5H10 76 100

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

February 2016

PAGE ____ OF ____

Data Qualified? Yes / No

STORET Station Name: Lake Vedrana (0.25mi) Mickler's Landing Date: 02/18/2016 (mm/dd/yyyy)

STORET Station ID: ~~2501152~~ GSNE0018 Latitude: ~~30.1~~ 30.165839 (Decimal Degrees)

WBID: 2320 B RQ -2016- NA ORG ID: 21 FLA Longitude: ~~81.3~~ 81.361071 (Decimal Degrees)

Receiving Body of Water: Guana River Field ID: County: St. Johns

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
P O'Connor	X		X		
Jeremy Parrish			X		

Sampling Equipment

- [X] Sample Container
- [ ] Carboy
- [ ] Dipper
- [ ] Van Dorn
- [ ] Syringe
- [ ] Other
- [ ] Pole

Equipment ID

Collection Method

- [ ] Wading From
- [ ] Shore
- [ ] Other (note below)

Via Boat
- [ ] Canoe/Kayak
- [ ] Electric Motor
- [ ] Gasoline Motor

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

Matrix: (Fresh) / Marine / DI

Meter ID# YSI 556 Photos: Yes / No

Tide Falling: Yes / No / NA

Time Zon	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT	pH	Salinity (ppt)	Secchi Disk(m)	Sp COND (µmhos/cm)	Temp. (C°)
EST	~~1200~~ ~~0918~~ 1118	0.3	0.6	5.6	54.7	7.7	0.35	VOB	714	14.1°
CEN								0.6 S		

Biological Samples Collected: None (HA) SCI (LVS) RPS LVI Other

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☐ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☐ Ice ☐ H_2SO_4			☐ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO_3			☐ <2
Filtered Nutrients	☐ W-PO4-F ☑ Field Filtered 0.45 µm Filter	☐ Ice			
Chlorophyll	☐ CHLSUITE-W	☐ Ice			
BOD	☐ BOD-UNIN	☐ Ice			
Physical/Aggregate (Kit A)	☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☐ Ice			
Physical/Aggregate (Kit B)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Microbiology	☐ E Coli ☐ F Coli ☐ Entero ☐ QPCR	☐ Ice			
Periphyton	☐ ALGAE-ID	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other			

No Samples

Place Preservative Sticker(s) Here (If Available)

Notes: Recon for potential Bio sites

Place Label Here (If Available)

Signature: Date:

Field Parameters Entered into LIMS: (Initials/Date) Field Parameters QC in LIMS: (Initials/Date)

Date Migrated to STORET: (Initials/Date) Field Sheets Scanned/Saved: CG 5/24/16 (Initials/Date)

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

February 2016

PAGE ____ OF ____

Data Qualified? Yes / No

STORET Station Name: Lake Vedra @ Sawgrass Date: 02/18/2016 (mm/dd/yyyy)

STORET Station ID: 27010181 Latitude: 30.21889 (Decimal Degrees)

WBID: 2320B RQ -2016- NA ORG ID: 21 FLA Longitude: 81.37364 (Decimal Degrees)

Receiving Body of Water: Guana River Field ID: ____ County: St. Johns

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Parrish	✓		✓		
P. Oconnor			✓		

Sampling Equipment

☐ Sample Container ☐ Van Dorn ☐ Pole
☐ Carboy ☐ Syringe
☐ Dipper ☐ Other ____
Equipment ID ____

Collection Method

☐ Wading From
☐ Shore
☐ Other (note below)

Via Boat
☐ Canoe/Kayak
☐ Electric Motor
☐ Gasoline Motor

Water Level: Dry / Low / Normal / High / Flooded Matrix: (Fresh) Marine / DI

Meter ID# YSI 556 Photos: Yes / No Tide Falling: Yes / No / NA

Time Zon	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
EST	1018	0.3	0.5	4.5	45	7.76	0.33		680	15.0
CEN										

Biological Samples Collected: None HA SCI (LVS) RPS LVI Other ____

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☐ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☐ Ice ☐ H_2SO_4			☐ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO_2			☐ <2
Filtered Nutrients	☐ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☐ Ice			
Chlorophyll	☐ CHLSUITE-W	☐ Ice			
BOD	☐ BOD-UNIN	☐ Ice			
Physical/Aggregate (Kit A)	☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☐ Ice			
Physical/Aggregate (Kit B)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Microbiology	☐ E Coli ☐ F Coli ☐ Entero ☐ QPCR	☐ Ice			
Periphyton	☐ ALGAE-ID	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other			

No Samples

Place Preservative Sticker(s) Here (If Available)

Notes:
Recon for potential bio sites

Place Label Here (If Available)

Signature: ____ **Date:** ____

Field Parameters Entered into LIMS: ____ (Initials/Date) Field Parameters QC in LIMS: ____ (Initials/Date)

Date Migrated to STORET: ____ (Initials/Date) Field Sheets Scanned/Saved: ____ (Initials/Date)

76100

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

SAMPLING AGENCY:		STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER:
DEAR NED ROC		65NE0018	2/18/16	
REMARKS:	COUNTY: STJohns	LOCATION: Lake Vedra Upstream of MICKLERS Landy		FIELD ID/NAME:

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 3	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 5	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 3	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 5 Primary Score 26	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** 5	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 3 Left Bank 3	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 3 Left Bank 3 Secondary Score 37	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

63 **TOTAL SCORE** Fails #Habitat

Date:	Analyst:	Signature:

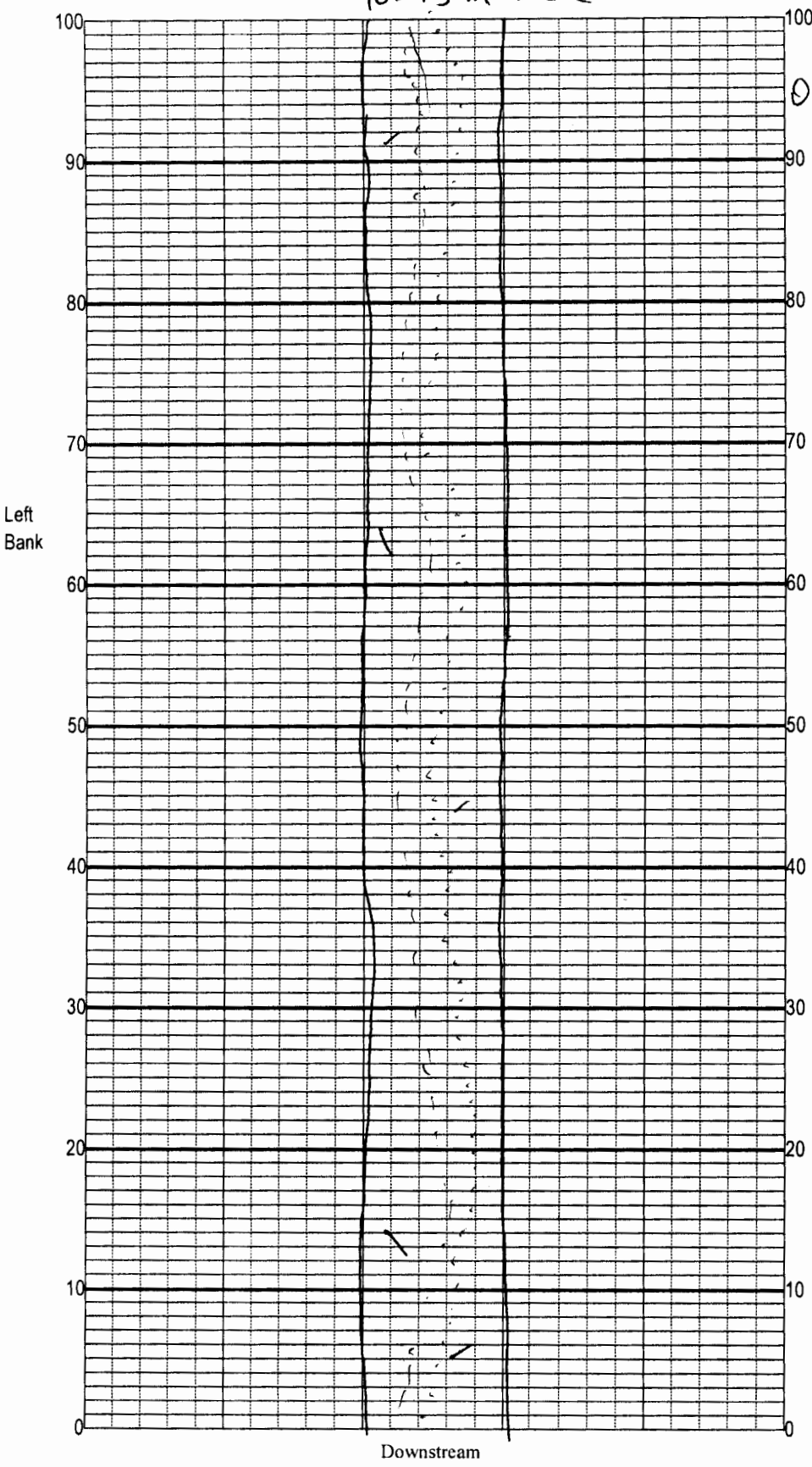
62-160.800, F.A.C.

Revision Date: March 1, 2014

5c 5/24/16 JG

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

10-15 m wide



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

0.15 W/S

Location: LAKE Vedra Above mitchells Lag

Date: 2/18/16

Sampler: PO'Connor

100 m: Latitude	
Longitude	
0 m: Latitude	
Longitude	

Substrates: Code key, draw proportionate habitat abundance.		%
✓	Snags	21
X	Roots/undercut banks	NA
O	Leaf Packs (or mats)	NA
V	Aquatic Macrophytes	15
	Pools	total # observed = ____ # range expected = ____

Average width 10-15 m

Average depth 0.6 m

Velocity measured at 100 meter mark.

WQ & chemistry taken at N/A 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:

CERATOPHYLLUM Primary Habitat in Dredged channel
Beyond the Dredged Channel on left and Right SIDE IS APPROX 100m of Woody Plants willow, Myrtle
CEPHALANTHUS Typha
ONLY SMALL PORTIONS of Dredged area HAS Vegetation w/i Flowing area ≈ 1.5%
* Effluent from Golf Course

62-160.800, F.A.C

Revision Date: March 1, 2014

SBO 76102

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

SAMPLE ID _____ ORG ID _____ LATITUDE 30 09 57.2

COUNTY St Johns STORET # ~~[redacted]~~ 65NE0018 LONGITUDE 81 21 39.8

DATE 2/18/16 TIME 1200 SAMPLING AGENCY _____

SITE NAME Lake Vida 0.25mi above Nicklaus Log

FIELD ID/NAME _____ RECEIVING BODY OF WATER _____

RIPARIAN ZONE / STREAM FEATURES

Meter 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): _____

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 : 18m Right Bank : 18m

Hydrologic Modification Score (per FT 3101): _____

High Water Mark: 0.6 (m) + 0.6 (above present water level) = 1 (present depth) (above bed)

Artificially Impounded ☐ Yes ☐ No

Typical Width (m) Depth (m)/Velocity (m/sec) Transect

15 m wide

m/s	0.3 m/s	m/s
m deep	0.6 m deep	m deep

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)			
Undercut Banks / Roots			
Leaf Packs or Mat			
Aquatic Vegetation	5-10		
Rock or Shell Rubble			
Sand			
Mud / Muck / Silt			
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 :								Vars
Mid:	0.3	14.1	7.7	5.6	54.7	714	0.35	TOTAL DEPTH
Bottom	0.6							

System Type: Stream ☐ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐ _____

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:	☐	☒	☐	☐

AMBIENT FIELD CONDITIONS / NOTES:

planorbella everywhere dead

Hydrologic Disturbance Scoring ☐ 1 ☐ 3-4 ☐ 5-6 ☐ 7-8 ☐ 9-10

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

SAMPLING TEAM

Jeremy Pound

SIGNATURE : _____

62-160.800, F.A.C.

Revision Date: March 1, 2014

JG

Sbio 76100

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site:	County:	Date:	Investigators:
Lake Vedra 0.25 mi abv mickler landing	St Johns	2/18/16	Pozmor

STORET Station Number: 65NE0018

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
	1	N	N			1	N	N	
	2	X	↓			2	X	↓	
	3	↓	↓			3	↓	↓	
	4	↓	↓			4	↓	↓	
0	5	↓	↓	0	60	5	↓	↓	0
	6	↓	↓			6	↓	↓	
	7	↓	↓			7	↓	↓	
	8	↓	↓			8	N	↓	
	9	N	↓			9	N	↓	
	1	N	N			1	N	N	
	2	X	↓			2	X	↓	
	3	↓	↓			3	↓	↓	
	4	↓	↓			4	↓	↓	
10	5	↓	↓	0	70	5	↓	↓	0
	6	↓	↓			6	↓	↓	
	7	↓	↓			7	↓	↓	
	8	↓	↓			8	↓	↓	
	9	N	↓			9	N	↓	
	1	N	N			1	N	N	
	2	X	↓			2	X	↓	
	3	↓	↓			3	↓	↓	
	4	↓	↓			4	↓	↓	
20	5	↓	↓	0	80	5	↓	↓	0
	6	↓	↓			6	↓	↓	
	7	↓	↓			7	↓	↓	
	8	↓	↓			8	↓	↓	
	9	N	↓			9	N	↓	
	1	N	N			1	N	N	
	2	X	↓			2	X	↓	
	3	↓	↓			3	↓	↓	
	4	↓	↓			4	↓	↓	
30	5	↓	↓	0	90	5	↓	↓	0
	6	↓	↓			6	↓	↓	
	7	↓	↓			7	↓	↓	
	8	↓	↓			8	↓	↓	
	9	N	↓			9	N	↓	
	1	N	N			1	N	N	
	2	X	↓			2	X	↓	
	3	↓	↓			3	↓	↓	
	4	↓	↓			4	↓	↓	
40	5	↓	↓	0	100	5	↓	↓	0
	6	↓	↓			6	↓	↓	
	7	↓	↓			7	↓	↓	
	8	↓	↓			8	↓	↓	
	9	N	↓			9	N	↓	
	1	N	N						
	2	X	↓						
	3	↓	↓						
	4	↓	↓						
50	5	↓	↓	0					
	6	↓	↓						
	7	↓	↓						
	8	↓	↓						
	9	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%.

Secchi depth	VOB
Estimated?	

# points ranked 4-6	0
total points assessed	22
% points ranked 4-6	0

Check accompanying data collected at same site/date.	
Algal mat sample	NA
Linear Veg Survey	yes
Habitat Assessment	yes
SCI/Biorecon	No
Water sample	NO
RQ-	

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

Sb10 7600

Form FD 9000-32	FDEP Linear Stream Vegetation Survey (DEP SOP FS 7320)	Revised 10-11-11

Waterbody: Lake Vedra above Mickurst Rd.	Date: 2/18/16	County:	Storet Number: ~~[illegible]~~ 65NE60 18
Analyst:		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 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.

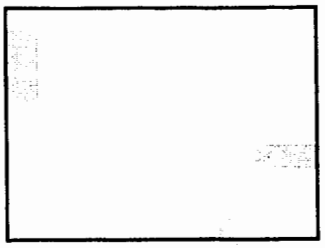
HERBACEOUS SPECIES	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
	Meter Mark										
Alternanthera philoxeroides	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Bacopa caroliniana											
Bacopa monneri											
Bidens mitis											
Boehmeria cylindrica											
Centella asiatica											
Cephalanthus occidentalis											
Ceratophyllum demersum	D	D	D	D	D	D	D	D	D	D	
Chara											
Cicuta maculata											
Cladium jamaicense											
Colocasia esculenta											
Crinum americanum											
Diodia virginiana											
Eichhornia crassipes											
Eleocharis (wispy viviparous) BALD				✓							
Fontinalis											
Hydrilla verticillata											
Hydrocotle	✓		✓		✓				✓	✓	
Hygrophila polysperma											
Hymenocallis											
Itea virginica											
Lachnanthes caroliniana											
Landoltia punctata											
Lemna	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Limnophila sessiflora											
Lobelia cardinalis											
Ludwigia leptocarpa											
Ludwigia palustris											
Ludwigia peruviana											
Ludwigia repens											
Luziola fluitans											
If no Dominant or Co-Dominant were selected, indicate with an "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	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
	Meter Mark										
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											
Sacciolepis striata											
Sagittaria kurziana											
Sagittaria lancifolia											
Sagittaria latifolia											
Salix caroliniana										✓	
Salvinia minima											
Samolus parviflora											
Saururus cernuus											
Typha	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Vallisneria americana											
Zizania aquatica											
Zizaniopsis milacea											
Spartina bakeri	✓			✓	✓						
Hibiscus coccineus	✓	✓	✓	✓	✓	✓	✓	✓			
Myrica cerifera	✓		✓	✓	✓		✓	✓	✓	✓	
Wolffiella	✓				✓	✓	✓	✓	✓	✓	
Azolla						✓					

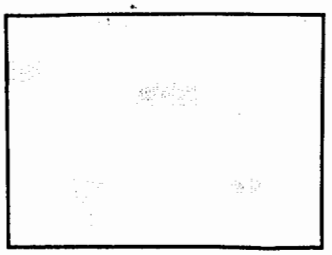
Se 5/24/16 Ckq

Percent Cover Categories for macrophytes in a 10 m segment of a stream 5 m wide

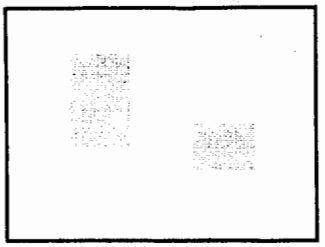
5% Macrophyte Coverage



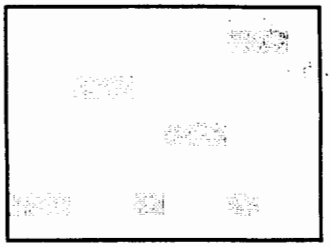
5% Macrophyte Coverage



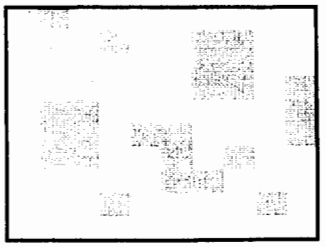
10% Macrophyte Coverage



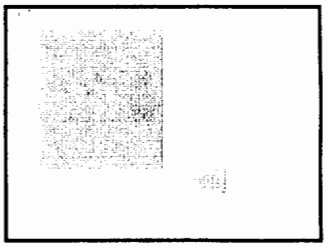
10% Macrophyte Coverage



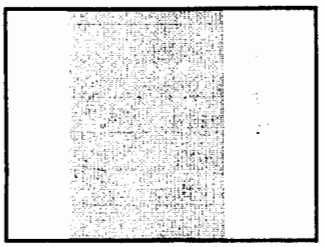
25% Macrophyte Coverage



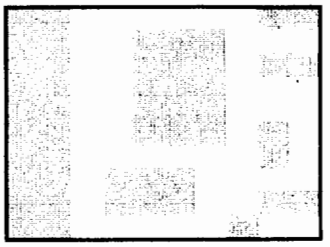
25% Macrophyte Coverage

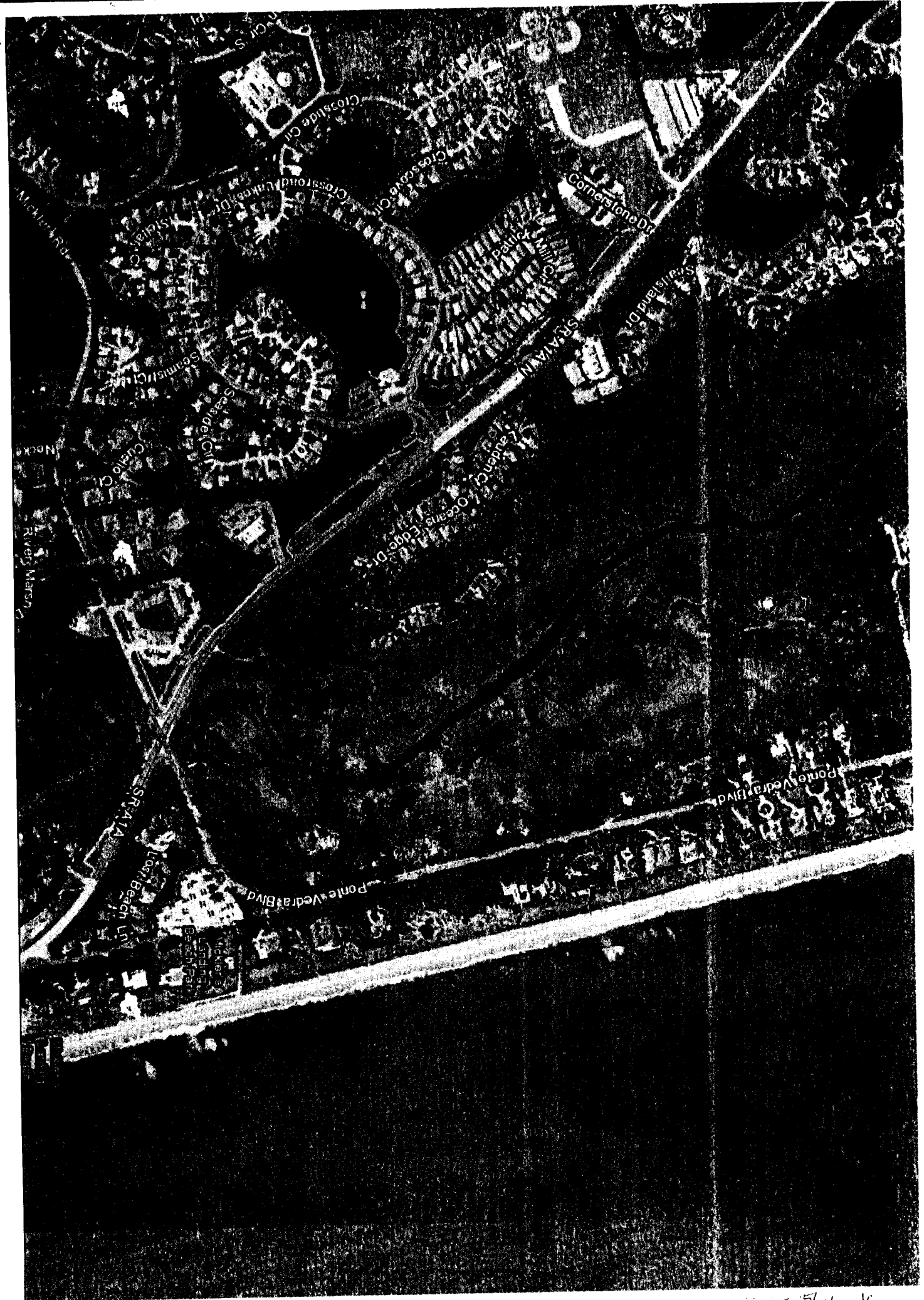


50% Macrophyte Coverage



50% Macrophyte Coverage





0 0.1

2 5/24/16 JG

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Boldly "X" this box if there is qualified data on

Meter ID: YSI 556 #1 Project: LAKE VEDRA RECON

Notes: (1) Numbers ≤4, are rounded down; numbers ≥ 5 are rounded up (e.g., 5.15 becomes 5.2).
(2) Always wait for meter to stabilize before recording any readings.
(3) For Calibrations, record ~~calibrated~~ meter reading. Do not record initial meter reading before calibration.

Circle/Fill In: (Lab Calibration) or Calibration/Verification on Site_____

Temperature (Quarterly) FT 1400 Date of Last Temperature Verification 1/16

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/l	Meter D.O. mg/l	% DO	Probe Charge	Probe Gain	Pass /	Lab /
Calibr.	PO'Connor	02/18/16	0703	22.0	8.74	8.74	100.0	—	—	Pass	LAB
ICV			0720	22.0	8.74	8.74	100.0	—	—		
(CCV)	PO'Connor	2/18/16	1325	21.0	8.91	8.81	98.8	—	—	Pass	LAB
CCV											

Report DO mg/L with one decimal figure and DO % saturation as a whole number with no decimals. DO Acceptance criteria from Table ±0.3 mg/L. **Rapid-Pulse Sensors:** DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

Optical: DO gain range 0.85 to 1.15; DO charge N/A. **Steady-state & Galvanic Sensors:** DO Gain & Charge N/A.

Spec. Cond.	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard µmhos/cm	Meter Reading µmhos/cm	Pass /	Lab /
Calibr.	PO'Connor	02/18/16	0723	1511138	11/2016	1000	1000	Pass	LAB
ICV	↓	↓	0725	↓	↓	↓	1000	Pass	LAB
(CCV)	PO'Connor	2/18/16	1335	1507017	01/2016	100	103	Pass	LAB
CCV									

Report specific conductance as a whole number with no decimal figure. Conductivity Acceptance criteria ± 5%

pH DEP SOP	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass /	Lab /
Calibr.	PO'Connor	02/18/16	0730	2504818	04/2017	7.0	7.00	-34.0	Pass	LAB
Calibr.	↓	↓	0735	2509F74	09/2017	4.0	4.00	146.0	Pass	LAB
Calibr.	↓	↓	0740	2506675	11/2016	10.0	10.00	-206	Pass	LAB
ICV	↓	↓	0742	↓	↓	10.00	9.98	-206.7	Pass	LAB
CCV	PO'Connor	2/18/16	1327	2504818	04/17	7.00	9.95	205.1	Pass	LAB
CCV										

Report pH with one decimal place; pH Acceptance criteria ±0.2 SU; mV pH7 Range 0±50; mV pH 4 Range +180±50; mV pH 10 Range -180±50; Slope from 7 to 10 and 4 to 7 must be between 165 and 180 m

Depth (Quarterly) N/A Date of Last Depth Verification _____

Depth Sensor	Name	Date	Time	Zero the Sensor	ICV Value	Pass /	Lab /
Pressure mode in air				0.000			

ICV acceptance criteria ±5 % or ±0.05m, whichever is greater

JC 5/24/16 JC