~~

Substrates: Code key, draw proportionate habitat abundance. %



Snags

few



Roots/undercut banks



Leaf Packs (or mats)



Aquatic Macrophytes

6.5



ROCKS



Pools

total # observed = 1

range expected = 12

Average width 8.0 m

Average depth 0.8 m

Velocity measured at 0.50-1.00 meter mark.

WQ & chemistry taken at _____ 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:

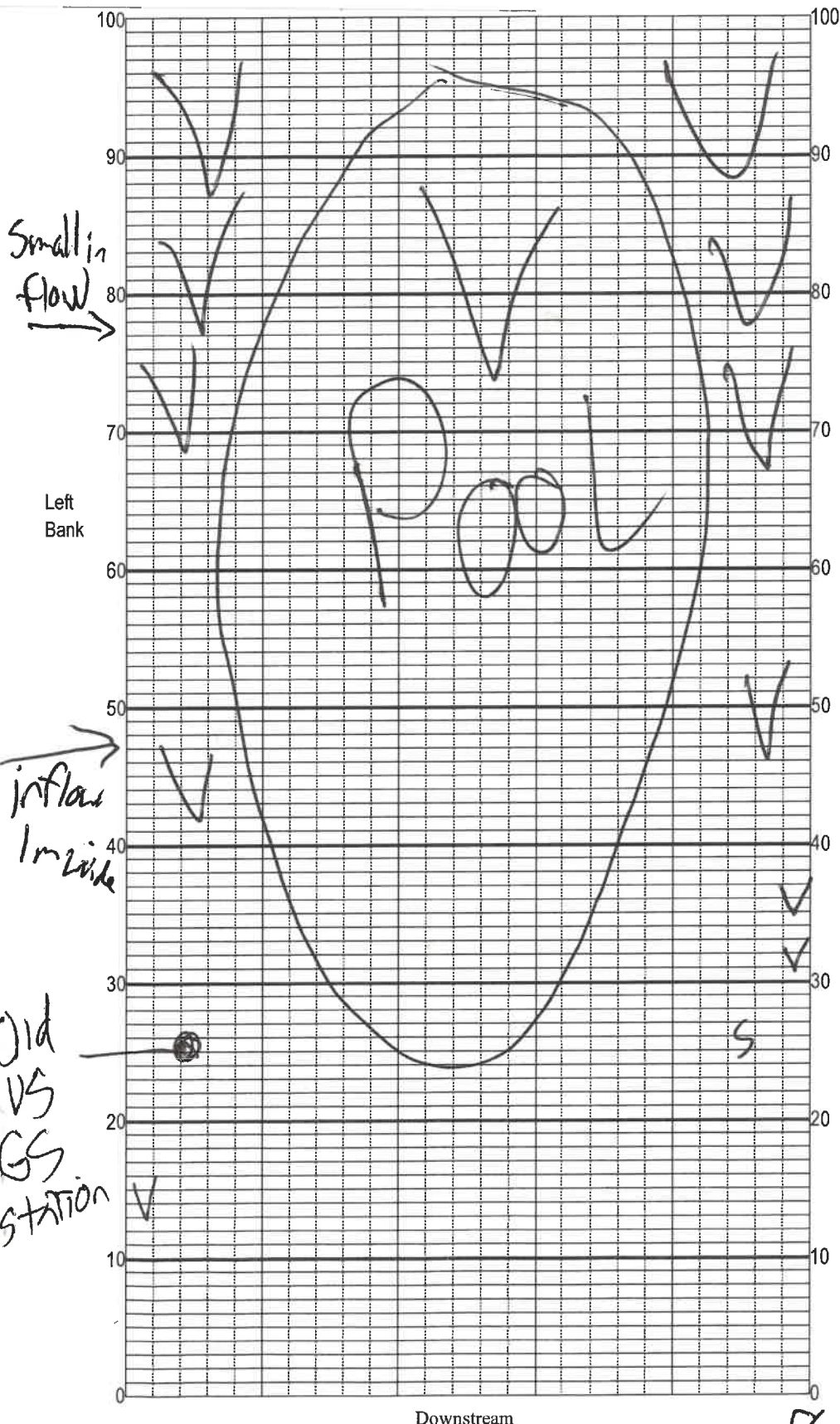
Note areas (on map) where natural vegetation is altered or eliminated.

Plants observed / other notes:

$$1 = 167 / 2500 = .065$$

A

@ 0.5 flow
 not SCI able
 too Lake Like



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