

Site Name Baggett Creek upstream of Hwy 90

Date: 03/07/2019

Field ID G4NW0336 Storet G4NW0336

Project: SMP

Visit ID 79260

RQ: 2019-02-18-19

RPS ID 9267

LIMS ID: _____

Macro ID N/A

WBID: 275

HA ID 15678

☒ SCI

☒ RPS/LVS Only

☒ Sample Site Created in SBIO

☒ Phys/Chem entered in SBIO

☒ HA entered in SBIO Initial FB 03/18/2019

☐ Date and Initial QA: _____

☒ RPS entered in SBIO Initial FB 03/18/2019

☐ 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: _____

☐ Macro authorized in SBIO

☐ Date and Initial: _____

☐ Macro 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:

Baggett Creek upstream of Hwy 90

Date:

3/7/19
(mm/dd/yyyy)

WIN/ Field ID:

G4NW0336

WBID:

275

Latitude:

30.728013

(Decimal Degrees)

County:

Okaloosa

ORG ID:

21FLPNS

Longitude:

-86.659978

(Decimal Degrees)

Receiving Body of Water:

Yellow River

RQ-2019-

02-18-19

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment									
J. Pross N. Murrey					X	X	X	X	X	☒ 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 / 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 (PPT)	Sp COND (µmhos/cm)	Temp. (C°)									
EST	071015	0.4	0.2	0.4 (S)	10.69	97.1	5.37	0.01	33.6	11.2									
CEN																			
Biological Samples Collected: None (HA) (SCI) (RPS) Algae ID (LVS) (H) (LVI) Other:																			
SBIO ID Numbers: SBIO-ID: 79260 HA-ID: 15678 RPS-ID: 9267 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		SAB197090		7/19		☒ <2						
Metals		☒ W-ICPMS ☒ W-ICP					☒ Ice ☒ HNO3		NA834050		12/19		☒ <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-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		☒ 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:

<2 m² vegetation, LVS NOT conducted

Field/WIN ID →



G4NW0336

Location:

Baggett Creek upstream of Hwy 90

Signature:

J. Pross

Date:

3/7/19

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

Migrate Data to WIN:

Verify Data in WIN:

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

SAMPLE ID 79060 ORG ID 21 FL PWS LATITUDE 30.728013
 COUNTY Chalidase STORET # G4NW0336 LONGITUDE -86.659978
 DATE 3/7/19 TIME 1015 SAMPLING AGENCY 21 FL PWS
 SITE NAME Bagger Creek upstream Hwy 90
 FIELD ID/NAME G4NW0336 RECEIVING BODY OF WATER Yellow R.

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☐ <u>89</u> Silviculture ☒ <u>JP</u> 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) Depth (m)/Velocity (m/sec) Transect <u>4</u> m wide			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>718</u> Right Bank: <u>15</u>				Hydrologic Modification Score (per FT 3101) <u>1-2</u> <u>1923</u>			
High Water Mark: <u>0.4</u> + <u>0.4</u> = <u>0.8</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

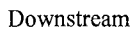
Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse		Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify):		Smothering of Substrates Sand Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐ Silt Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐ Algae Smothering: None ☒ Slight ☐ Moderate ☐ Severe ☐																																					
SUBSTRATE TYPE Assessment Tool: ☒ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon		WATER QUALITY <table border="1"> <thead> <tr> <th></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>0.2</u></td> <td><u>11.2</u></td> <td><u>5.37</u></td> <td><u>10.69</u></td> <td><u>97.1</u></td> <td><u>33.6</u></td> <td><u>0.01</u></td> <td><u>0.4</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>					Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top:	<u>0.2</u>	<u>11.2</u>	<u>5.37</u>	<u>10.69</u>	<u>97.1</u>	<u>33.6</u>	<u>0.01</u>	<u>0.4</u>	Mid:								☒ VOB	Bottom:								
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Mid:								☒ VOB																																	
Bottom:																																									
Woody Debris (Snags) <u>15.3</u> <u>3</u> <u>5</u> Undercut Banks / Roots <u>2.6</u> <u>5</u> <u>5</u> Leaf Packs or Mat <u>1.1</u> <u>5</u> <u>5</u> Aquatic Vegetation Rock or Shell Rubble..... Sand..... <u>6</u> <u>5</u> Mud / Muck / Silt Other Other		Meter ID: <u>154179</u> Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: _____ Exp: _____ Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____																																							
ABUNDANCE <table border="1"> <thead> <tr> <th></th> <th>Not Obs.</th> <th>Rare</th> <th>Common</th> <th>Abundant</th> </tr> </thead> <tbody> <tr> <td>Periphyton:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Fish:</td> <td>☐</td> <td>☐</td> <td>☒</td> <td>☐</td> </tr> <tr> <td>Aquatic Plants:</td> <td>☐</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Iron/Sulfur Bacteria:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>			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 ☐														
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SAMPLING TEAM <u>James Potts / Nathan Mulvey</u>		SIGNATURE: <u>Dr. Potts</u>																																							
DATE: <u>3/7/19</u>		DATE: <u>3/7/19</u>																																							

AMBIENT FIELD CONDITIONS / NOTES:

< 2m² veg.

☒ The antecedent hydrologic conditions have been met to my best knowledge.

Telephone / Train Pole / Bad habitat



62-160.800, F.A.C

Plants observed / other notes:
SBIO ID: 79200
WIN ID: G4NW0336

Revision Date: January 2017

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

SAMPLING AGENCY: 21 FL PMS		STORET STATION NUMBER: 64NW0336	DATE (MM/DD/YY): 3/7/19	RECEIVING BODY OF WATER: Yellow River
REMARKS: SBLO ID 79260	COUNTY: Okaloosa	LOCATION: Bogot Creek	FIELD ID/NAME: 64NW0336	

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components Substrate Diversity <u>14</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 <u>14</u> 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 4 3 2 1
Substrate Availability <u>14</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 <u>14</u> 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>15</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 <u>15</u> 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>15</u> ----- Primary Score <u>68 58</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. <u>15</u> 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 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>9</u> <u>9</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 <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 woody root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank <u>8</u> <u>9</u> Left Bank	Width of vegetation greater than 18 m 10 <u>9</u> <u>2</u>	Width of vegetation >12 to 18m <u>R</u> 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> <u>10</u> Left Bank ----- Secondary Score <u>53 73</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. <u>R</u> 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

121 131 TOTAL SCORE HA ID: 15678

Date: 3/7/19	Analyst: James PMS	Signature: <u>JP</u>
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DEP FORM FD 9000-25 Rapid Periphyton Survey Worksheet

Site: <u>Bassett Creek</u>					County: <u>Chualar</u>		Date: <u>3/7/19</u>		Investigators: <u>Jared Potts / Nathan Mulkey</u>	
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	78	60	1	N	No	96	
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9	N	N							
10	1	N	No	88	70	1	N	No	84	
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9	N	N							
20	1	N	No	90	80	1	N	No	68	
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9	N	N							
30	1	N	No	64	90	1	N	No	80	
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9	N	N							
40	1	N	No	70	100	1	N	No	76	
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9	N	N							
50	1	N	No	74		1	N	No		
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9	N	N							

STORET Station Number: 64NW0338

Secchi depth	<u>0.4</u>
Estimated?	<u>N</u>
# points ranked 4-6	<u>0</u>
total points assessed	<u>99</u>
% points ranked 4-6	<u>0</u>

Check accompanying data collected at same site/date.

Algal mat sample	
Linear Veg Survey	
Habitat Assessment	<u>X</u>
SCI/Biorecon	<u>X</u>
Water sample	<u>X</u>

RQ- 2019-02-18-19

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

SB1020: 79260
RPS20: 9267

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%.

Waterbody: <u>Baggett Creek upstream Hwy 90</u>	Date: <u></u>	County: <u>O'Caluosa</u>	Storet Number: <u>G4NW0336</u>
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Comments: $< 2 m^2$ Vegetation No LUS Conducted

[illegible]

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