

Site Name Williams Creek below Frankfort Avenue

Date: 02/14/2019

Field ID G4NW0198 Storet G4NW0198

Project: SMP. TMDL Studies

Visit ID 79217

RQ: 2019-02-11-27

RPS ID 9239

LIMS ID: 2063103

VPDB ID N/A

HA ID 15653

☒ ~~LVI~~ SCI

☐ RPS/LVS Only

☒ Sample Site Created in SBIO

☒ Phys/Chem entered in SBIO

☒ HA entered in SBIO Initial ^{FR} 2/25/2019 ☐ Date and Initial QA: _____

☒ RPS entered in SBIO Initial ^{FR} 2/25/2019 ☐ Date and Initial QA: _____

☐ 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: _____

☐ 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: Williams Creek below Frankfort Avenue

Date: 02/14/19
(mm/dd/yyyy)

WIN/ Field ID: G4NW0198

WBID: 864A

Latitude: 30.41202

County: Santa Rosa

ORG ID: 21FLPNS

Longitude: 86.89455
(Decimal Degrees)

Receiving Body of Water: Santa Rosa Sound

RQ-2019-02-4-27
(Decimal Degrees)

Sampling Team Members

S. Slade
F. Rivera

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

Meter ID# 154179

Matrix: Fresh / Marine / DI

Photos: Yes / No

Flow: No Flow / Intertidal / 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 (PPT)	Sp COND (umhos/cm)	Temp. (C°)
EST	13:15	0.1	0.05	0.1	8.61	79.3	4.27	0.03	72.9	14.9
CEN				0.05						

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

SBIO ID Numbers: SBIO-ID: 79217 HA-ID: 15653 RPS-ID: 9239 Macrophyte-ID: N/A LIMS#: 2063103

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	SA8085170	3/26/19	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3	PA8099110	4/04/19	☒ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um 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	☒ W-FW-QLDC	☒ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci	☒ Ice			
Molecular	☐ PCR-FILTER ☒ PCR-BacR ☒ PCR-GULL2 ☒ PCR-HF183 ☒ PCR-DGS ☒ PCR-GFD	☒ Ice			
Tracers	☒ W-E8321-DI ☒ W-E8321-MS	☒ Ice			
Pesticides	☐ W-PSNP-TQ	☐ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C				

Notes: Less than 2m² vegetation.
LVS NOT conducted

Field/WIN ID →



Location:
Williams Creek below Frankfort Avenue

Signature: [Signature]

Date: 2/14/19

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 (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 79217 ORG ID 21FLPNS LATITUDE 30.41202
 COUNTY Santa Rosa WIN ID/STORET # G4NW0198 LONGITUDE -86.89455
 DATE 02/14/2019 TIME 13:15 CTZ SAMPLING AGENCY FL DEP - NWROC
 SITE NAME Williams Creek below Frankfort Road **RQ-2019-02-11-27**
 FIELD ID/NAME G4NW0198 RECEIVING BODY OF WATER Santa Rosa Sound WBID 864A Project SMP- TMDL Studies

RIPARIAN ZONE / STREAM FEATURES

LIMS ID: 2063103

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) N/A
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 65m 2.0 m wide — m/s 0.2 m/s — m/s — m deep 0.2 m deep — m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank : <u>718</u> Right Bank : <u>718</u>				Hydrologic Modification Score (per FT 3101) <u>3-4</u>			
High Water Mark: <u>3.0</u> + <u>0.4</u> = <u>3.4</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>1.5</u></td> <td><u>10</u></td> <td></td> </tr> <tr> <td>Undercut Banks / Roots</td> <td><u>0.4</u></td> <td><u>4</u></td> <td></td> </tr> <tr> <td>Leaf Packs or Mat</td> <td><u>0.2</u></td> <td><u>2</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></td> <td></td> <td></td> </tr> <tr> <td>Sand.....</td> <td><u>98</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>1.5</u>	<u>10</u>		Undercut Banks / Roots	<u>0.4</u>	<u>4</u>		Leaf Packs or Mat	<u>0.2</u>	<u>2</u>		Aquatic Vegetation				Rock or Shell Rubble..				Sand.....	<u>98</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>0.05</u></td> <td><u>14.9</u></td> <td><u>4.27</u></td> <td><u>8.01</u></td> <td><u>79.3</u></td> <td><u>72.9</u></td> <td><u>0.03</u></td> <td><u>0.1</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>154179</u> TOTAL DEPTH <u>0.1</u>				Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top :	<u>0.05</u>	<u>14.9</u>	<u>4.27</u>	<u>8.01</u>	<u>79.3</u>	<u>72.9</u>	<u>0.03</u>	<u>0.1</u>	Mid:								☒ VOB	Bottom								
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ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☐ ☐ ☒ ☐ Fish: ☐ ☒ ☐ ☐ Aquatic Plants: ☐ ☒ ☐ ☐ Iron/Sulfur Bacteria: ☐ ☐ ☐ ☒			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Surface Oils Normal ☐ Sheen ☐ Globs ☒ 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: <u>No sinuosity in 100m stretch.</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																																																														

SAMPLING TEAM: Frank Butera, Stopher Slade

SIGNATURE:

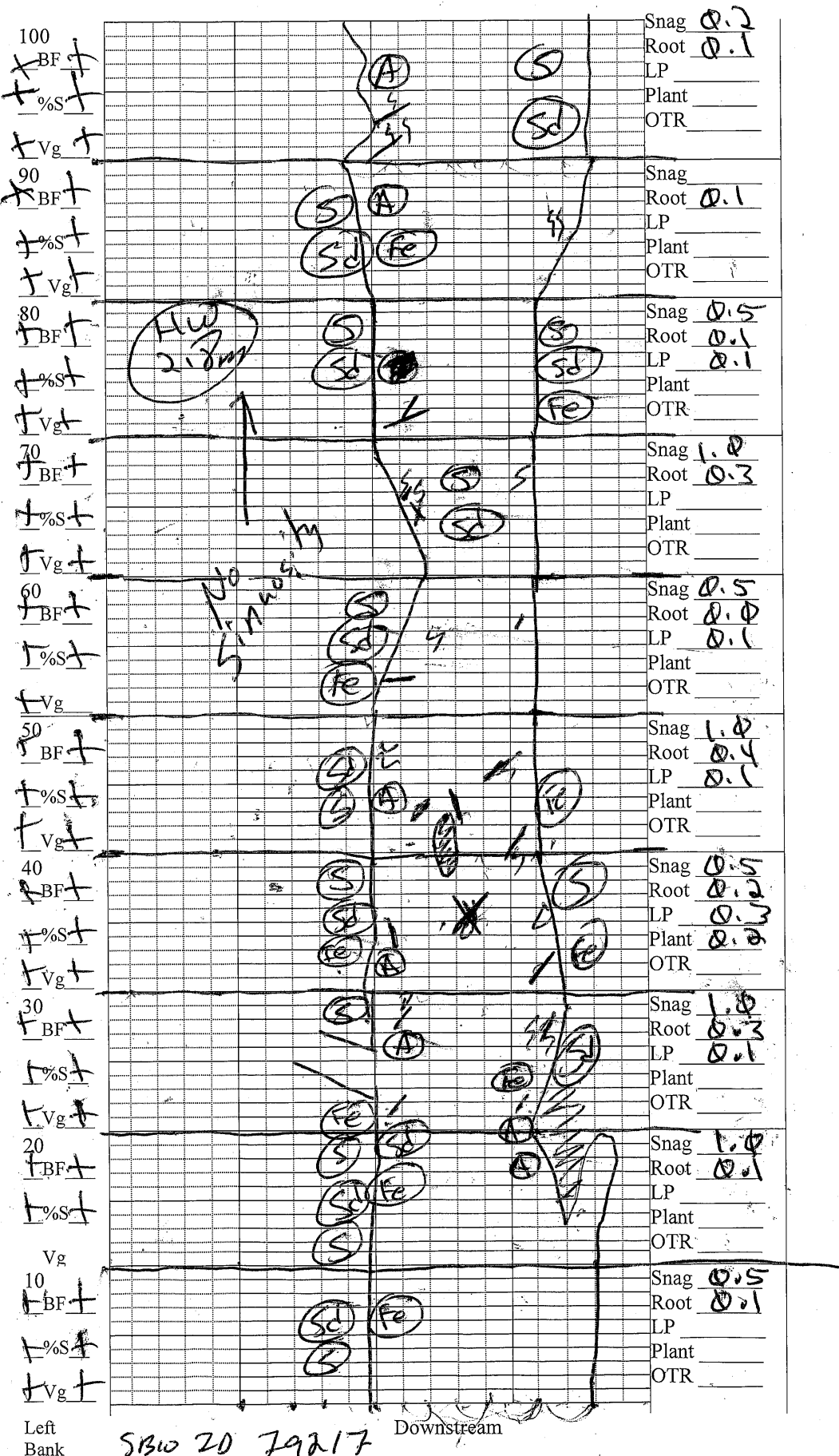
Frank Butera

DATE:

02/14/2019

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).



WIN ID G4NW0198

Substrates: Code key, draw proportionate habitat abundance.

- ☒ Snags 1.5% 6.2
- ☒ Roots/undercut banks 1.7 0.4%
- ☒ Leaf Packs (or mats) 0.7 0.2%
- ☒ Macrophytes 0.2 N/A
- ☒ Fe Trans/Sulfur 0.7
- ☒ Silt 0.7
- ☒ Sand 98% 0.7
- ☒ Hg 0.7
- ☒ Sand Bar

Velocity:

Note where velocity measures were taken. 65 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 0.1 m

Average depth 0.28 m

WQ & chemistry taken @ 75 m

Mitchell Creek below Frankfort Ave.

Project. TMDL Studies

Sampled By/Date: 2/14/2019
F. B. B.

0 m Latt. 30.41182

0 m Long. 86.89488

100 m Latt. 30.41241

100 m Long. 86.89488

0-10 meter [A]	Habitat Area (M)	Left Bank	Right Bank
	Snag 0.5	Bankfull	Bankfull
0m width (m) 4.0	Root 0.1	+	+
10m width 5.0	Leaf	Slope	Slope
Max Depth 0.5	Veg	+	+
Avg. Depth 0.3	Gravel	Veg	Veg
Rip. Buff L 718	Rock	+	+
Rip. Buff R 718	Other (S) (A) (F) (E)	MAV. 0.4	

10-20 meter [B]	Habitat Area (M)	Left Bank	Right Bank
	Snag 1.0	Bankfull	Bankfull
20m width 3.0	Root 0.1	+	+
Max Depth 0.3	Leaf	Slope	Slope
Avg. Depth 0.2	Veg	+	+
Rip. Buff L	Gravel	Veg	Veg
Rip. Buff R	Rock	+	+
	Other (S) (A) (F) (E)		

20-30 meter [C]	Habitat Area (M)	Left Bank	Right Bank
	Snag 1.0	Bankfull	Bankfull
30m width 4.0	Root 0.3	+	+
Max Depth 0.4	Leaf 0.1	Slope	Slope
Avg. Depth 0.3	Veg	+	+
Rip. Buff L 718	Gravel	Veg	Veg
Rip. Buff R 718	Rock	+	+
	Other (S) (A) (F) (E) (D)		

30-40 meter [D]	Habitat Area (M)	Left Bank	Right Bank
	Snag 0.5	Bankfull	Bankfull
40m width 3M	Root 0.2	+	+
Max Depth 0.3	Leaf 0.3	Slope	Slope
Avg. Depth 0.2	Veg 0.2	+	+
Rip. Buff L 718	Gravel	Veg	Veg
Rip. Buff R 718	Rock	+	+
	Other (S) (A) (F) (E) (D)	1.4/3	

40 - 50 meter [E]	Habitat Area (M)	Left Bank	Right Bank
	Snag 1.0	Bankfull	Bankfull
50m width 4.0	Root 0.4	+	+
Max Depth 0.3	Leaf 0.1	Slope	Slope
Avg. Depth 0.4	Veg	+	+
Rip. Buff L	Gravel	Veg	Veg
Rip. Buff R	Rock	+	+
	Other (S) (A) (F) (E) (D)		

50-60 meter [F]	Habitat Area (M)	Left Bank	Right Bank
	Snag 0.5	Bankfull	Bankfull
60m width 2.0	Root 0.1	+	+
Max Depth 0.3	Leaf 0.1	Slope	Slope
Avg. Depth 0.2	Veg	+	+
Rip. Buff L	Gravel	Veg	Veg
Rip. Buff R	Rock	+	+
	Other (S) (A) (F) (E) (D)		

60-70 meter [G]	Habitat Area (M)	Left Bank	Right Bank
	Snag 1.0	Bankfull	Bankfull
70m width 4.5	Root 0.3	+	+
Max Depth 0.3	Leaf	Slope	Slope
Avg. Depth 0.2	Veg	+	+
Rip. Buff L 718	Gravel	Veg	Veg
Rip. Buff R 718	Rock	+	+
	Other (S) (A) (F) (E) (D)		

70-80 meter [H]	Habitat Area (M)	Left Bank	Right Bank
	Snag 0.5	Bankfull	Bankfull
80m width 4.0	Root 0.1	+	+
Max Depth 0.4	Leaf 0.1	Slope	Slope
Avg. Depth 0.3	Veg	+	+
Rip. Buff L 718	Gravel	Veg	Veg
Rip. Buff R 718	Rock	+	+
	Other (S) (A) (F) (E) (D)		

80-90 meter [I]	Habitat Area (M)	Left Bank	Right Bank
	Snag	Bankfull	Bankfull
90m width 5.0	Root 0.1	+	+
Max Depth 0.2	Leaf	Slope	Slope
Avg. Depth 0.2	Veg	+	+
Rip. Buff L 718	Gravel	Veg	Veg
Rip. Buff R 718	Rock	+	+
	Other (S) (A) (F) (E) (D)	HW2.8	

90 - 100 meter [J]	Habitat Area (M)	Left Bank	Right Bank
	Snag 0.2	Bankfull	Bankfull
100m width 5.0	Root 0.1	+	+
Max Depth 0.2	Leaf	Slope	Slope
Avg. Depth 0.2	Veg	+	+
Rip. Buff L 718	Gravel	Veg	Veg
Rip. Buff R 718	Rock	+	+
	Other (S) (A) (F) (E) (D)		

Station Name

Williams Creek below Frankfort Ave.

Storet: G4NW0198

Date 02/14/2019

GPS Coordinates

0 meter

30.41182

86.89415

100 meter

30.41241

86.89488

Water Quality Measured at

75 m mark

Stream Velocity and location.

0.2 m/s 65 meter mark

Number of Pools & Location

0

Silt smothering @

A-5

Sand Smothering @

A-5

Algae Smothering @

C-E, J.

Degraded Banks @

—

Total Habitat	Sq. Meters	Percent
Snags	6.2	1.5
Roots	1.7	0.4
Leaf	0.7	0.2
Veg	0.2	N/A
Rock		
Gravel		
Sand	401	98
Other		
Other		
Sum 1° Habitat	8.8	2.1

Notes:

@ SMP plus e 100 m mark
SR10 ID 79217 Avg. W. = 4.1
Fe Sulfur A-F, H, I

SR10 ID 79217
Avg. Depth .28 Max Depth 0.4

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

SAMPLING AGENCY: 21FLPNS		STORET STATION NUMBER: G4NW0198	DATE (MM/DD/YY): <u>02/14/19</u>	RECEIVING BODY OF WATER: Santa Rosa Sound
REMARKS: WBID 864A	COUNTY: Santa Rosa	LOCATION: Boiling Creek at Boat Launch		FIELD ID/NAME: G4NW0198

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components Substrate Diversity <u>4</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 12 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 <u>4</u> 3 2 1
Substrate Availability <u>2</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 5 4 3 <u>2</u> 1
Water Velocity <u>14</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 <u>14</u> 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>2</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 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 <u>2</u> 1
Secondary Habitat Components Artificial Channelization <u>8</u>	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. 20 19 18 17 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 <u>8</u> 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>9</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>8</u> Left Bank <u>7</u> ----- Secondary Score <u>61</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. <u>8</u> <u>7</u> 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

83

TOTAL SCORE

Date: <u>02/14/2019</u>	Analyst: <u>F. Butera</u>	Signature: <u>[Signature]</u>
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SBIO ID: 79217

HA ID: 15653

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Williams Creek below Frankfort Avenue

County:
Santa Rosa

Date:
2/14/2019

Investigators: F. Butera

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	96	60	1	N	No	96
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
10	1	N	No	96	70	1	N	No	96
	2								
	3								
	4								
	5								
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30	1	N	No	96	90	1	N	No	96
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
40	1	N	No	96	100	1	N	No	96
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
50	1	N	No	96		1	N	No	
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								

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%.

STORET Station Number:
G4NW0198

Secchi depth 0.1 "5"
Estimated? No

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
SCI/Biorecon
Water sample
RQ-2019-02-11-27

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

SBIO Visit ID. 79217

RPS ID. 9239

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET																									
Waterbody: Williams Creek below Frankfort Avenue												Date: 2/14/19					County: Santa Rosa					Storet Number: G4NW0198			
Analyst: F. Butera												Signature: [Handwritten Signature]													
Comments: < 2 m ² Vegetation. NO VVS conducted																									
Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m ² 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.																									
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												Micranthemum umbrosum													
Bacopa monnieri												Myriophyllum aquaticum													
Bidens mitis												Najas guadelupensis													
Boehmeria cylindrica												Nuphar luteum													
Centella asiatica												Orontium aquaticum													
Ceratophyllum demersum												Panicum hemitomon													
Chara												Panicum repens													
Cicuta maculata												Panicum rigidulum													
Cladium jamaicense												Pistia stratioides													
Colocasia esculenta												Polygonum glabra													
Commelina diffusa												Polygonum hydropiperoides													
Commelina virginica												Polygonum punctatum													
Crinum americanum												Pontedaria cordata													
Diodia virginiana												Potamogeton illinoensis													
Eichhornia crassipes												Ruellia simplex													
Eleocharis (wispy viviparous)												Sacciolepis striata													
Hydrilla verticillata												Sagittaria kurziana													
Hydrocotyle												Sagittaria lancifolia													
Hygrophila polysperma												Sagittaria latifolia													
Hymenocallis												Salvinia minima													
Lachnanthes caroliniana												Samolus parviflora													
Landoltia punctata												Saururus cernuus													
Lemna												Sparganium americanum													
Limnophila sessiflora												Typha													
Ludwigia leptocarpa												Vallisneria americana													
Ludwigia palustris												Zizania aquatica													
Ludwigia peruviana																									
Ludwigia repens																									
Luziola fluitans																									

Revision Date: March 1, 2014
62-160.800, F.A.C.

BIOASSESSMENT	WBID	Kit	Qty	Bottle Group	WIN ID	Latt	Long	WIN creation	In MAT
Williams Creek below Frankfort Road	864A	SCI Kit	1	A	G4NW0198	30.41202	-86.89455		Yes
		Escherichia coli	1						
		HA	1	B					
		RPS	1						
		RPS	1						
		LVS	1						
RQ-2019-02-11-27									

UWF Bottle Lot No.

Boat Ramps

Bottle Group	Category	Test	Bottles	Labels
A	Kit A	Nutrients	1	
		Chlorophyll	1	
		Alkalinity...	1	
		Ortho-Phos	1	
	Pesticides	W-PNSP-TQ	4	
		W-E8321-D, +	1	
	Bacteria	E. coli	1	
B	MacroInvert	SCI	2	
	Algal ID	Algal ID	1	
Total			13	15

Check Eglin Access Map.

* Williams Creek replaced Boiling Creek at Boat Launch.

Boiling Creek was not accessible due to missions at Eglin AFB.

Boiling Creek G4NW0385, WBID 517. (Eglin map F-2)