

Site Name Big Horse Creek upstream of Old River Road

Date: 04/03/2019

Field ID G4NW0298 Storet G4NW0298

Project: SMP

Visit ID 79303

RQ: 2019-02-18-18

RPS ID 9284

LIMS ID: _____

Macro ID N/A

WBID: 28

HA ID 15717

☒ SCI

☐ RPS/LVS Only

☒ Sample Site Created in SBIO

☒ Phys/Chem entered in SBIO

☒ HA entered in SBIO Initial FB 04/04/19

☐ Date and Initial QA: _____

☒ RPS entered in SBIO Initial FB 04/04/19

☐ Date and Initial QA: _____

☐ LVS 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: _____

☐ RPS score: _____

☐ VPDB authorized in SBIO

☐ Date and Initial: _____

☐ VPDB score: _____

☐ SCI complete: _____

SCI Score: _____

☐ If SMP, scanned into database



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: Big Horse Creek upstream of Old River Road

Date: 04/03/2019
(mm/dd/yyyy)

WIN/ Field ID: G4NW0298

WBID: 28

Latitude: 30.91440792

County: Okaloosa

ORG ID: 21FLPNS

Longitude: -86.5797445
(Decimal Degrees)

Receiving Body of Water: Yellow River

RQ-2019- 02-18-18

Sampling Team Members

Frank Butera

EB Alicia Hogue Stoper Slude

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

Sampling Equipment

☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☒ Syringe	
☐ Dipper	☐ Other	
Depth Measured with YSF		
Equipment ID 155077		

Collection Method

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

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

Meter ID# 155077

Matrix: Fresh Marine / DI

Photos: Yes / No

Flow: No Flow / Intestinal / Flowing / NA

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 (PPTH)	Sp COND (umhos/cm)	Temp. (C°)
EST	9:40	0.3	0.15	0.3	10.03	94.2	5.39	0.01	23.2	13.0
CEN				1.5						

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

SBIO ID Numbers: SBIO-ID: 79303 HA-ID: 15717 RPS-ID: 9284 Macrophyte-ID: N/A 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	SA8197090	07/16/2019	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☐ HNO3	NA8344050	12/10/2019	☒ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter	☒ Ice	16570048		
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-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	☒ 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:

Field/WIN ID



G4NW0298

Location:

Big Horse Creek upstream of Old River Road

Signature: Frank S. Butera

Date: 04/03/2019

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:

(Initials/Date)

(Initials/Date)

(Initials/Date)

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

SAMPLE ID 79303 ORG ID 21FLPNS LATITUDE 30.91440792
 COUNTY Okaloosa WIN ID/STORET # G4NW0298 LONGITUDE -86.5797445
 DATE 04/03/2019 TIME 9:40 CTZ _____ SAMPLING AGENCY FL DEP - NWROC
 SITE NAME Big Horse Creek upstream of Old River Road RQ-2019-02-18-18
 FIELD ID/NAME G4NW0298 RECEIVING BODY OF WATER Yellow River WBID 28 Project SMP- TMDL Studies

RIPARIAN ZONE / STREAM FEATURES

LIMS ID:

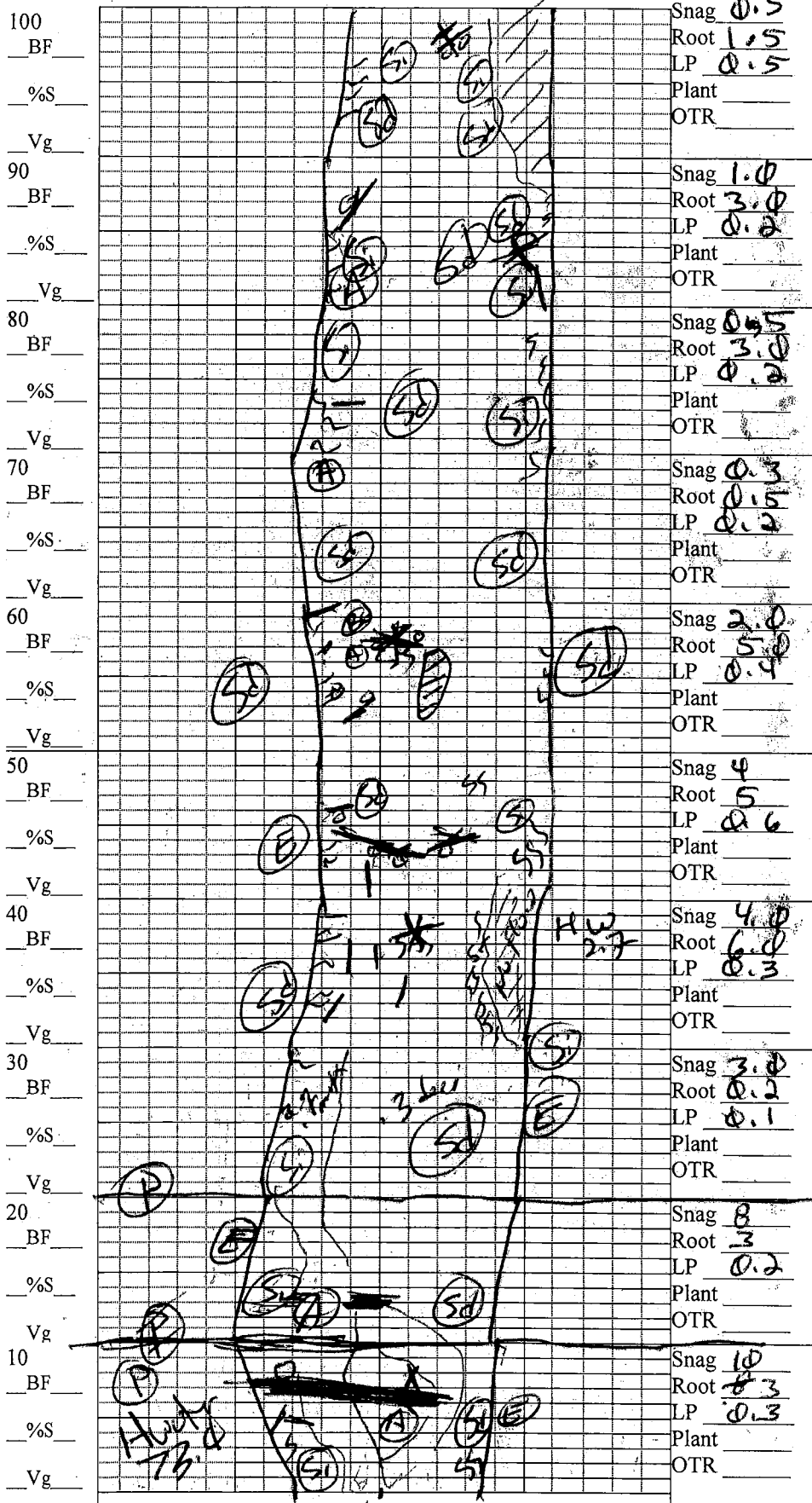
PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☒ Silviculture ☐ Field/Pasture ☐ Agricultural ☒ Residential ☐ Commercial ☐ Industry ☐ Other (Specify) ☐								Landscape Development Intensity Index (LDI) <u>N/A</u>
Local Watershed Erosion (select one): ☐ None ☐ Slight ☒ Moderate ☐ Heavy Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☐ Moderate ☐ Heavy				Typical Width (m) <u>50m</u> Depth (m)/Velocity (m/sec) Transect <u>8.0</u> m wide				
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>17</u> Right Bank: <u>718</u>				Hydrologic Modification Score (per FT 3101) <u>1-2</u>				
High Water Mark: <u>73.0</u> + <u>0.7</u> = <u>3.7</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		WATER QUALITY <table border="1"> <thead> <tr> <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: <u>0.3</u></td> <td><u>13.0</u></td> <td><u>5.39</u></td> <td><u>10.03</u></td> <td><u>94.2</u></td> <td><u>23.2</u></td> <td><u>0.01</u></td> <td><u>0.3</u></td> </tr> <tr> <td>Mid: <u>0.15</u></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> </tr> </tbody> </table> Meter ID: <u>155077</u> <u>49</u> TOTAL DEPTH <u>0.3</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>13.0</u>	<u>5.39</u>	<u>10.03</u>	<u>94.2</u>	<u>23.2</u>	<u>0.01</u>	<u>0.3</u>	Mid: <u>0.15</u>							☒ VOB	Bottom							
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>13.0</u>	<u>5.39</u>	<u>10.03</u>	<u>94.2</u>	<u>23.2</u>	<u>0.01</u>	<u>0.3</u>																														
Mid: <u>0.15</u>							☒ VOB																														
Bottom																																					
Woody Debris (Snags) <u>4.1</u> <u>5</u> Undercut Banks / Roots <u>3.4</u> <u>5</u> Leaf Packs or Mat <u>0.4</u> <u>5</u> Aquatic Vegetation Rock or Shell Rubble..... Sand..... <u>93.4</u> <u>5</u> Mud / Muck / Silt Other Other		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: <u>SA8197090</u> Exp: <u>7/16/2019</u>		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 ☐																																	
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☐ ☐ ☒ ☐ Fish: ☐ ☐ ☐ ☒ Aquatic Plants: ☒ ☐ ☐ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐		System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐																																			
AMBIENT FIELD CONDITIONS / NOTES: <u>Blue/Green Algae @ 60m.</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																					
SAMPLING TEAM: Frank Butera, Alicia Hogue <u>FB</u> <u>Shake Slake</u>			SIGNATURE: <u>[Signature]</u>		DATE: <u>04/03/2019</u>																																

Stream/River Habitat Sketch Sheet, Form FD 9000-4 (June 1, 2001)

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



Substrates: Code key, draw proportionate habitat abundance.

☒ Snags $\frac{33.3}{810} = 4.1\%$

☒ Roots/undercut banks $\frac{27.5}{810} = 3.4\%$

☒ Leaf Packs (or mats) $\frac{3}{810} = 0.4\%$

☒ Macrophytes

☒ BAR

Sl = silt, lt = fine sand, sd = sand, b = boulders

☒ A = Algae, B = Blue Green, C = Fe, D = Fe/Sulfur

Velocity:

Note where velocity measures were taken. 10 m

Habitat Smothering:

Note areas (on map) where sand or silt is something 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.

Average width 8.1m

Average depth 0.3 m

WQ & chemistry taken @ 10 m

Big Horse Creek upstream of Old River Road

Storet. G4NW0298

Field ID. G4NW0298

Date: 04/03/2019

Sampled By: F. Butler

Plants observed/other notes:

SB 10 ID 79303

0-10 meter [A]	Habitat Area (M)	Left Bank	Right Bank
	Snag 10.0	Bankfull	Bankfull
0m width (m) 7.5	Root 3.0	+	-
10m width 9.4	Leaf 0.3	Slope	Slope
Avg. Depth 0.3	Veg	-	-
Max Depth 0.6	Gravel	Veg	Veg
Rip. Buff L 718	Rock	+	+
Rip. Buff R 718	(S) (S) (A) (E) (P)		

10-20 meter [B]	Habitat Area (M)	Left Bank	Right Bank
	Snag 8.0	Bankfull	Bankfull
20m width 8.0	Root 0.3	-	-
	Leaf 0.2	Slope	Slope
Avg. Depth 0.3	Veg	-	+
Max Depth 0.8	Gravel	Veg	Veg
Rip. Buff L 18	Rock	-	+
Rip. Buff R 718	Si, Si, A, E		

20-30 meter [C]	Habitat Area (M)	Left Bank	Right Bank
	Snag 3.0	Bankfull	Bankfull
30m width 8.0	Root 0.2	+	-
	Leaf 0.12	Slope	Slope
Avg. Depth 0.3	Veg	-	+
Max Depth 0.7	Gravel	Veg	Veg
Rip. Buff L 718	Rock	+	+
Rip. Buff R 718	Si, Si, A, E		

30-40 meter [D]	Habitat Area (M)	Left Bank	Right Bank
	Snag 4.0	Bankfull	Bankfull
40m width 8.0	Root 0.8	-	-
	Leaf 0.3	Slope	Slope
Avg. Depth 0.4	Veg	-	-
Max Depth 0.6	Gravel	Veg	Veg
Rip. Buff L 718	Rock	+	+
Rip. Buff R 718	Si, Si, A		

40 - 50 meter [E]	Habitat Area (M)	Left Bank	Right Bank
	Snag 4.0	Bankfull	Bankfull
50m width 8.0 718	Root 5.0	-	-
	Leaf 0.6	Slope	Slope
Avg. Depth 0.4	Veg	-	-
Max Depth 0.6	Gravel	Veg	Veg
Rip. Buff L 718	Rock	+	+
Rip. Buff R 718	Si, Si, E		

50-60 meter [F]	Habitat Area (M)	Left Bank	Right Bank
	Snag 2.0	Bankfull	Bankfull
60m width 8.5	Root 5.0	-	-
	Leaf 0.4	Slope	Slope
Avg. Depth 0.3	Veg	-	-
Max Depth 0.4	Gravel	Veg	Veg
Rip. Buff L 718	Rock	+	+
Rip. Buff R 718	Si, Si, A		

60-70 meter [G]	Habitat Area (M)	Left Bank	Right Bank
	Snag 0.3	Bankfull	Bankfull
70m width 9.0	Root 0.5	-	-
	Leaf 0.2	Slope	Slope
Avg. Depth 0.3	Veg	-	+
Max Depth 0.3	Gravel	Veg	Veg
Rip. Buff L 18	Rock	+	+
Rip. Buff R 718	Si, Si, A		

70-80 meter [H]	Habitat Area (M)	Left Bank	Right Bank
	Snag 0.5	Bankfull	Bankfull
80m width 8.0	Root 3.0	-	-
	Leaf 0.2	Slope	Slope
Avg. Depth 0.3	Veg	+	-
Max Depth 0.4	Gravel	Veg	Veg
Rip. Buff L 718	Rock	+	+
Rip. Buff R 718	Si, Si, A		

80-90 meter [I]	Habitat Area (M)	Left Bank	Right Bank
	Snag 1.0	Bankfull	Bankfull
90m width 8.0	Root 3.0	-	-
	Leaf 0.2	Slope	Slope
Avg. Depth 0.4	Veg	-	-
Max Depth 0.7	Gravel	Veg	Veg
Rip. Buff L 10	Rock	-	+
Rip. Buff R 718	Si, Si, A		

90 - 100 meter [J]	Habitat Area (M)	Left Bank	Right Bank
	Snag 0.5	Bankfull	Bankfull
100m width 7.0	Root 1.5	-	-
	Leaf 0.5	Slope	Slope
Avg. Depth 0.4	Veg	+	-
Max Depth 0.6	Gravel	Veg	Veg
Rip. Buff L 718	Rock	+	+
Rip. Buff R 718	Si, Si, A		

Big Horse Creek up Old River Road

Storet: G4NW0298

Date 4/03/2019

0 meter (Dec Deg)

30.91434
86.57950

100 meter (Dec Deg)

30.91523
86.57926

Water Quality Measured at

10m

Stream Velocity and location.

0.4 m/s 50 meter mark

Number of Pools & Location 2

40-10, 20-40

High Water: 73.0

Silt smothering @

A-J

Sand Smothering @

A-J

Algae Smothering @

A, B, F, G, I

Degraded Banks @

A-C, E,

Fe/Sulfur Bact. @

N/A

Total Habitat	Sq. Meters	Percent
Snags	33.3	4.1
Roots	27.5	3.4
Leaf	3.0	0.4
Veg		
Rock		
Gravel		
Sand	756.2	93.4
Other		
Sum 1 st Habitat		7.9

Avg. Depth	Max. Depth	Avg. Width
0.3	0.8	8.1

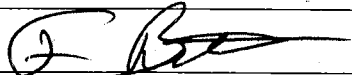
Notes: Left Bank recently cleared 21m from Bank.
SB10 ID 79303

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

SAMPLING AGENCY: 21FLPNS		STORET STATION NUMBER: G4NW0298	DATE (MM/DD/YY): 04/03/19	RECEIVING BODY OF WATER: Yellow River
REMARKS: WBID 28	COUNTY: Okaloosa	LOCATION: Big Horse Creek upstream of Old River Road		FIELD ID/NAME: G4NW0298

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components Substrate Diversity <u>12</u>	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags) 15 14 13 <u>12</u> 11	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed 10 9 8 7 6	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered 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>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>11</u> Primary Score <u>11</u> <u>50</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 Artificial Channelization <u>17</u>	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. 20 19 18 <u>17</u> 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>4</u> Left Bank <u>4</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. 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>8</u> Left Bank <u>10</u>	Width of vegetation greater than 18 m <u>10</u> 9	Width of vegetation >12 to 18m <u>8</u> 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>9</u> Left Bank <u>8</u> Secondary Score <u>60</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 <u>9</u>	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. <u>8</u> 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

110 TOTAL SCORE % = 69%

Date: 04/03/2019	Analyst: F. Butera, A. Hogue S. Slate	Signature: 
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SBIO ID: 79303 HA ID: 15717

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Big Horse Creek upstream of Old River Road

County: Okaloosa

Date: 04/03/2019

Investigators: F. Butera, A. Hoguer (P), S. Slatk

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	No	85	60	1	N	No	59
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
10	1	N	No	96	70	1	N	No	93
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
20	1	N	No	96	80	1	N	No	96
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
30	1	N	No	96	90	1	N	No	96
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
40	1	N	No	96	100	1	N	No	96
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
50	1	N	No	96	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.				
	2				Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank.				
	3				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.				
	4				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%.				
	5								
	6								
	7								
	8								
	9								

STORET Station Number: G4NW0298

Field ID: G4NW0298

Secchi depth 0.3
Estimated? No

points ranked 4-6 2
total points assessed 99
% points ranked 4-6 01%

Check accompanying data collected at same site/date.

Algal mat sample
Linear Veg Survey
Habitat Assessment
SC Biorecon
Water sample

RQ- 2019-02-18-18

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

RPS ID 9284

VPDB ID N/A

SBI0 ID 79303

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Storet Number: G4NW0298

Signature:

Comments: $< 2 m^2$ Vegetation LVS NOT Appropriate

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.

[illegible]

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62-160.800, F.A.C.