



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

Location/STORET Station Name: Black Creek Upstream of Hwy 20

Date: 03/22/2018
(mm/dd/yyyy)

WIN ID G3NW0148

WBID: 679

Latitude: 30.47423

County: Walton

RQ: 2018-03-19-25

ORG ID: 21FLPNS

Longitude: -85.987477
(Decimal Degrees)

Receiving Body of Water: Choctawhatchee Bay Field ID: G3NW0148

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment		
Frank Butera					X	X	X	X	X	☒ Sample Container	☐ Van Dorn	☐ Pole
Mike King					X	X	X	X	X	☐ Carboy	☒ Syringe	
Alicia Hogue					X	X	X	X	X	☐ Dipper	☐ Other	

Water Level: Dry / Low / Normal / <u>Above Normal</u> / Flooded					Meter ID# <u>132237</u>			Matrix: <u>Fresh</u> / Marine / DI		
Photos: <u>Yes</u> / No		Flow: No Flow / Intestinal / <u>Flowing</u> / NA			Tide: Rising / Falling / Slack / <u>NA</u>			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	<u>9:50</u>	<u>0.5</u>	<u>0.30</u>		<u>9.43</u>	<u>90.2</u>	<u>4.18</u>	<u>0.01</u>	<u>24</u>	<u>13.39</u>
<u>CEN</u>										

Biological Samples Collected: None <u>HA</u> <u>SCI</u> <u>RPS</u> Algae ID LVS LVI Other:									
SBIO ID Numbers: SBIO-ID: <u>70301</u> HA-ID: <u>15080</u> RPS-ID: <u>8948</u> Macrophyte-ID: <u>N/A</u> 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	SA7275010	10/02/2018	☒ <2	
Metals	☒ W-ICPMS ☒ W-ICP				☒ Ice ☒ HNO3	7226050	08/14/2018	☒ <2	
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice	9798594			
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-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-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD				☐ Ice				
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA				☐ Ice				
Pesticides	☒ W-PSNP-TQ ☒ W-UHERB-AA ☒ W-AHERB-AA ☒ W-CARB-AA ☒ W-PCL-SQ-R ☒ W-PYR-AA-R ☒ W-GLYPH ☒ W-SUC-AA-R				☒ Ice ☐ Other				

Notes:

Field/WIN ID



Location:

Black Creek Upstream of Hwy 20

Signature: [Signature]

Date: 03/22/2018

Enter Field Parameters, Verify Station ID in LIMS DMT:

QC Station ID, Field Parameters in LIMS DMT:

Scan/Save Field Sheets [Signature] / 3/24/18 Migrate Data to WIN: [Signature] / [Date]

Verify Data in WIN: [Signature] / [Date]

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

SAMPLE ID 78301 ORG ID 21FLPNS LATITUDE 30.47423
 COUNTY Walton STORET # G3NW0148 LONGITUDE -85.987477
 DATE 03/22/2018 WBID 679 TIME 10:50 AM CST SAMPLING AGENCY FL DEP - NWROC
 SITE NAME Black Creek Upstream of Hwy 20
 FIELD ID/NAME G3NW0148 WBID 679 RECEIVING BODY OF WATER Choctawhatchee Bay

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) ☐
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>5m</u> <u>nk</u> <u>7</u> m wide <u>.33</u> m/s <u>.33</u> m/s <u>.25</u> m/s
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank : <u>7.8</u> Right Bank : <u>7.8</u>			Hydrologic Modification Score (per FT 3101) <u>3.4</u> <u>1.2</u> <u>(1.3)</u>				
High Water Mark: <u>3.05</u> + <u>1.2</u> = <u>4.25</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%) <u>86%</u> ☒ 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			
Invert ☐ Peri ☐ % Coverage # Times Sampled # Times Sampled		Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M)			
Woody Debris (Snags) <u>8.5</u> <u>4</u> <u></u> Undercut Banks / Roots <u>14.8</u> <u>4</u> <u></u> Leaf Packs or Mat <u>2.5</u> <u>4</u> <u></u> Aquatic Vegetation <u></u> <u></u> <u></u> Rock or Shell Rubble <u></u> <u></u> <u></u> Sand <u>07.6</u> <u>4</u> <u></u> Mud / Muck / Silt <u></u> <u></u> <u></u> Other <u></u> <u></u> <u></u> Other <u></u> <u></u> <u></u>		Top: <u>0.3</u> <u>13.5</u> <u>4.18</u> <u>9.43</u> <u>90.2</u> <u>24</u> <u>0.01</u> <u>1.2</u> Mid: <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> Bottom: <u>0.5</u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> Meter ID: <u>132237</u> VOB ☒ TOTAL DEPTH <u>1.2</u>			
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☐ ☒ ☐ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☒ ☒ ☐ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐		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:			
		Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ 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>SBIO ID 78301</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.			

SAMPLING TEAM Frank Butera, Mike King, Alicia Hogue

SIGNATURE :

[Signature]

DATE :

03/22/2018

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 G3NW0148

Substrates: Code key, draw proportionate habitat abundance.



Snags $\frac{24}{120} = 8.5\%$



Roots/undercut banks $\frac{10.8}{820} = 1.3\%$



Leaf Packs (or mats)

$\frac{20.8}{120} = 2.5\%$



Macrophytes

$\frac{0.3}{120} = 0.25\%$



Velocity:

Note where velocity measures were taken. 5 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 8.1 m

Average depth 0.4 m

WQ & chemistry taken @ 94 m

Station Name: Black Creek

Project: SMP / TMDL Studies

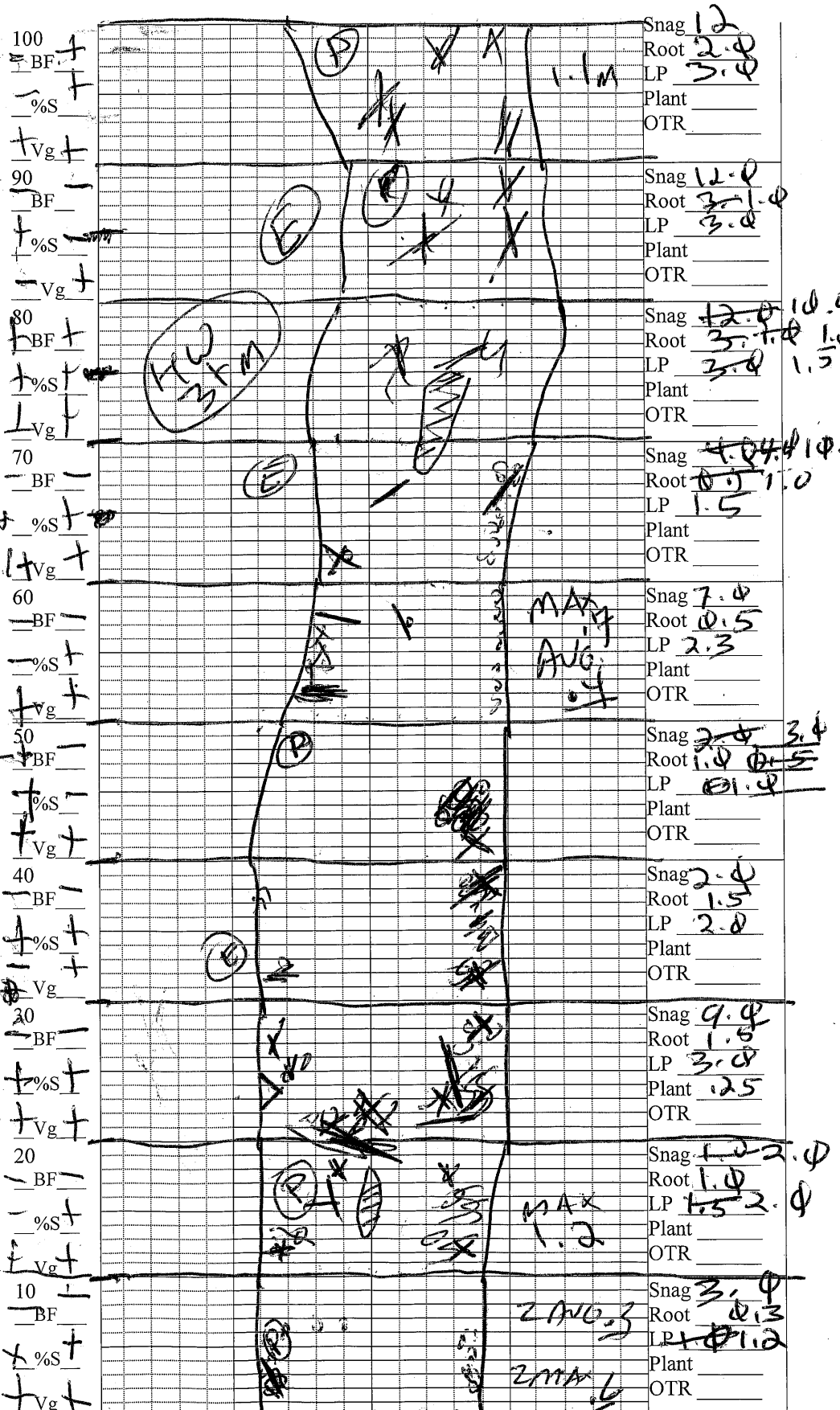
Sampled By/Date: 3/2/13 JES

0 m Latt. 30.47451

0 m Long. 85.98795

100 m Latt. 30.47469

100 m Long. 85.98706



Left Bank
SAND BAR
Pool
EROSION
Downstream

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

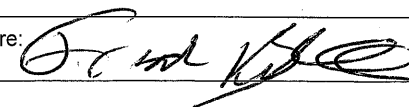
SAMPLING AGENCY: 21FLPNS FDEP NWROC		STORET STATION NUMBER: G3NW0148	DATE (MM/DD/YY): 03/22/18	RECEIVING BODY OF WATER: Choctaw. BAY
REMARKS: SB1021 78301	COUNTY: Walton	LOCATION: Black Creek	FIELD ID/NAME: G3NW0148	

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>12</u>	20 19 18 17 16	15 14 13 <u>12</u> 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>9</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 <u>12</u> 11	6% to 15% major productive habitat 10 <u>9</u> 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>24</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>15</u> ----- Primary Score <u>56</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	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>19</u>	20 <u>19</u> 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability Right Bank <u>6</u> Left Bank <u>5</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 <u>6</u>	Only meets 1 of the 3 requirements for optimal bank stability. <u>5</u> 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>9</u> Left Bank <u>9</u> ----- Secondary Score <u>68</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. 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

124

TOTAL SCORE

HA ID 15080

Date: 03/22/2018	Analyst: Frank Butera	Signature: 
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DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Black Creek Upstream of Hwy 20

County: Walton

Date: 3/22/2018

Investigators: Frank Butera (FD) Aileen Hogue

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			60		5			87	
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N	N		70	1	N	N		
	2					2				
	3					3				
	4					4				
	5			80		5			94	
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N	N		80	1	N	N		
	2					2				
	3					3				
	4					4				
	5			74		5			91	
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N	N		90	1	N	N		
	2					2				
	3					3				
	4					4				
	5			64		5			93	
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N	N		100	1	N	N		
	2					2				
	3					3				
	4					4				
	5			75		5			92	
	6					6				
	7					7				
	8					8				
	9					9				
50	1	N	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			96						
	6									
	7									
	8									
	9									

STORET Station Number: G3NW0148

Secchi depth 1.2
Estimated? 2

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

Check accompanying data collected at same site/date.
Algal mat sample
Linear Veg Survey
Habitat Assessment
SCI/Biorecon
Water sample
RQ-2018-03-19-25

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 ID: 78301

RPS ID: 8948

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

Waterbody: Black Creek Upstream of Hwy 20	Date: 03/22/18	County: Walton	Storet Number: G3NW0148
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Analyst: Frank Butera Signature: 

Analyst: Frank Butera	Signature: 
Comments: $22m^2$ Vg. Insufficient Vg. NO LUS	

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]

Field ID 783DT (KB)

63NW0148

RPS ID 8948

SBIO ID 78301

VPDB ID N/A