FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PLAN FIELD SHEET

January 2020

Meter Passed End of Day CCV Yes / No

WIN Station Name: Double Bayou 800m upstream from Lake Wimico **Date:** 8/24/2021

WIN/Field ID: G2TLHR0003 **WBID:** 1262 **ENR:** - **Latitude:** 29.791

County: GULF **Org ID:** 21FLTLHR **Longitude:** -85.11

Receiving Body of Water: Apalachicola - Chipola **RQ-** 2021-03-15-35

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
[x] Jade Burtchett	x		x		
[x] Jonathan Woods		x		x	x
[ ]					
[ ]					

Sampling Equipment

- [x] Sample Container
- [ ] Dipper
- [x] Syringe
- [ ] Carboy
- [ ] Van Dorn
- [ ] Pole

Depth measured with: Meter

Secchi Equipment ID:

Collection Method

- [ ] Wading
- [ ] From Shore
- [ ] Other _____
- [ ] Canoe/Kayak
- [ ] Electric Motor
- [x] Gasoline Motor

Water Level: [ ] Normal [ ] Low [x] High [ ] Dry [ ] Pooled [ ] Flooded

Meter ID# 154177

Photos: YES **Flow:** FLOW **Tide:** RISING **Tide Times:** High: 1015 Low: 1247

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

SBIO ID Numbers:

Notes:

P.CLOUDY

Duplicate Sample

Time Zone: EST **Time:** _____ **Field ID:** N/A (WIN ID_DUP)

WIN DMT Activity ID: _____

Blank

Time Zone: EST **Time:** 1200 **Field ID:** FB_08242021 (Blank Type_DDMMYYYY)

DI Source: C110E **Location:** At site

DI Type: Field Blank **Equipment ID:** _____

DI Container (Name/ID): A-1 **DI Container Type:** Carboy

LIMS EVENT ID: _____ **WIN Import ID:** _____

Enter Field Parameters, Verify Station ID In LIMS DMT: _____ (Initials/Date) **QC Station ID, Field Parameters In LIMS DMT:** _____ (Initials/Date)

Scan/Save Field Sheets _____ (Initials/Date) **Migrate Data to WIN:** _____ (Initials/Date) **Verify Data In WIN:** _____ (Initials/Date)

RQ-2021-03-15-35
Customer: WQAP
Project ID: SMP

Collected By: Jade Burtchett, Jonathan Woods
Field Report Prepared By: Jade Burtchett
Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID: G2TLHR0003

Location: Double Bayou 800m upstream from Lake Wimico

Comments:

Matrix: Fresh

(Check one) ☒ GRAB ☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPTh)
	1100 EST	1.33	16.6	26.7	5.76	0.3	0.8 ☐ VOB (S)	4.8	119	0.05
8/24/2021							Central Lab please use top row for login purposes			
	1105 EST	1.17	14.5	26.1	5.71	4.3			119.3	0.05

Parameter Suite	Parameter Methods	Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☐ H_2SO_4*	☒ <2	1	A
	Lot # 1105060 **Exp:**	04/30/22			
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD	☒ Ice ☒ HNO_3*	☐ <2	1	A
	Lot # 1105100 **Exp:**	06/07/22			
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice		1	A
	Filter Lot # 17162587				
	Syringe Lot # 0079900				
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice		1	A
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates (PJ-2L)	☐ MI-FW-QLDC **Formalin Lot #**	☐ Formalin			
Periphyton (PT-50ML)	☐ ALGAE-ID	☐ Ice			
Microbiology (Contract Lab Bottle)	☒ E Coli ☐ F Coli ☐ Enterococci ☐ Contract Lab	☒ Ice		1	A
Molecular (QPCR-P-500ML)	☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD	☐ Ice			
Tracers (BG-500ML)	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides (BG-500ML) (BG-1L)	x W-E8321-DI x WE8321-MS x W-PSNP-TQ W-CT-CL-R W-PCL-TQ-R W-CARB-AA (5 ml of MCAA** Buffer Solution)	☒ Ice		3	A
Phytoplankton/Periphyton	DTY-QN-C PKD-QN-BV	☐ Ice			

Name:
Jade Burtchett
Jonathan Woods

Signature:

Date:

*2.0 ml of Preservative used unless noted otherwise.
**MCAA: Monochloroacetic acid buffer solution

RQ- 2021-03-15-35
Customer: WQAP
Project ID: SMP

Collected By: Jade Burtchett, Jonathan Woods
Field Report Prepared By: Jade Burtchett, Jonathan Woods
Sampling Agency: FDEP

BLANK

FieldID: FB_08242021

Comments:

Matrix: Field Blank

(Check one) ☐ COMPOSITE ☒ GRAB

Date	Time	DI Source: C110E
8/24/2021	1200 EST	

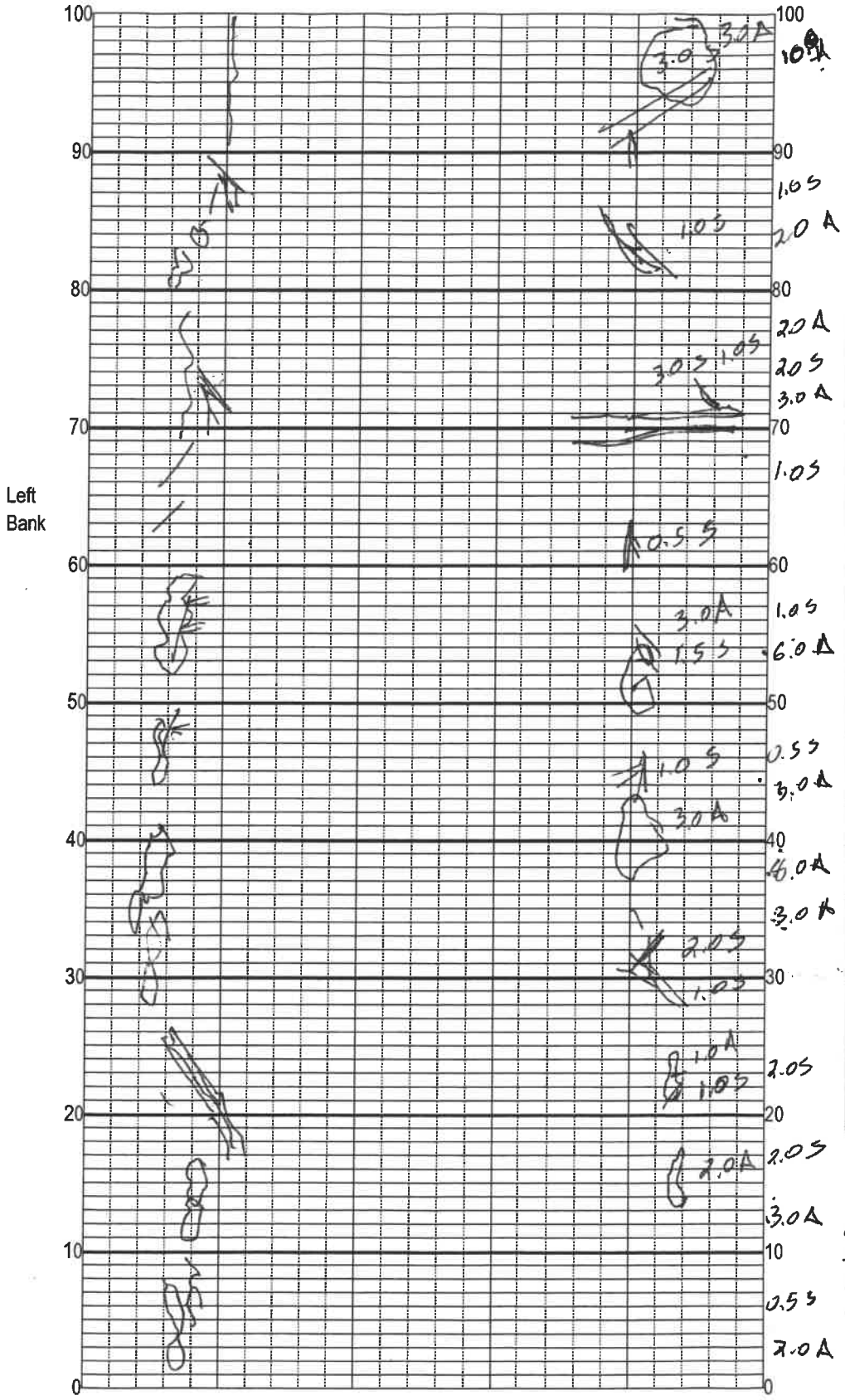
Parameter Suite	Parameter Methods	Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☐ H2SO4	☐ <2	1	A
	Lot # 1105060 **Exp:**	04/30/22			
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP	☒ Ice ☐ H2SO4	☐ <2	1	A
	Lot # 1105100 **Exp:**	06/07/22			
Filtered Nutrients (P125ML)	☒ W-PO4-F Filter ☒ Field Filtered 0.45 µm	☒ Ice		1	A
	Filter Lot # 17162587				
	Syringe Lot # 1091364				
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-IC / TDS	☒ Ice		1	A
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Tracers (BG-500ML)	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides (BG-500ML) (BG-1L)	☒ W-E8321-DI ☒ WE8321-MS ☒ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-PCL-TQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)	☒ Ice		3	A

Name:	Signature:	Date:
Jade Burtchett Jonathan Woods		

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Downstream

Length of grid represents 100 m of stream (not linear meter
(Horizontal scale is double vertical scale, draw proportionate

Location: Double Bayou

Date: 08/24/21

Sampler: Burtchett, Woods

100 m: Latitude	
Longitude	
0 m: Latitude	
Longitude	

Substrates: Code key, draw proportionate habitat abundance.		%
S	Snags	0.29
R	Roots/undercut banks	
L	Leaf Packs (or mats)	
A	Aquatic Macrophytes	1.2
K	Rock	
	mud	98.51
	Pools — total # observed = ____ # range expected = ____	

Average width 35 m

Average depth 4.8 m

Velocity measured at 100 meter mark.

WQ & chemistry taken at 100 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:

Cladium
Eichornia
Salvinia
Pontederia
Nuphar
Bidens
Sag.

42-A = 1.2

10 : 5 = 0.29

Field/WIN ID → G2TLHR0003

Location ↓

Double Bayou 800m upstream from Lake Wimico

62-160.800, F.A.C

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

SAMPLING AGENCY:		STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER:
21FLTLHR		G2TLHR0003	08/24/21	Lake Wimico
REMARKS:	COUNTY: Gulf	LOCATION: Dable Bayou		FIELD ID/NAME: G2TLHR0003

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 8	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 4 3 2 1
Substrate Availability 2	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 2 1
Water Velocity 11	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 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 18 Primary Score 39	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 2 1
Secondary Habitat Components **Artificial Channelization** 20	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 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 10 Left Bank 10	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful 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 10 Left Bank 10	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 10 Left Bank 10 Secondary Score 80	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 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

119 **TOTAL SCORE**

Date: 08/24/21	Analyst: Burtchett, Woods	Signature:

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

SAMPLE ID _____ ORG ID 21FLTLHR LATITUDE _____

COUNTY Gulf STORET # _____ LONGITUDE _____

DATE 08/24/21 TIME 1100 SAMPLING AGENCY FDEP

SITE NAME Double Bayou 400m upstream from Lake Wimico

FIELD ID/NAME G2TLHR0003 RECEIVING BODY OF WATER Lake Wimico

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)
100							

Landscape Development Intensity Index (LDI): _____

Local Watershed Erosion (select one) : ☑ None ☐ Slight ☐ Moderate ☐ Heavy

Local Watershed NPS Pollution : ☑ No evidence ☐ Slight ☐ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side Left Bank : 714 Right Bank : 714

Hydrologic Modification Score (per FT 3101): _____

Typical Width (m) Depth (m)/Velocity (m/sec) Transect: 35 m wide

4 m/s	4.6 m/s	_____ m/s
0.1	0.12	0.1
4.8 m deep	4.8 m deep	4.8 m deep

High Water Mark: 0.7 (m) + 4.8 (above present water level) = 5.5 (present depth) (above bed)

Artificially Impounded ☐ Yes ☑ No

Artificially Channelized : ☑ No ☐ Some recovery ☐ Mostly recovered, more sinuous ☐ 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

	None	Slight	Moderate	Severe
Sand Smothering:	☐	☑	☐	☐
Silt Smothering:	☐	☑	☐	☐
Algae Smothering:	☑	☐	☐	☐

SUBSTRATE TYPE

Assessment Tool: ☐ SCI ☑ RPS ☑ LVS ☐ LCI ☐ BioRecon

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	0.24		
Undercut Banks / Roots			
Leaf Packs or Mat			
Aquatic Vegetation	1.2		
Rock or Shell Rubble..			
Sand.....			
Mud / Muck / Silt	98.51		
Other			
Other			

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top :	0.3	26.7	5.76	1.33	16.6	1190	0.05	0.8
Mid:								☐ VOB
Bottom	4.3	26.1	5.71	1.17	14.5	119.3	0.05	TOTAL DEPTH
								4.8

Meter ID: 154177

Water Odors Normal ☑ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐

Water Surface Oils Normal ☑ Sheen ☐ Globs ☐ Slick ☐ Other ☐

Water Sample Taken? ☑ Yes ☐ No

Sample Preserved? ☑ Yes ☐ No

Lot Number: _____ Exp: _____

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:

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

SAMPLING TEAM Burtchett, Woods

SIGNATURE : _____ DATE : 08/24/21

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site:	County:	Date:	Investigators:
Double Bayou	Gulf	06/24/21	Burchett Woods

STORET Station Number: G2TLtR0003

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N		
	2	N	✓	
	3		✓	
	4		✓	
	5		✓	0
	6		✓	
	7		✓	
	8		✓	
	9		✓	
10	1	N		
	2		✓	
	3		✓	
	4		✓	
	5		✓	0
	6		✓	
	7		✓	
	8		✓	
	9	X		
20	1	N		
	2		✓	
	3		✓	
	4		✓	
	5		✓	0
	6		✓	
	7		✓	
	8		✓	
	9		✓	
30	1	X		
	2	N	✓	
	3		✓	
	4		✓	
	5		✓	0
	6		✓	
	7		✓	
	8		✓	
	9		✓	
40	1	N		
	2			
	3		✓	
	4		✓	
	5		✓	0
	6		✓	
	7		✓	
	8		✓	
	9		✓	
50	1	N		
	2		✓	
	3		✓	
	4		✓	
	5		✓	0
	6		✓	
	7		✓	
	8		✓	
	9		✓	
60	1	N		
	2		✓	
	3		✓	
	4		✓	
	5		✓	0
	6		✓	
	7		✓	
	8		✓	
	9	X		
70	1	N	✓	
	2		✓	
	3		✓	
	4		✓	
	5		✓	0
	6		✓	
	7		✓	
	8		✓	
	9		✓	
80	1	N	✓	
	2		✓	
	3		✓	
	4		✓	
	5		✓	0
	6		✓	
	7		✓	
	8		✓	
	9		✓	
90	1	N		
	2		✓	
	3		✓	
	4		✓	
	5		✓	0
	6		✓	
	7		✓	
	8		✓	
	9			
100	1	N		
	2			
	3		N	
	4		N	
	5		✓	0
	6		✓	
	7		✓	
	8		✓	
	9		✓	

Secchi depth	0.8
Estimated?	

# points ranked 4-6	0
total points assessed	60
% 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- 2021-03-1535

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

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%.

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

Waterbody: Double Bayou | Date: 8/24/2 | County: Gulf | Storet Number: GZT_11RC003

Analyst: Woods | Signature:

Comments:

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 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Alternanthera philoxeroides											
Bacopa caroliniana											
Bacopa monneri											
Bidens mitis				✓							
Boehmeria cylindrica				✓				✓			
Centella asiatica											
Ceratophyllum demersum											
Chara											
Cicuta maculata											
Cladium jamaicense	✓						✓	✓	✓	✓	
Colocasia esculenta											
Commelina diffusa											
Commelina virginica											
Crinum americanum		✓	✓					✓			
Diodia virginiana											
Eichhornia crassipes				✓	✓	✓	✓	✓	✓	✓	
Eleocharis (wispy viviparous)											
Hydrilla verticillata											
Hydrocotle											
Hygrophila polysperma											
Hymenocallis											
Lachnanthes caroliniana											
Landoltia punctata											
Lemna											
Limnophila sessiflora											
Ludwigia leptocarpa											
Ludwigia palustris											
Ludwigia peruviana											
Ludwigia repens											
Luziola fluitans											
If no Dominant or Co-Dominant were selected, indicate with "X"	X	X	X	X	X	X	X	X	X	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											

HERBACEOUS SPECIES	Meter Mark 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Micranthemum glomeratum											
Micranthemum umbrosum											
Myriophyllum aquaticum											
Najas guadelupensis											
Nuphar luteum						✓	✓			✓	
Orontium aquaticum											
Panicum hemitomon											
Panicum repens											
Panicum rigidulum											
Pistia stratioides											
Polygonum glabra											
Polygonum hydropiperoides											
Polygonum punctatum		✓					✓	✓			
Pontedaria cordata	✓			✓	✓			✓	✓	✓	
Potamogeton illinoensis											
Ruellia simplex											
Sacciolepis striata											
Sagittaria kurziana											
Sagittaria lancifolia	✓	✓					✓	✓		✓	
Sagittaria latifolia											
Salvinia minima	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Samolus parviflora											
Saururus cernuus								✓			
Sparganium americanum											
Typha											
Vallisneria americana											
Zizania aquatica	✓					✓			✓	✓	
Triadenum virginicum							✓				
Bidens Alba	✓				✓	✓	✓	✓	✓	✓	
Rhynchospora inundata		✓			✓	✓					
Cyperus virens				✓			✓				
Schoenoplectus californicus										✓	