



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

WIN Station Name: West Branch West BR AT Dunn Ave Date: 2/6/2019

WIN/ Field ID: 20030747 WBID: 2210 Latitude: 30.438361

County: Duval ORG ID: 21FLA Longitude: 81.711666

Receiving Body of Water: SR RQ-2018- 2019-01-28-50

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Parnish									
B. Davis									

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Depth Measured with <u>YSI #3</u>		
Equipment ID <u>0-40-44</u>		

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

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded Meter ID# YSI #3 Matrix: Fresh Marine/ DI

Photos: Yes / No Flow: No Flow / Interstitial / 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	955	0.2	0.1	0.25	7.67	75	6.57	0.09	191	14.5 ✓
CEN										

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

SBIO ID Numbers: SBIO-ID: HA-ID: RPS-ID: Macrophyte-ID: 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	<u>SA8197090</u>	<u>7/16/19</u>	☐ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☐ HNO3	<u>8099110</u>	<u>4/2/12</u>	☒ <2
Filtered Nutrients	☒ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☒ Ice	<u>SA17925H</u>		
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-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 ☒ <u>8321 DIMS</u>	☒ Ice			
Pesticides	☒ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA ☐ W-CARB-AA	☒ Ice			
	☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Other			

Notes: SCI Kit 2019

WIN ID/Field ID: 20030747

WEST BR AT DUNN AVE

Signature: B. Davis LIMS event-2019-02-07-01 Date: 2/6/19

Enter Field Parameters, Verify Station ID in LIMS DMT: 2/18/19 QC Station ID, Field Parameters in LIMS DMT: CR 2/13/19

Scan/Save Field Sheets Migrate Data to WIN: Verify Data in WIN:

Shw 79200

SAMPLE ID _____ ORG ID 21 FLA LATITUDE _____
COUNTY Pinal STORET # 20030747 LONGITUDE _____
DATE 2/6/19 TIME 9:55 SAMPLING AGENCY NE ROC
SITE NAME Westbranch Runnel
FIELD ID/NAME _____ RECEIVING BODY OF WATER _____

RIPARIAN ZONE / STREAM FEATURES

Meter ID: _____

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category):								Landscape Development Intensity Index (LDI)
Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)	
<u>10</u>	<u>5</u>	<u>5</u>	<u>50</u>	<u>30</u>				
Local Watershed Erosion (select one): ☐ None ☒ Slight ☐ Moderate ☐ Heavy								Typical Width (m) Depth (m)/Velocity (m/sec) Transect
Local Watershed NPS Pollution: ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy								
Width of Riparian Vegetation (m) on Each Buffer Side				Hydrologic Modification Score (per FT 3101)				
Left Bank: <u>>18</u> Right Bank: <u>218</u>								
High Water Mark: <u>0.6</u> + <u>0.3</u> = <u>0.9</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No				
Artificially ☒ No ☐ Mostly recovered, more sinuous				Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%)				
Channelized: ☐ Some recovery ☐ Recent, severe				☒ Heavily Shaded ☐ Moderate Shaded (46-80%)				

SEDIMENT / SUBSTRATE

Sediment Oils				Sediment Odors				Smothering of Substrates			
☐ Absent ☒ Slight ☐ Moderate ☐ Profuse				☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify): _____				Sand Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐ Silt Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐ Algae Smothering: None ☒ Slight ☐ Moderate ☐ Severe ☐			
SUBSTRATE TYPE				WATER QUALITY							
Assessment Tool: ☒ SCI ☒ ARPS ☒ LVS ☐ LCI ☐ BioRecon				Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
				Top:							
				Mid:	<u>0.2</u>	<u>14.5</u>	<u>6.57</u>	<u>7.67</u>	<u>75</u>	<u>191</u>	<u>0.09</u>
				Bottom:	<u>0.3</u>						<u>10.5</u>
				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				AMBIENT FIELD CONDITIONS / NOTES:							
Not Obs. Rare Common Abundant				Hydrologic Disturbance Scoring ☐ 1-2 ☐ 3-4 ☒ 5-6 ☐ 7-8 ☐ 9-10 ☐ The antecedent hydrologic conditions have been met to my best knowledge.							
Periphyton: ☐ ☒ ☐ ☐											
Fish: ☐ ☒ ☐ ☐											
Aquatic Plants: ☐ ☒ ☐ ☐											
Iron/Sulfur Bacteria: ☐ ☐ ☒ ☐											
SAMPLING TEAM <u>Shawn / B. Rayis</u>				SIGNATURE: <u>Shawn</u>				2/6/19			

Shw 79200

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: West Br @ Penn Ave County: Penn Date: 2/6/19 Investigators:

Transect (m)	Point 1=right	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	
0	1	N	N		60	1	N	N		
	2					2				
	3					3				
	4					4				92
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N	N		70	1	N	N		
	2					2				
	3					3				
	4					4				92
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N	N		80	1	N	N		
	2					2				
	3					3				
	4					4				96
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N	N		90	1	N	N		
	2					2				
	3					3				
	4					4				84
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N	N		100	1	N	N		
	2					2				
	3					3				
	4					4				86
	5					5				
	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			92						
	6									
	7									
	8									
	9									

STORET Station Number: 20030747

Secchi depth
Estimated?

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

Check accompanying data collected at same site/date.

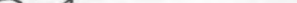
Algal mat sample	
Linear Veg Survey	
Habitat Assessment	
SCI/Biorecon	
Water sample	
RQ-	

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

MS 9220

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

Waterbody: <u>Westbrook Run</u>	Date: <u>2/6/19</u>	County: <u>...</u>	Storet Number: <u>20030747</u>
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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.

[illegible]

AL 5610 79200

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

SAMPLING AGENCY: NE ROC		STORET STATION NUMBER: 20030747	DATE (MM/DD/YY): 2/6/19	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: Doral	LOCATION: Westbranch e Run	FIELD ID/NAME:	

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>3</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 <u>3</u> 2 1
Substrate Availability <u>4</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 12 11	6% to 15% major productive habitat 10 9 8 7 6	Less than 5% major productive habitat 5 <u>4</u> 3 2 1
Water Velocity <u>14</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 <u>0.21</u> 0.17 0.13 >0.1 15 <u>14</u> 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>5</u> Primary Score <u>27 26</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. 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. <u>5</u> 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 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>5</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 6	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>10</u> Left Bank <u>9</u> Secondary Score <u>69</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 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

86 95 TOTAL SCORE

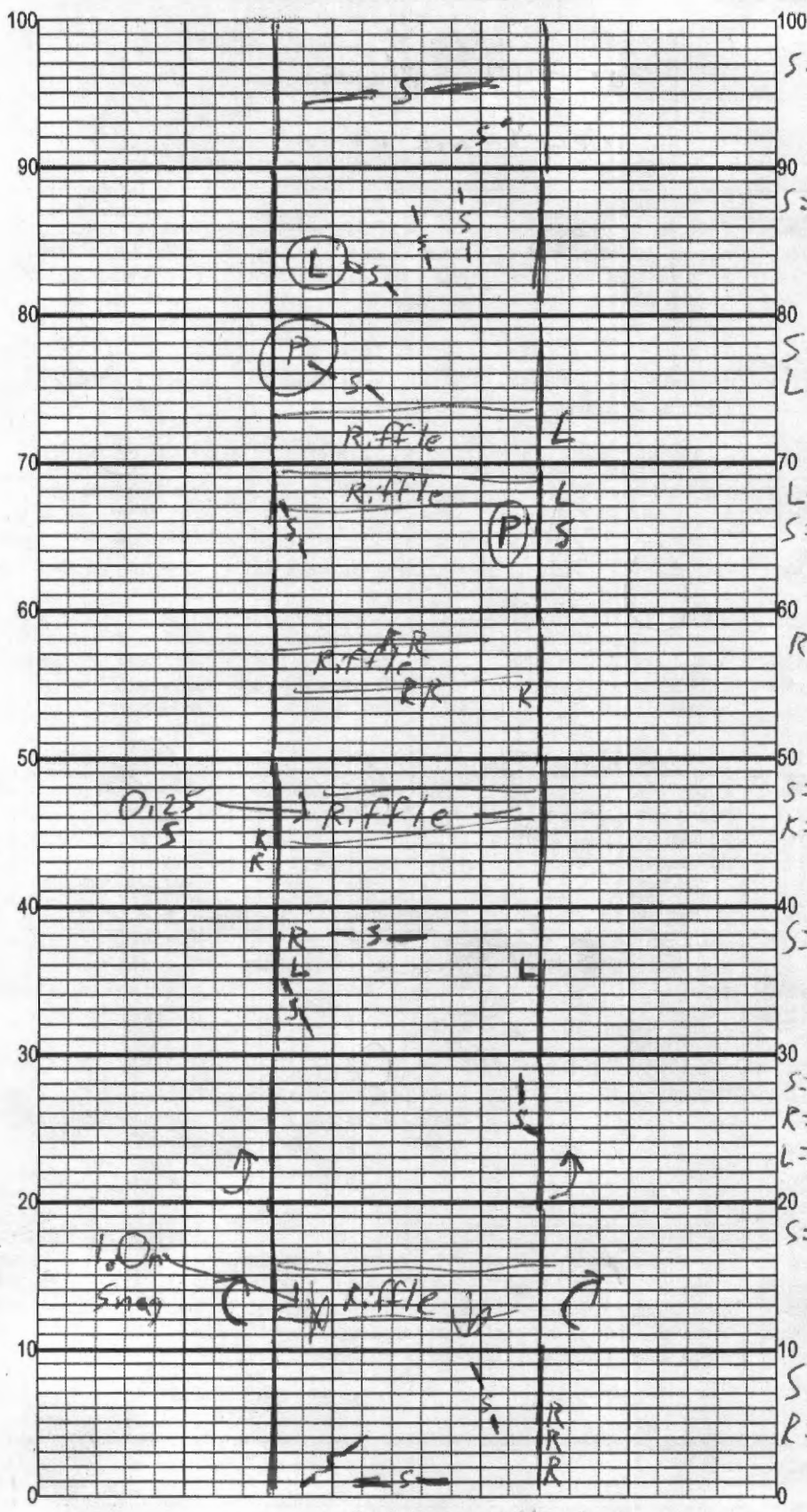
Date: <u>2/6/19</u>	Analyst: <u>Brian Davis</u>	Signature: <u>BS - D -</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet

2m

Left Bank

2m
W
0.3D



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

Location: _____
Date: 2/6/15
Sampler: B. Davis

100 m: Latitude _____	Longitude _____
0 m: Latitude _____	Longitude _____
Substrates: Code key, draw proportionate habitat abundance.	
☐ S	Snags <u>22</u>
☐ R	Roots/undercut banks <u>31</u>
☐ L	Leaf Packs (or mats) <u>1</u>
☐ V	Aquatic Macrophytes <u>51</u>
☐	_____
☐	_____
☐	total # observed = _____
☐	# range expected = _____

Average width 1.75 m
Average depth 0.3 m

Velocity measured at 0 meter mark.

WQ & chemistry taken at 0 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:

<2 M of Macrophytes was observed while doing the LVS? YES or NO

S = 0.5
R = 0.5
L = 1.25m
S = 3.5m
R = 1.75m

D = 0.3m
W = 1.0m
V = 0.2m/s

SCI 2220 Nine mile

Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: NE-DIST

Requester: Jeremy M. Parrish

Field Report Prepared By: B. #

Project ID: SMP

Collected By: B. #, J. Parrish

Sampling Agency: DEAR NE D

Locati	WIN ID/Field ID:		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 2/6/19 Time 955	Eastern Central	Composite end Date	Time	Bottle Group(s) (See pg 2)	
Field I	20030747		Matrix (type, e.g., Salt, Fresh, etc) Fresh		Diss. Oxygen 7.67	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	A, B	
WIN/E	WEST BR AT DUNN AVE		Temp (C) 14.5	pH 6.57	Sample Depth 0.1	☐ ft ☒ m	Sp. Conductance (umho/cm) 191		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt) 0.09	Comments				
Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Eastern Central	Composite end Date	Time	Bottle Group(s)	
Field ID			Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #			Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments				
Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Eastern Central	Composite end Date	Time	Bottle Group(s)	
Field ID			Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #			Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments				
Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Eastern Central	Composite end Date	Time	Bottle Group(s)	
Field ID			Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #			Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments				
Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Date	Eastern Central	Composite end Date	Time	Bottle Group(s)	
Field ID			Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #			Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments				

Relinquished By: B. #	Date/Time: 2/6/19 1600	Shipping Method: Fed Ex	Number of Coolers Shipped: 2	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-250ML-WI-THI	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1 to ALS
	NE-ALS-ECQ						
Group: A	Bottle Type:	BG-500ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	W-E8321-DI W-E8321-MS						
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	1
	W-ICP W-ICPMS						
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						
Group: A	Bottle Type:	BG-1L	# of Bottles: 4	Preservative:	ICE	Enter Number of Bottles Sent to Lab	4
	W-PSNP-TQ						
Group: B	Bottle Type:	PT-50ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	0
	ALGAL_ID						
Group: B	Bottle Type:	PJ-2L	# of Bottles: 2	Preservative:	Formalin	Enter Number of Bottles Sent to Lab	2

