



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

PAGE 1 OF 1

Data Qualified?
Yes ☒ No ☐

Location/STORET Station Name: Eightmile Creek @ Nw 798 st

Date: 11/28/17
(mm/dd/yyyy)

STORET # G1TLHR0078

WBID: 3607

Latitude: _____

(Decimal Degrees)

County: Duval

RQ: 2017-10-30-54

ORG ID: 21FLTLHR

Longitude: _____

(Decimal Degrees)

Receiving Body of Water: St. Johns River

Field ID: G1TLHR0078-2017-06

Sampling Team Members

Jan Woods
Jade Buckheft

WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	☒	☒	☒	☒

Sampling Equipment

☒ Sample Container ☐ Van Dorn ☐ Pole
☐ Carboy ☒ Syringe
☐ Dipper ☐ Other _____
Equipment ID _____

Collection Method

☒ Wading ☐ From Shore ☐ Other (note below)
☐ Via Boat
☐ Canoe/Kayak
☐ Electric Motor
☐ Gasoline Motor

Water Level: Dry / Pooled / Low / Normal / High / Flooded

Matrix: Fresh / Marine / DI

Meter ID# Pro DSS

Photos: Yes / No

Tide Falling: Yes / No / NA

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°)
<u>EST</u>	<u>1135</u>	<u>0.3</u>	<u>1.0</u>	<u>7.94</u>	<u>76.9</u>	<u>9.32</u>	<u>0.13</u>	<u>1.0</u>	<u>271</u>	<u>13.9</u>
CEN										

Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other _____

SBIO ID Numbers: SBIO-ID: 32037 RPS-ID: 8844 Macrophyte-ID: _____ LIMS#: _____

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	<u>7275010</u>	<u>10/2/18</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO ₃			☐ <2
Filtered Nutrients	☒ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci ☐ qPCR	☐ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

G1TLHR0078-2017-06



WBID 3607

Field ID ↑

STORET ↓

Eightmile Creek @
Nw 798 st



G1TLHR0078

Notes: pH failed calib. check

Signature: [Signature]

Date: 11/28/17

Field Parameters Entered into LIMS: JB 12/18/17

Field Parameters QC in LIMS: JB 12/25/17

Date Migrated to STORET: CG 2-23-18
(Initials/Date)

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

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

SAMPLING AGENCY: <u>8034</u>	STORET STATION NUMBER: <u>GTLH0078</u>	DATE (MM/DD/YY): <u>11/28/17</u>	RECEIVING BODY OF WATER: <u>Good Steinhatchee</u>
REMARKS:	COUNTY: <u>Dixie</u>	LOCATION: <u>5 mile crk</u>	FIELD ID/NAME: <u>GTLH0078-2017-06</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>18</u>	20 19 <u>18</u> 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>5</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 <u>5</u> 4 3 2 1
Water Velocity <u>20</u>	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 <u>20</u> 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>19</u> ----- Primary Score <u>62</u>	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 20 <u>19</u> 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	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 Right Bank <u>10</u> Left Bank <u>9</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 <u>9</u>	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>10</u> Left Bank <u>10</u>	Width of vegetation greater than 18 m <u>10</u> 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>10</u> Left Bank <u>10</u> ----- Secondary Score <u>79</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. <u>10</u> 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

141 **TOTAL SCORE**

Date: <u>11/28/17</u>	Analyst: <u>J. Burdett</u>	Signature: <u>[Signature]</u>
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DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID GTLH0078 ORG ID 8034 21 FAH LATITUDE _____
 COUNTY Dixie STORET # GTLH0078 LONGITUDE _____
 DATE 11/28/17 TIME 1135 SAMPLING AGENCY 8034
 SITE NAME Smile Creek @ NW 7944
 FIELD ID/NAME GTLH0078-2017-06 RECEIVING BODY OF WATER Steinhatchee

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) ☐ <u>100</u> ☐ ☐ ☐ ☐ ☐ ☐ ☐							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 <u>7</u> m wide <u>0.33</u> m/s <u>0.33</u> m/s <u>0.33</u> m/s <u>1.0</u> m deep <u>1.0</u> m deep <u>1.0</u> m deep			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>>18</u> Right Bank: <u>718</u>		Hydrologic Modification Score (per FT 3101) ☐					
High Water Mark: <u>0.75</u> + <u>1</u> = <u>1.75</u> (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 <table border="1"> <thead> <tr> <th></th> <th>% Coverage</th> <th>INVERT # Times Sampled</th> <th>PERI # Times Sampled</th> </tr> </thead> <tbody> <tr> <td>Woody Debris (Snags)</td> <td><u>1.07</u></td> <td><u>4</u></td> <td></td> </tr> <tr> <td>Undercut Banks / Roots</td> <td><u>1.4</u></td> <td><u>4</u></td> <td></td> </tr> <tr> <td>Leaf Packs or Mat</td> <td><u>0.61</u></td> <td><u>4</u></td> <td></td> </tr> <tr> <td>Aquatic Vegetation</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rock or Shell Rubble..</td> <td><u>1.34</u></td> <td><u>4</u></td> <td></td> </tr> <tr> <td>Sand.....</td> <td><u>95.53</u></td> <td><u>4</u></td> <td></td> </tr> <tr> <td>Mud / Muck / Silt</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				% Coverage	INVERT # Times Sampled	PERI # Times Sampled	Woody Debris (Snags)	<u>1.07</u>	<u>4</u>		Undercut Banks / Roots	<u>1.4</u>	<u>4</u>		Leaf Packs or Mat	<u>0.61</u>	<u>4</u>		Aquatic Vegetation				Rock or Shell Rubble..	<u>1.34</u>	<u>4</u>		Sand.....	<u>95.53</u>	<u>4</u>		Mud / Muck / Silt				Other				Other				WATER QUALITY <table border="1"> <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>13.9</u></td> <td><u>9.32</u></td> <td><u>7.94</u></td> <td><u>76.9</u></td> <td><u>271</u></td> <td><u>0.13</u></td> <td><u>1.0</u></td> </tr> <tr> <td>Mid:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>☒ VOB</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> Meter ID: <u>ProDSS</u> TOTAL DEPTH: <u>1.0</u>				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>13.9</u>	<u>9.32</u>	<u>7.94</u>	<u>76.9</u>	<u>271</u>	<u>0.13</u>	<u>1.0</u>	Mid:								☒ VOB	Bottom								
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AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																																																																	

SAMPLING TEAM

Woods, Burtchett

SIGNATURE:

Jude

DATE:

11/28/17

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: 8 mile crk @ Nw 798 st County: Dixie Date: 11/28/17 Investigators: woods, Burtch

STORET Station Number:

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		94		5	N		92
	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		96		5	X		96
	6	N				6	X		
	7	N				7	X		
	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	X		
	5	X		96		5	X		90
	6	X				6	X		
	7	N	Y			7	N		
	8	N	Y			8	N		
	9	N				9	N		
30	1	N			90	1	N		
	2	N				2	N		
	3	N				3	N		
	4	N				4	X	Y	
	5	X		96		5	X	Y	96
	6	X				6	X	Y	
	7	X				7	X	Y	
	8	N	Y			8	N		
	9	N				9	N		
40	1	N			100	1	N		
	2	N				2	N		
	3	N				3	N		
	4	X				4	N		
	5	X		96		5	N		96
	6	X				6	N		
	7	X				7	N		
	8	N				8	N		
	9	N				9	N		
50	1	N			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 58-3010 if the percentage of total sampled points with a thickness rank of				
	2	N							
	3	N							
	4	N							
	5	N		90					
	6	N							
	7	N							
	8	N							
	9	N							

Secchi depth 1.0
Estimated?

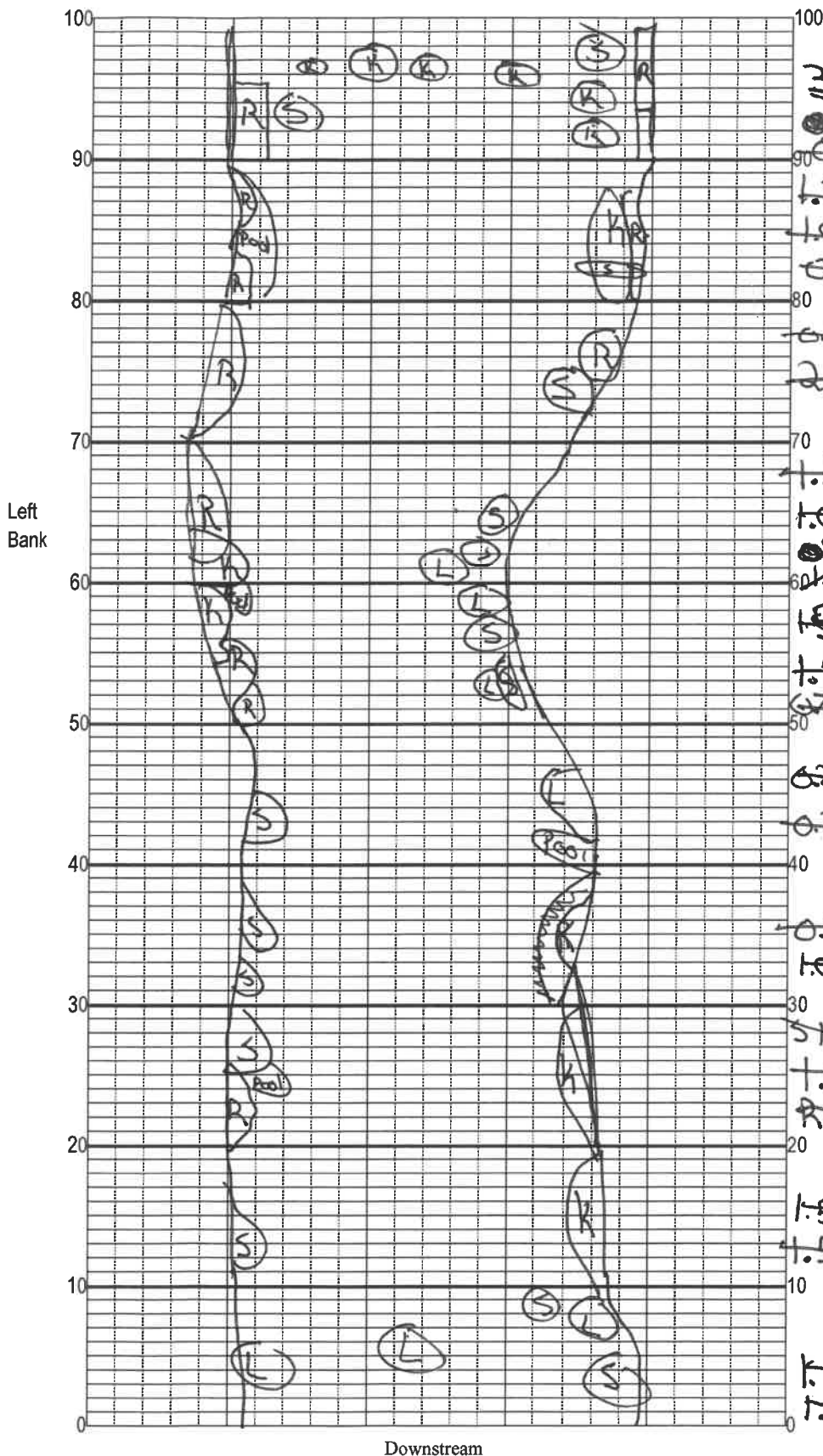
points ranked 4-6 0
total points assessed
% points ranked 4-6

Check accompanying data collected at same site/date.
Algal mat sample
Linear Veg Survey
Habitat Assessment
SCI/Biorecon
Water sample
RQ-10-30-54
2017

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

G1TLHR0078-2017-06

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



Location: 8 mile creek @ NW 798
 Date: 1/28/17
 Sampler: J. Burtche H, J. Woods

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

Substrates: Code key, draw proportionate habitat abundance. %

S Snags 1.07
R Roots/undercut banks 1.4
L Leaf Packs (or mats) 1.34
M Aquatic Macrophytes 0.61
K rocks/ 1.39
Y Pools total # observed = _____
 # range expected = _____

Average width 7.0 m
 Average depth 1.0 m

Velocity measured at 50 meter mark. 0.33 m/s

WQ & chemistry taken at 50 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:
1.5S
1.5K
1.5L
1.0S
1.0S R
1.9.75 K
7.5 S
4.25 L

Length of grid represents 100 m of stream (not lii
 (Horizontal scale is double vertical scale, draw prc

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