

Field Personnel processing steps

☐ New Field IDs created (when using a new station) Date: _____ initials: _____ ☒ NA

☐ Create entry in SMPStationCreationFile if new station is used

\\Fidep1\wqap\NW ROC\TMDL\WIN_Station Creation

☒ Date sampled Date: 09-03-2019 initials: FB

☒ Update "SMP Tracker" Date: 09-04-2019 initials: FB

☒ Photos put into archive Date: 09-04-2019 initials: FB ☐ NA

☐ RQ Sheet – from LIMS (display/print request)

☒ Calibration Log for YSI used

☒ Field Sheets initialed/dated @ "Scan/Save Field Sheets" then scanned and saved into:

Scans_ToBeProcessed Date: 09-17-2019 initials: FB

Scan order; RQ Tracking Sheet, Calibration Log, Field Sheets, Tallahassee Submittal Sheets, Overflow Lab COC

☒ Update "Data Tracker"

\\publicfiles\pubfds\DEAR\WQAPmonitoring\StrategicMonitoring\2019\21FLPNS

Ready for folder system (top)

LIMS processing (to be completed by LIMS data personnel) (MC)

☐ Field parameters entered into LIMS Date: _____ initials: _____

☐ Digital RQ packet put into

SMP 2019/Data/Scanned Field Sheets Date: _____ initials: _____

☐ Digital field Sheets put into archive Date: _____ initials: _____

☐ Date submitted for QA/QC Date: _____ initials: _____

☐ Update "Data Tracker"

Database processing (Cheryl)

☐ Field parameters QA/QC in LIMS Date: _____ initials: _____

☐ Lab results put into archive (CB) Date: _____ initials: _____

☐ Data migrated to WINS Date: _____ initials: _____

☐ Update "Data Tracker"

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

Boldly "X" this box if there are qualified data on this page.

Meter ID: 154179

RQ: 2019-07-29-70

Project: LV I/SMP

- Notes: (1) Always wait for meter to stabilize before recording any readings.
 (2) Report all digits displayed. Do not round before reporting measurements. (See special instructions for depth).
 (3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 6/13/19

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro- meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.											P / F	L / F
ICV											P / F	L / F
CCV	<u>M. Clark</u>	<u>9/3</u>	<u>7:38</u>	<u>27.1</u>	<u>764</u>	<u>8.0</u>	<u>8.02</u>	<u>100.3</u>			<u>P</u> / <u>F</u>	<u>F</u> / <u>F</u>
CCV	<u>M. Clark</u>	<u>↓</u>	<u>15:33</u>	<u>26.9</u>	<u>762</u>	<u>8.0</u>	<u>8.07</u>	<u>100.4</u>			<u>P</u> / <u>F</u>	<u>F</u> / <u>F</u>

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 (Pro DSS 0.75 to 1.50); DO charge N/A. Steady-state & Galvanic Sensors: DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	<u>M. Clark</u>	<u>9/3</u>	<u>7:40</u>	<u>190116A</u>	<u>1/20</u>	<u>1000</u>	<u>1,000</u>	<u>P</u> / <u>F</u>	<u>F</u> / <u>F</u>
ICV	<u>M. Clark</u>	<u>9/3</u>	<u>7:43</u>	<u>190618A</u>	<u>6/20</u>	<u>100</u>	<u>104.3</u>	<u>P</u> / <u>F</u>	<u>F</u> / <u>F</u>
CCV	<u>M. Clark</u>	<u>9/3</u>	<u>15:36</u>	<u>190618A</u>	<u>6/20</u>	<u>100</u>	<u>104.4</u>	<u>P</u> / <u>F</u>	<u>F</u> / <u>F</u>
CCV								P / F	L / F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	<u>M. Clark</u>	<u>9/3</u>	<u>7:46</u>	<u>244803</u>	<u>10/20</u>	<u>7.</u>	<u>25.9</u>	<u>6.2</u>	<u>-68.8</u>	<u>P</u> / <u>F</u>	<u>F</u> / <u>F</u>
Calibr.	<u>M. Clark</u>	<u>↓</u>	<u>7:48</u>	<u>2902814</u>	<u>1/21</u>	<u>4.</u>	<u>26.0</u>	<u>4.0</u>	<u>114.5</u>	<u>P</u> / <u>F</u>	<u>F</u> / <u>F</u>
Calibr.	<u>↓</u>	<u>↓</u>	<u>7:50</u>	<u>4904E09</u>	<u>9/20</u>	<u>10.</u>	<u>26.0</u>	<u>10.0</u>	<u>-236.9</u>	<u>P</u> / <u>F</u>	<u>F</u> / <u>F</u>
ICV	<u>↓</u>	<u>↓</u>	<u>7:52</u>	<u>2902814</u>	<u>1/21</u>	<u>4.0</u>	<u>25.7</u>	<u>3.98</u>	<u>113.8</u>	<u>P</u> / <u>F</u>	<u>F</u> / <u>F</u>
CCV	<u>M. Clark</u>	<u>9/3</u>	<u>15:39</u>	<u>2811403</u>	<u>10/20</u>	<u>7.0</u>	<u>23.1</u>	<u>7.12</u>	<u>-70.1</u>	<u>P</u> / <u>F</u>	<u>F</u> / <u>F</u>
CCV										P / F	L / F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50 ; mV pH 4 Range $+180 \pm 50$; mV pH 10 Range -180 ± 50 ;

If mV are recorded: slope from 7 to 10 168.1, slope from 4 to 7 183.3 (both must be between 165 and 180 mV)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)

If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: 6/13/19

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last verification: _____

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	<u>M. Clark</u>	<u>9/3</u>	<u>7:55</u>	<u>0.00</u>	<u>0.0</u>	<u>P</u> / <u>F</u>	<u>F</u> / <u>F</u>

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:

Site Name Allen Lake (Middle)

Date: 09/03/2019

Field ID G3NW0085 Storet G3NW0085

Project: SMP / TMDL Studies

Visit ID 80193

RQ: 2019-07-29-70

Macro ID 11484

LIMS ID: 2116423

HA ID 16214

WBID: 959H

☒ LVI

☒ Sample Site Created in SBIO

☒ Phys/Chem entered in SBIO

☒ HA entered in SBIO Initial FB

☐ Date and Initial QA: _____

☒ LVI entered in SBIO Initial FB

☒ Date and Initial QA: _____

☐ < 2 m² vegetation

☒ Plants getting verified

Date submitted: _____

☐ Plants verified

Date returned: _____

☐ Macro authorized in SBIO

☐ Date and Initial: _____

☐ LVI 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: Allen Lake (Middle)

Date: 9/3/19
(mm/dd/yyyy)

WIN/ Field ID: G3NW0085

WBID: 959H

Latitude: 30.35419498

County: Walton

ORG ID: 21FLPNS

Longitude: -86.25178176

Receiving Body of Water: Gulf of Mexico

RQ-2019- ~~07-00-00~~ 07-29-70
(Decimal Degrees)

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Frank Butera									
Matt Bearden <u>Myranda Clark</u>									

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☒ Syringe	
☐ Dipper	☐ Other	
Depth Measured with <u>P.D.S.S.</u>		
Equipment ID		

Collection Method		
☐ Wading	☒ Canoe/Kayak	
☐ From Shore	☐ Electric Motor	
☐ Other	☐ Gasoline Motor	

Water Level: Dry/ Pooled/ Low ☒ Normal High / Flooded	Meter ID# <u>154179</u>	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 (PPTH)	Sp COND (umhos/cm)	Temp. (C°)
EST	13:05	1.6	0.3	1.0	6.73	89.9	5.37	0.04	83.6	30.8
CEN	13:10		1.1		5.59	72.4	5.18	0.04	83.7	29.0

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

SBIO ID Numbers: SBIO-ID: 80193 HA-ID: 16214 RPS-ID: N/A Macrophyte-ID: 10484 LIMS#: 2116423

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	SA8344070	12/10/19	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3	NA9099030	04/09/2020	☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter	☒ Ice	16570048		
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / ☒ W-F / ☒ W-TSS / ☒ TURBIDITY / ☒ W-CH-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 ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CAR8-AA	☐ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C				

Notes:

Ref: 9/3/19 Date: 29Jul19 SHIPPING: 0.00
Dep: 9/3/19 Wgt: 10.00 LBS SPECIAL: 0.00
DV: 0.00 HANDLING: 0.00
TOTAL: 0.00

Sys: PRIORITY OVERNIGHT
TRK: 4751 8782 3165

Field/WIN ID → G3NW0085

Location: Allen Lake (Middle)

Date: 9/3/19

Signature: Myranda Clark

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: _____

(Initials/Date) (Initials/Date) (Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 80193 MACROPHYTE ID: _____ LATITUDE: 30.35419498
COUNTY: Walton (Santa Rosa Beach) STORET #: G3NW0085 LONGITUDE: -86.25178176
DATE: 09/03/2019 TIME: 13:05 CTZ SAMPLING AGENCY: FL DEP - NWROC
SITE NAME: Allen Lake (Middle) WBID: 959H
FIELD ID/NAME: ZG3NW0085 LAKE SIZE: 15 RQ: 2019-07-08-46

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category - from GIS):										LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer)											
Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Other (Specify)				LDI: <u>N/A</u>										
☒	☐	☐	☐	☒	☒	☐	☐				Land Use Source & Year:										
Local Watershed Erosion (select one): ☐ None ☒ Slight ☐ Moderate ☐ Heavy						Artificially Impounded															
Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☐ Moderate ☒ Heavy						☐ Yes ☒ No															
STORMWATER INPUTS		Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation					Some direct stormwater inputs (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place					Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place					Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place				
<u>7</u>		20 19 18 17 16					15 14 13 12 11					10 9 8 7 6					5 4 3 2 1				
LAKESIDE ALTERATIONS		Very few man-made structures, roads, or other disturbance adjacent to lake (<10% lakeside affected)					Moderate disturbance visible - structures, roads or other (10%-49% lakeside affected)					Many structures, roads or other human disturbance visible (50%-70% lakeside affected)					Highly developed or disturbed (>70% of lakeside affected)				
<u>3</u>		20 19 18 17 16					15 14 13 12 11					10 9 8 7 6					5 4 3 2 1				
BUFFER ZONE		Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer					89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer					50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer					< 29% of shoreline with >18m buffer				
<u>8</u>		20 19 18 17 16					15 14 13 12 11					10 9 8 7 6					5 4 3 2 1				

WATER / SUBSTRATE / BIOLOGICAL: SAMPLES AND OBSERVATIONS

Water: Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ No pH < 2 ☐ No Color Sample Taken? ☒ Yes ☐ No Lot # _____ Exp. Date: _____ Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☒ Normal ☐ High								Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____							
Meter Readings: Top: <u>0.3</u> <u>30.8</u> <u>5.37</u> <u>6.73</u> <u>89.9</u> <u>83.6</u> <u>3.88</u> Mid-Depth: _____ Bottom: <u>1.1</u> <u>29.0</u> <u>5.18</u> <u>5.59</u> <u>72.4</u> <u>83.7</u> <u>29.0</u>								Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____							
Clarity: ☐ Clear ☒ Turbid ☐ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green								SECCHI (M) <u>1.0</u> Total Station Depth (M) <u>1.6</u>							
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☒ Vegetated ☐ Sand/Silt ☒ Organic smooth (muck) ☒ Other (Specify): <u>algae</u>								Sediment Odors: ☒ Normal ☐ Other (Specify): _____ ☐ Anaerobic							
Biological Communities: LVI Conducted? ☒ Yes ☐ No Phytoplankton Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☒ No Lot #: _____ Exp Date: _____ Algal Bloom/Algal ID Sample Taken? Yes ☐ No ☒ Active Vegetation Mgmt? ☐ Yes ☐ No ☒ Don't Know								Abundance: Absent Rare Common Abundant Periphyton ☐ ☐ ☐ ☒ Nuisance Plants ☐ ☒ ☐ ☐ Submersed Plants ☐ ☐ ☐ ☒ Exotic Apple Snails ☒ ☐ ☐ ☐							
Weather Conditions: <u>Sunny, Hot</u>								Additional Notes: <u>Lake checked w/ submersed vegetation</u>							
SAMPLING TEAM: Frank Butera, Matt Bearden <u>M. Clarke</u>								SIGNATURE: <u>[Signature]</u>							
DATE: <u>09/03/19</u>								DATE: <u>09/03/19</u>							

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Allen Lake (Middle)					County: Walton (Santa Rosa Beach)					Date: 09/03/2019				
Analyst: F. Butera					Signature: <i>[Signature]</i>					STORET: G3NW0085				
Except where noted as "sp." species level identification required. *Genera that may require lab verification* Plants in bold = FLEPPC invasive exotic. It is important to note dominant or co-dominant taxa (by areal extent) for each unit. Use "D" to denote dominant taxon, or "C" for the 2 co-dominant taxa.										Lake units sampled (circle one group): 1, 4, 7, 10 2, 5, 8, 11 3, 6, 9, 12				
SBIO ID 80193	3	6	9	12	Collect ed? (✓)	Macro ID 11484	3	6	9	12	Collect ed? (✓)			
SPECIES						SPECIES								
Acer rubrum						Habenaria repens								
Alternanthera philoxeroides						Hydrilla verticillata								
Andropogon sp.		1				Hydrocotyle sp.								
Azolla filiculoides (A. caroliniana)						Hygrophila polysperma		1						
Baccharis sp.						*Hypericum fasciculatum								
Bacopa caroliniana						*Hypericum hypericoides			1					
Bacopa monnieri						*Hypericum myrtifolium								
Bidens laevis						Ilex cassine								
Bidens mitis						Ipomoea aquatica								
Blechnum serrulatum						Ipomoea sagittata								
Boehmeria cylindrica						Itea virginica								
Brasenia schreberi		1	1			Juncus effusus								
Cabomba caroliniana						*Juncus marginatus								
Casuarina equisetifolia						*Juncus megacephalus								
Centella asiatica						Juncus repens								
Cephalanthus occidentalis	1	1	1	1		*Juncus scirpoides								
Ceratophyllum demersum						Lachnanthes caroliniana	1	1						
Chara sp.						Leersia hexandra								
Cladium jamalense	1			1		Landoltia punctata (Spiro. punctata)								
Cliftonia monophylla						Lemna sp.								
Colocasia esculenta						Leucothoe racemosa (E. racemosa)								
*Commelina						Limnium spongia								
Crinum americanum						Limnophila sessiliflora								
*Cyperus alternifolius (C. involucreatus)						Liquidambar styraciflua								
Cyperus articulatus						*Ludwigia arcuata								
Cyperus haspan						*Ludwigia leptocarpa								
*Cyperus lecontei						*Ludwigia linearis								
*Cyperus polystachyos						*Ludwigia octovalvis								
*Cyperus odoratus						*Ludwigia peruviana								
*Cyperus surinamensis						*Ludwigia repens								
Cyrilla racemiflora	1		1	1		*Ludwigia								
Decodon verticillatus						Luziola fluitans (H. carolinensis)	1	1	1	1				
Diodia virginiana						Lyonia lucida								
*Echinochloa crus-galli						Magnolia virginiana		1						
*Echinochloa muricatum						Mayaca fluviatilis								
Echinochloa walteri						Melaleuca quinquenervia								
Eclipta prostrata (E. alba)						Micranthemum glomeratum								
Egeria densa						Micranthemum umbrosum								
Eichhornia crassipes						Mikania scandens		1	1					
*Eleocharis baldwinii						Mimosa pigra								
*Eleocharis WISPY	1		1	1		Myrica cerifera	1	1	1	1				
Eleocharis cellulosa						P. glauca								
Eleocharis equisetoides						Juncus sp.								
Eleocharis interstincta						Nymphaea caroliniana								
*Eriocaulon compressum						Hypericum brachy	1	1	1	1				
*Eriocaulon decangulare														
Eupatorium capillifolium	1		1	1										
*Fuirena						Juncus → R. fraxi SP								
Fuirena scirpoides	1	1	1											
Gordonia lasianthus														

RQ:2019-07-08-46

29-70

LIMS ID 2116423

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

~~RQ:2019-07-08-46~~

**Schoenoplectus tabernaemontani* = *Scirpus validus*

STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION
Lake Habitat Assessment Field Sheet

Store/ WIN ID NUMBER: G3NW0085	DATE (M/D/Y) 09/03/19	LAKE NAME: Allen Lake (<i>middle</i>)		FIELD ID / NAME: G3NW0085
ECO-REGION: 959H	COUNTY: Walton	SAMPLING LOCATION/DESCRIPTION: Santa Rosa Beach, FL		LAKE SIZE: 15.3 Acres
PARAMETER	No surface inflow or outflow present, very long water residence time, groundwater seepage dominates ☒	Surface water inflow present, but flow is rare, moderate to long water residence time ☐	Surface water inflow and outflow present (or outflow only), sometimes with visible flow, short water residence time ☐	Impounded, hydrology of system artificially controlled ☐
HYDROLOGY				
Color	Very clear, uncolored water (benthic sampling appropriate) ☐	Water somewhat tannin stained (benthic sampling appropriate) ☐	Dark, discolored water (water color 20 PCU or higher) ☒	Visibility extremely reduced due to high color ☐
	Optimal	Suboptimal	Marginal	Poor
Secchi 10	Secchi >3 m Or VOB 20 19 18 17 16	3 2.6 2.2 1.8 1.4 15 14 13 12 11	1.0 0.9 0.8 0.7 0.6 10 9 8 7 6	0.5 0.4 0.3 0.2 0.1 5 4 3 2 1
Vegetation Quality <i>Fbutter</i> 11 9	Diverse, expected native vegetation (emergent or submersed), less than 5% nuisance taxa 20 19 18 17 16	Mostly expected native plants, but moderate growths (6%-20% of lake) of nuisance macrophytes, or more than 50% of lake covered with plants 15 14 13 12 11	Large masses (21%-40%) of nuisance macrophytes (e.g., Hydrilla, hyacinth, cattail, etc.) or algal mats 10 9 8 7 6	Lake choked (>40%) with nuisance macrophytes (duckweed, hyacinth, etc.) or algal mats, or few plants present at all (e.g., plants removed) 5 4 3 2 1
Stormwater Inputs 7	Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation 20 19 18 17 16	Some direct stormwater inputs (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place 15 14 13 12 11	Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place 10 9 8 7 6	Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place 5 4 3 2 1
Bottom Substrate Quality 14	Diverse mixture of sand, detritus, with small amounts of CPOM/mud/muck. SAV may be present 20 19 18 17 16	Mixture of sand or clay and detritus with higher % CPOM/mud/muck content. SAV may be present 15 14 13 12 11	Moderate layer of CPOM/mud/muck, or hardpacked sand only, or moderate algal growth (mats or Chara) on bottom 10 9 8 7 6	Thick deposits of CPOM, or fine detritus and anaerobic muck/mud/silt, or algal growth or nuisance plants (Hydrilla) cover bottom 5 4 3 2 1
Lakeside Adverse Human Alterations 3	Very few man-made structures, roads, or other disturbance adjacent to lake (<10%) 20 19 18 17 16	Moderate disturbance visible (structures, roads or other), 10%-49% lakeside affected 15 14 13 12 11	Many structures, roads or other human disturbance visible (50%-70%) lakeside affected 10 9 8 7 6	Highly developed or disturbed (>70% of lakeside affected) 5 4 3 2 1
Upland Buffer Zone 8	Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer 20 19 18 17 16	89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer 15 14 13 12 11	50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer 10 9 8 7 6	< 29% of shoreline with >18m buffer 5 4 3 2 1
Adverse Watershed Land Use 9	Score the potential effects from adverse human land uses, based on a continuum of amount and type, with least to most adverse as follows: Native vegetation, Silviculture, Pasture or Citrus, Low Density Residential, Row Crops, Commercial, High Density Residential, Urban, Industrial 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1			

TOTAL SCORE

6062

COMMENTS:

ANALYSIS DATE:

09/03/19

ANALYST: Frank Butera, Mike King

SIGNATURE:

Frank Butera

SBIO ID:

80193

HA ID:

16214

RQ:2018-07-08-46

Photo Log

Storet

Station Name: Allen Lake (Middle)

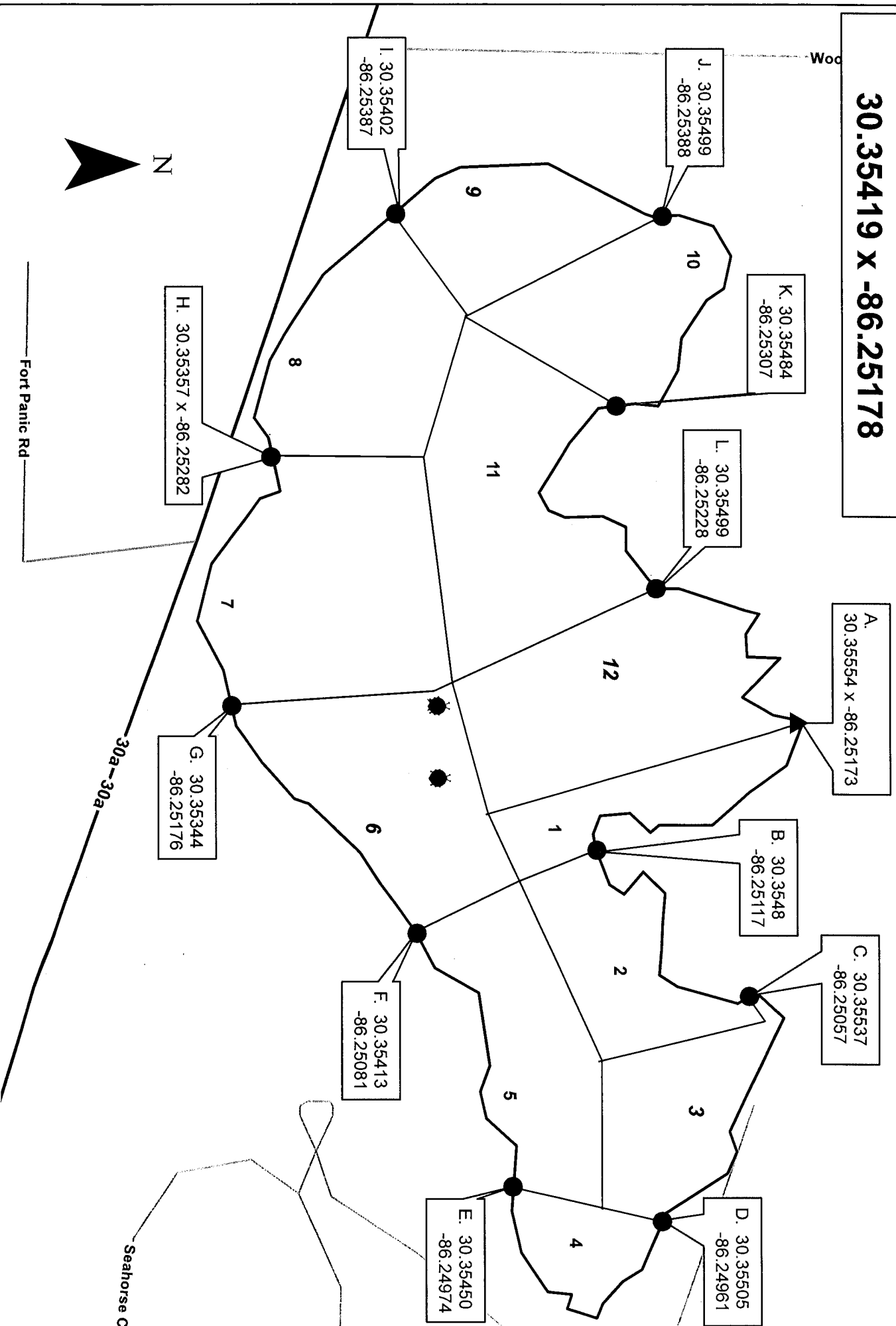
Date:

Samplers. F. Butera, ~~M. Bearden~~

- 1 Section 12 - North
- 2 Section 12 - Surface
- 3 North - Storet
- 4 East - Storet
- 5 South - Storet
- 6 West - Storet
- 7 _____
- 8 _____
- 9 _____
- 10 _____
- 11 _____
- 12 _____
- 13 _____
- 14 _____
- 15 _____
- 16 _____
- 17 _____

Notes.

**Allan Lake Storet G3NW0085
WBID 959H. SMP Lakes 2018
30.35419 x -86.25178**



Request Number: RQ-2019-07-29-70
SMP LVI Allen Lake

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: NW-DIST
Project ID: SMP

Requester: Michael King
Collected By: Frank Butler

Field Report Prepared By: Frank Butler
Sampling Agency: FDEP-NURSE

Location	Field/WIN ID →	Barcode G3NW0085		☐ Comp ☒ Grab	Collection (comp begin or grab) Date	Time	Eastern Central	Composite end Date	Time	Bottle Group(s)
Field ID	Location: Allen Lake (Middle)			Matrix (type, e.g., Salt, Fresh, etc) Fresh Surface	Diss. Oxygen 6.73		☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		A
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C) 30.8	pH 5.37	Sample Depth 0.3	☐ ft ☒ m	Sp. Conductance (umho/cm)	83.6	
Location				Salinity (ppt) 0.04	Comments					
Field ID				☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Time	Eastern Central	Composite end Date	Time	Bottle Group(s)
WIN/STORET #				Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen		☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Location				Salinity (ppt)	Comments					
Field ID				☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Time	Eastern Central	Composite end Date	Time	Bottle Group(s)
WIN/STORET #				Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen		☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Location				Salinity (ppt)	Comments					
Field ID				☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Time	Eastern Central	Composite end Date	Time	Bottle Group(s)
WIN/STORET #				Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen		☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Location				Salinity (ppt)	Comments					
Field ID				☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Time	Eastern Central	Composite end Date	Time	Bottle Group(s)
WIN/STORET #				Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen		☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Location				Salinity (ppt)	Comments					
Field ID				☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Time	Eastern Central	Composite end Date	Time	Bottle Group(s)
WIN/STORET #				Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen		☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Location				Salinity (ppt)	Comments					

Relinquished By: F. Butler	Date/Time: 08/03/2017	Shipping Method: Fed Ex	Number of Coolers Shipped: 1	Received By:	Date/Time:
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Group: A	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-SO4-IC						
	W-TDS						
	W-TSS						
Group: A	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 1	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
	W-PO4-F						