

Site Name Sevenmile Creek upstream of Alder Brook Blvd

Date: 2/12/19

Field ID G4NW0345 Storet G4NW0345

Project: SMP

Visit ID 79229

RQ: 2019-02-11-26

RPS ID 9241

LIMS ID: 2157523

VPDB ID —

HA ID 15656

☒ ~~LVI~~ SCI

☐ RPS/LVS Only

☒ Sample Site Created in SBIO 02/25/2019 FB

☒ Phys/Chem entered in SBIO 2/26/2019

☒ HA entered in SBIO Initial FB

☒ Date and Initial QA: 2/28/19 SL

☒ RPS entered in SBIO Initial FB

☒ Date and Initial QA: 2/28/19 SL

☐ LVI entered in SBIO Initial —

☐ Date and Initial QA: —

☒ < 2 m² vegetation

☐ Plants getting verified

Date submitted: —

☐ Plants verified

Date returned: —

☒ RPS authorized in SBIO

☒ Date and Initial: FB 2/28/19

☒ RPS score: 0

☐ VPDB authorized in SBIO

☐ Date and Initial: —

☐ VPDB score: —

☒ SCI complete: 05/05/2020 A. Rankin

SCI Score: 86

☒ If SMP, scanned into database



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: Sevenmile Creek upstream of AlderBrook Blvd.

Date: 2/12/19
(mm/dd/yyyy)

WIN/Field ID: G4NW0345

WBID: 10G

Latitude: 30.66666

County: Santa Rosa

ORG ID: 21FLPNS

Longitude: -87.216510
(Decimal Degrees)

Receiving Body of Water: Escambia River

RQ-2019- 2019-02-11-26
(Decimal Degrees)

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
<u>J. P. King</u> <u>M. King</u>					☒	☒	☒	☒	☒
					☒	☒	☒	☒	☒

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☒ Syringe	
☐ Dipper	☐ Other	
Depth Measured with Equipment ID		

Collection Method		
☒ Wading	☐ Canoe/Kayak	
☐ From Shore	☐ Electric Motor	
☐ Other	☐ Gasoline Motor	

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded
Photos: Yes ☒ No ☐ Flow: No Flow / Intestinal / Flowing / NA
Meter ID# 154179 Matrix: Fresh / Marine / DI
Tide: Rising/ Falling/ Slack NA Tide Times: High Low

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (µmhos/cm)	Temp. (C°)
EST	0910	0.260	0.130	0.260	8.58	93.5	5.15	0.02	53.3	19.5
CEN				(S)						

Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other:
SBIO ID Numbers: SBIO-ID: 79229 HA-ID: 15656 RPS-ID: 9241 Macrophyte-ID: LIMS#:

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4	SA 8197090	07/16/19	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3	NA 8344050	12/10/19	☒ <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-CI-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☒ MI-FW-QLDC	☒ Formalin			
Periphyton	☒ ALGAE-ID	☒ Ice			
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci	☐ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD	☐ Ice			
Tracers	☒ W-E8321-DI ☒ W-E8321-MS	☒ Ice			
Pesticides	☒ W-PSNP-TQ	☒ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C				

Notes: lots of trees falling into stream. Sand deposition widening stream & eroding banks. No LVS

Field/WIN ID: G4NW0345
Location: Sevenmile Creek upstream of AlderBrook Blvd.

Signature: [Signature] Date: 2/12/19

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

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

SAMPLE ID 79229 ORG ID 21FLPNS LATITUDE 30.66706
 COUNTY Santa Rosa STORET # 64NW0345 LONGITUDE 87.214643
 DATE 2/12/19 TIME 0910 SAMPLING AGENCY FDEP NW ROC
 SITE NAME Sevenmile Creek upstream of Alder Brook Blvd
 FIELD ID/NAME 64NW0345 RECEIVING BODY OF WATER Escambia River

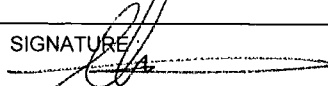
RIPARIAN ZONE / STREAM FEATURES

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) <u>MA</u>	
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>0m</u> <u>4.5</u> m wide <u>0.33</u> m/s <u>0.33</u> m/s <u>0.33</u> m/s <u>0.8</u> m deep <u>0.4</u> m deep <u>0.4</u> m deep			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>718</u> Right Bank: <u>>18</u>				Hydrologic Modification Score (per FT 3101) <u>1-2</u>					
High Water Mark: <u>0.5</u> + <u>1.1</u> = <u>1.6</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 ☐
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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:				<u>0.130</u>	<u>19.5</u>	<u>5.15</u>	<u>8.58</u>	<u>93.5</u>	<u>53.3</u>	<u>0.02</u>	<u>1.0</u>
Mid:											☒ VOB
Bottom:											
Meter ID: <u>154179</u>				TOTAL DEPTH <u>1.0</u>							
Woody Debris (Snags) <u>18</u> <u>5</u> Undercut Banks / Roots <u>7</u> <u>5</u> Leaf Packs or Mat <u>4</u> <u>5</u> Aquatic Vegetation <u>1</u> Rock or Shell Rubble.. Sand..... <u>70</u> <u>3</u> Mud / Muck / Silt Other ... pipe clay ... <u>4</u> <u>1</u> Other				Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>SA 8197090</u> Exp: <u>07/16/19</u> <u>WA 8344050</u> <u>12/12/19</u>				Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☒ Other (Specify) ☐ 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>MIKE KING / JIMMY PITTS</u>				SIGNATURE 		DATE <u>2/25/19</u> <u>02/12/19</u>	

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

SAMPLING AGENCY: <u>FDEP NW ROC</u>		STORET STATION NUMBER: <u>G4NW0345</u>	DATE (MM/DD/YY): <u>02/12/19</u>	RECEIVING BODY OF WATER: <u>Escambia River</u>
REMARKS: <u>SR10 ID 79229</u>	COUNTY: <u>SANTA ROSA</u>	LOCATION: <u>SEVEN MILE CREEK</u>		FIELD ID/NAME: <u>G4NW0345</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>14</u>	20 19 18 17 16	15 <u>(14)</u> 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>18</u>	Greater than 30% major productive habitat present at site 20 19 <u>(18)</u> 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>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>14</u> ----- Primary Score <u>66</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. <i>nm</i> 15 <u>(14)</u> 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. <u>(20)</u> 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>7</u> <u>6</u> Left Bank _____	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>10</u> Left Bank <u>10</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>7</u> <u>9</u> Left Bank <u>6</u> ----- Secondary Score <u>71</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 <u>(7)</u> <u>(6)</u>	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

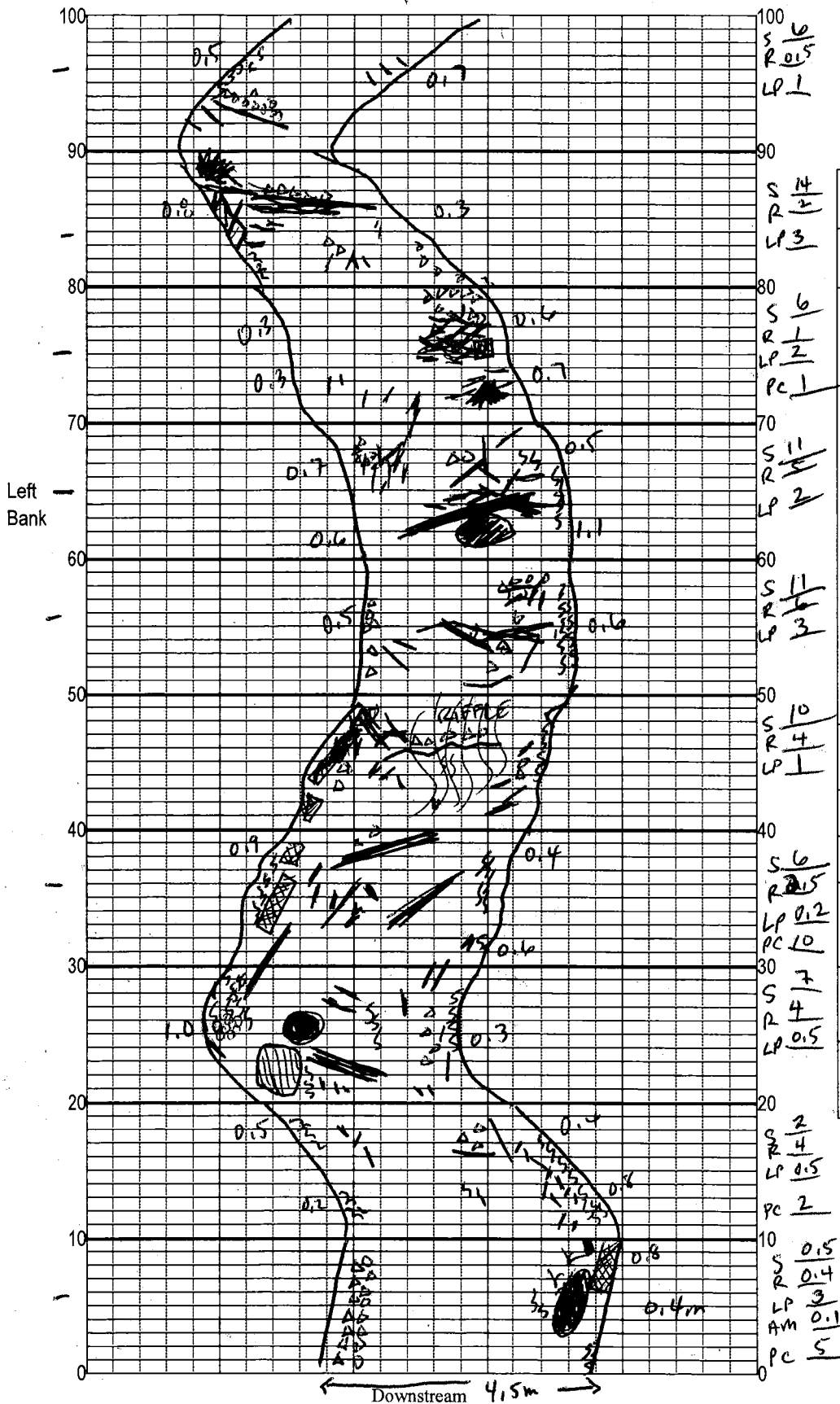
137

TOTAL SCORE

HA ID 15656

Date: <u>2/12/19</u>	Analyst: <u>MIKE KING</u>	Signature:
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: Seven mile Creek
 Date: 2/12/19
 Sampler: MIKE King / Janny P.H.S

100 m: Latitude 30.66706
 Longitude 87.21593
 0 m: Latitude 30.66667
 Longitude 87.214643

Substrates: Code key, draw 29.8%
 proportionate habitat abundance.

	Snags	<u>73.5</u>	<u>18.4</u>
	Roots/undercut banks	<u>29.4</u>	<u>7.35</u>
	Leaf Packs (or mats)	<u>4</u>	<u>4</u>
	Aquatic Macrophytes	<u>16.2</u>	<u>4</u>
	gravel	<u>0.1</u>	<u>4</u>
	pipe clay	<u>16</u>	<u>4</u>
	Pools	total # observed = <u>111</u> # range expected = <u> </u>	

Average width 4 m
 Average depth 0.4 m

Velocity measured at 40 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:

LOTS OF TREES FALLING INTO STREAM.
SAND DEPOSITION WIDENING STREAM & ERODING BANKS

SB10 ID 79229

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

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: SEVEN MILE County: SANTA ROSA Date: 2/12/2019 Investigators: MIKE (RM) / JIMMY PITS

Transect (m) Point 1=right 9=left Algal Thickness Rank (N-6, X) Estimated Canopy Cover STORET Station Number: 64WJW0345

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	N		60	1	N	N		
	2					2				
	3					3				
	4					4				
	5			28		5				36
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N			70	1	N			
	2					2				
	3					3				
	4					4				
	5			40		5				48
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N			80	1	N			
	2					2				
	3					3				
	4					4				
	5			72		5				40
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N			90	1	N			
	2					2				
	3					3				
	4					4				
	5			48		5				72
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N			100	1	N			
	2					2				
	3					3				
	4					4				
	5			56		5				60
	6					6				
	7					7				
	8					8				
	9					9				
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 FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.					
	2									
	3									
	4									
	5			32						
	6									
	7									
	8									
	9									

Secchi depth > 1.0
Estimated? Y

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 ✓
~~SCN~~ Biorecon ✓
Water sample ✓
RQ- 2019-02-11-26

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

SB10 ID 79229

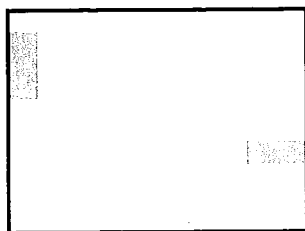
RPS 9241

[illegible]

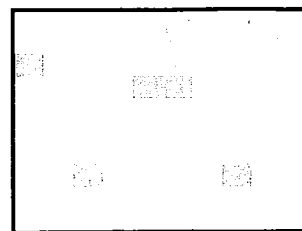
FDEP FORM FD 9000-32 LINEAR VEGETATION SURVEY FIELD SHEET

Percent Cover Categories for macrophytes in a 10 m segment of a stream 5 m wide

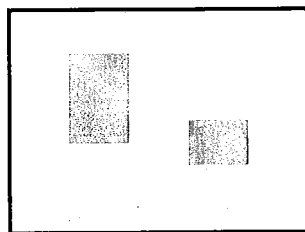
5% Macrophyte Coverage



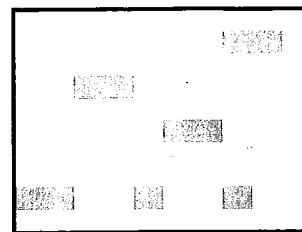
5% Macrophyte Coverage



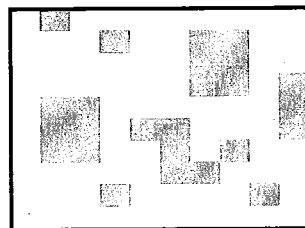
10% Macrophyte Coverage



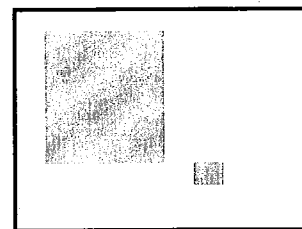
10% Macrophyte Coverage



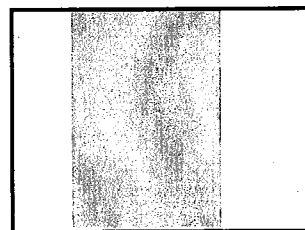
25% Macrophyte Coverage



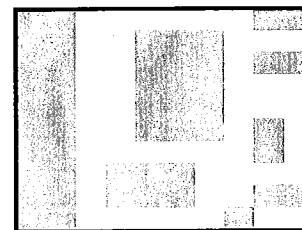
25% Macrophyte Coverage



50% Macrophyte Coverage



50% Macrophyte Coverage



Station: Seven Mile Creek Upstream of Alderbrook Blvd.
 WIN ID G4NW0345
 Visit ID 80693
 Project SMP
 RQ-2020-02-10-41
 LIMS ID 2157523

Sampling Date 2/12/2020
 County Santa Rosa
 Receiving Waters Escambia R.

Variable Name	Rep 1	Rep 2
AmphipodPct	0	0
ChironPct	27.89	22.38
ChironTaxa	12	13
ClingerTaxa	18	16
ColeopteraPct	12.93	18.88
DecapodaPct	0.68	0.7
DipteraPct	28.57	24.48
Dominant Taxa	Heptageniidae	Stenelmis
DominantPct	8.16	11.19
EPTTaxa	19	16
EphemPct	11.56	11.89
EphemTaxa	4	3
FFBrowGrazPct	0	0
FFEpiColDepPct	34.01	33.22
FFParasitePct	0	0
FFPIPIercePct	0.68	0.7
FFPredCarnPct	18.37	18.53
FFScavPct	0.34	0.35
FFScrapePct	13.95	16.08
FFShredPct	17.69	18.18
FFSubColDepPct	5.44	2.1
FFSuspFiltPct	9.52	10.84
FFUnknownPct	0	0
GastropodaPct	0	0
IsopodaPct	0	0
LongLivedTaxa	7	5
OdonataPct	2.72	4.2
OligocPct	5.44	2.1
OligocTaxa	3	1
PelecypodaPct	0	0
PlecopPct	11.56	11.19
PolychaetePct	0	0
PolychaeteTaxa	0	0
SCI_2012_Rep	86.00849394	86.36027667
SensitiveTaxa	19	16
TanytarsiniPct	3.4	6.99
TotalDBar	0	0
TotalDensity	0	0
TotalNind	147	143
TotalTaxa	44	42
TrichopPct	23.13	26.57
TrichopTaxa	10	10
TrombidPct	0	0
VeryTolerantPct	1.36	0.7

SCI_2012_AVG	86.1843853
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