



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name:

Mandarin Drain Mandarin Rd Loretto

Date:

3/4/19

WIN/ Field ID:

20030687

WBID:

2385

Latitude:

30.16324

(Decimal Degrees)

County:

DUVAL

ORG ID:

21FLA

Longitude:

81.64811

(Decimal Degrees)

Receiving Body of Water:

LSOR

RQ-2019-02-25-67

Sampling Team Members						WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
J. Parrish P. O'Connor						Y	Y	Y	Y	Y	☒ Sample Container	☐ Van Dorn	☐ Pole		
											☐ Carboy	☐ Syringe			
											☐ Dipper	☐ Other			
Depth Measured with						DEP 154181									
Equipment ID						Ortho #44									
											Collection Method				
						Y	Y	Y	Y	Y	☒ Wading	☐ Canoe/Kayak			
											☐ From Shore	☐ Electric Motor			
											☐ Other	☐ Gasoline Motor			
Water Level: Dry/ Pooled/ Low / Normal <u>High</u> Flooded						Meter ID# DEP154181				Matrix: <u>Fresh</u> Marine/ DI					
Photos: Yes / No		Flow: No Flow / Intestinal <u>Flowing</u> / NA		Tide: Rising <u>Falling</u> / 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 (umhos/cm)	Temp. (C°)					
EST	1300	0.3	0.15	0.35	3.24	35.5	7.13	0.12	259.4	19.6					
CEN															
Biological Samples Collected: None <u>HA</u> SCI <u>RPS</u> Algae ID <u>VS</u> 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		SAB274050		10-01-19		☒ <2			
Metals		☒ W-ICPMS ☒ W-ICP				☒ Ice ☒ HNO3		NAB197080		01-16-19		☒ <2			
Filtered Nutrients		☒ W-P04-F ☒ Field Filtered 0.45 um Filter				☒ Ice									
Chlorophyll		☒ CHLSUITE-W				☒ Ice									
Physical/Aggregate (Fresh)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-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				☐ Ice									
		☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD													
Tracers		☒ W-E8321-DI ☐ W-E8321-MS				☒ Ice									
Pesticides		☒ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI				☒ Ice									
		☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA													
Phytoplankton		☐ DTY-QN-C ☐ PKD-QN-C				☐ Ice									

Notes:

WIN ID/Field ID:



20030687

MANDARIN DRAIN AT MANDARIN RD
AND LORETTO RD

Signature:

J. Parrish

3/4/19

LIMS EVENT ID:

2019-03-05-01

WIN Import ID:

Enter Field Parameters, Verify Station ID in LIMS DMT:

3/3/19

QC Station ID, Field Parameters in LIMS DMT:

BD 3/11/19

Scan/Save Field Sheets

BD 3/11/19

Migrate Data to WIN:

Verify Data in WIN:

(Initials/Date)



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Strategic Monitoring Program
Stream Condition Index Site Evaluation Form

January 2019

Point of Contact

Name: Jeremy Parrish **Organization:** FDEP NEROC **Date:** 2/28/2019
Address: 8800 Baymeadows Way west
email: Jeremy.M.Parrish@dep.state.fl.us **Phone Number:** 904-256-1700

Station Information

Station ID #: 20030687 **Station Name:** MANDARIN DRAIN AT MANDRIN RD AND LORETTO RD.
Latitude: 30.163747 **Longitude:** 81.648111
WBID #: 2385 **WBID Name:** Mandarin Drain
Basin Group #: Group 2 **Basin Group Name:** Lower St. Johns River

Attach the following items to this form and submit to Kevin O'Donnell, Kevin.ODonnell@dep.state.fl.us

- SCI Site Evaluations Forms for all other sites in this WBID, if there are any.
- A map showing all relevant layers including, but not limited to: this station, the WBID, NHD layer, and primary access corridors (such as roads, boat launches, railroad lines, utility right of ways, and aerial imagery).
- The most recent Habitat Assessment Field Sheet, DEP FD 9000-5 to and the most recent Habitat Assessment Sketch Sheet, DEP FD 9000-4.
- Additional documentation referenced below that support SCI site evaluation such as analytical results, email correspondence, historic photos and field sheets.

Preliminary Questions

1. Is this water segment man-made, predominantly channelized or predominantly physically altered?	☐ Yes	☒ No
2. Is this water segment primarily used for water management purposes, such as flood protection, stormwater management, irrigation, or water supply?	☐ Yes	☒ No
3. Is this water segment actively managed? Management activities may include, but are not limited to dredging and vegetation management (removal, herbicide application, mowing)?	☐ Yes	☒ No
4. Is this water segment impacted by hydrologic modifications?	☐ Yes	☒ No
5. For this water segment, does the Habitat Assessment (DEP-SOP-001/01 FT 3000) Substrate Diversity component score in the marginal or poor category?	☐ Yes	☒ No
6. For this water segment, does the Habitat Assessment (DEP-SOP-001/01 FT 3000) Substrate Availability component score in the marginal or poor category?	☐ Yes	☒ No
7. For this water segment, does the Habitat Assessment (DEP-SOP-001/01 FT 3000) Artificial Channelization component score in the marginal or poor category?	☐ Yes	☒ No
8. Does this water segment typically meet the minimum flow requirements required as per DEP-SOP-003/11 SCI 1000, to perform the Stream Condition Index?	☒ Yes	☐ No
9. Is this water segment intermittent and ephemeral and therefore inappropriate per DEP-SOP-003/11 SCI 1000?	☐ Yes	☒ No
10. Is this water segment tidally influenced and therefore inappropriate per DEP-SOP-003/11 SCI 1000?	☒ Yes	☐ No
11. Is this water segment more wetland like than stream like and therefore inappropriate per DEP-SOP-003/11 SCI 1000?	☒ Yes	☐ No
12. Is this water segment more lake like than stream like and therefore inappropriate per DEP-SOP-003/11 SCI 1000?	☐ Yes	☒ No

Use the space below to discuss why the SCI is not appropriate for this station.

Address each preliminary question answered yes and any other factors not captured by the preliminary questions.

- Downloaded historical conductivity, ranges from Fresh to Saline, when SJR is high flows inundating site with >10000sp conductance H2O periodically.
- Habitat was appropriate, the inverts were dominated by isopods
- Dissolved oxygen was 3.24 mg/L which indicates detritus & wetland consumption of oxygen

Current Habitat Assessment Information

Populate the fields below using information from the most recent Habitat Assessment.

Sample Date: <u>3/4/2019</u>	SBIO ID: _____	HA ID: _____
Total Score: <u>137</u>	Primary Score: <u>58</u>	Secondary Score: <u>79</u>
Substrate Diversity Score: <u>13</u>	Substrate Availability Score: <u>15</u>	Artificial Channelization Score: <u>19</u>

Primary Parameters

Substrate Diversity Score: <u>13</u>	Major Productive Habitat Type(s): <u>Snag</u>
Substrate Diversity Notes:	Minor Productive Habitat Type(s): <u>Leaf</u>
Substrate Diversity Notes: <u>Snag, Woodydebris, Leaf, Roots</u>	
Substrate Availability Score: <u>15</u>	% Snag: <u>15</u> % Root: <u>2</u> % Aquatic Vegetation: _____ % Leaf Pack: <u>10</u> % Leaf Mat: _____ % Rock: _____ ☐ Rock ☐ Sand ☐ Clay ☒ Mud/Muck ☐ CPOM ☐ Other
Substrate Availability Notes: <u>Total 27% Habitat (Soutialis on snag, some anaerobic areas "smothering")</u>	

Water Velocity Score: <u>15</u>	Water Velocity: <u>0.25</u> m/s	☐ This water velocity is slower than normal. ☐ This water velocity is typical. ☒ This water velocity is faster than normal. ☐ None of the above, see comment.
Water Velocity Notes:		

Habitat Smothering Score: <u>15</u>	Number of stable pools: <u>0</u>	Expected Number of stable pools: <u>1-2</u>
		% of habitat affected by sand smothering: <u>25.0</u>
		% of habitat affected by silt smothering: <u>25</u>
		% of habitat affected by algae smothering: <u>0</u>
Habitat Smothering Notes: <u>Silt smothering leaf & muck in areas 25% "Anaerobic areas"</u>		

Secondary Parameters

Artificial Channelization Score: <u>19</u>	☒ Natural channelization, no evidence of dredging or artificial straightening ☐ Evidence of historic dredging or artificial straightening ☐ Evidence of recent dredging or artificial straightening ☐ System is subject to regular maintenance, dredging, straightening, vegetation removal Etc.
Channelization Notes:	(check all that apply)

Bank Stability Score: <u>10</u>	☐ Banks are concrete lined ☐ Banks are bedrock ☐ Banks are pipeclay ☐ Banks are soil ☒ Banks are present ☐ No definable banks present ☐ Eroded areas present
Bank Stability Notes:	(check all that apply)
<u>"Wetland like" but had defined channel</u>	

Right Bank Riparian Buffer Width Score: <u>10</u>	Right Bank Riparian Buffer Width: <u>>18</u> meters
Left Bank Riparian Buffer Width Score: <u>10</u>	Left Bank Riparian Buffer Width: <u>>18</u> meters
Riparian Buffer Width Notes:	

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

(AK) 79245

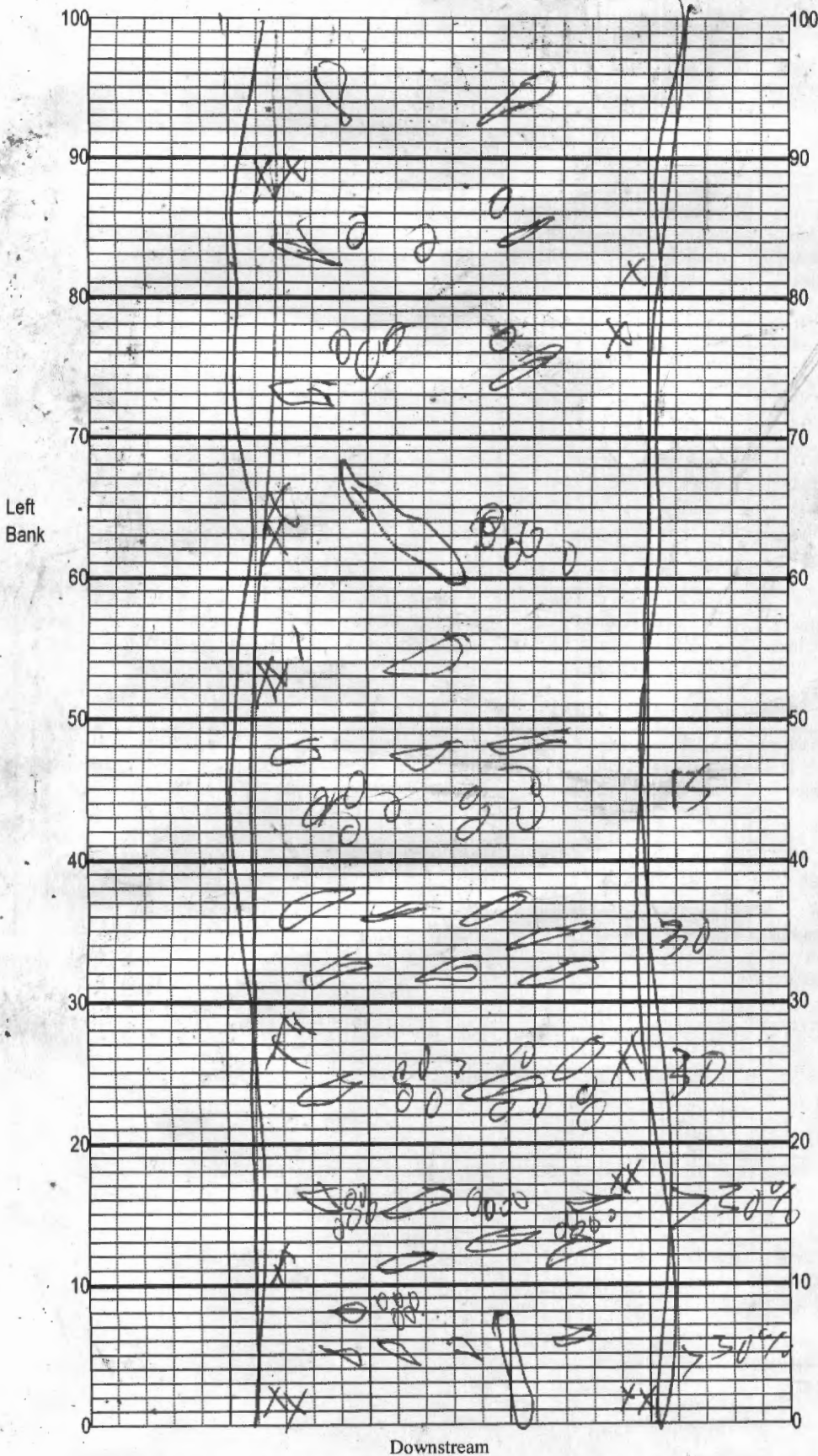
SAMPLING AGENCY: NE ROC		STORET STATION NUMBER: 20030687	DATE (MM/DD/YY): 3/4/19	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: Orral	LOCATION: Mandan Drain Loreto & Mandan		FIELD ID/NAME:

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 13	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability 15 14 13	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 15	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 15 14 13 12 11 Primary Score 62 58 56 57	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	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 19	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability	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.	Only meets 2 of the 3 requirements for optimal bank stability.	Only meets 1 of the 3 requirements for optimal bank stability.	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas.
Right Bank 10 Left Bank 10	10 9	8 7 6	5 4	3 2 1
Riparian Buffer Zone Width	Width of vegetation greater than 18 m	Width of vegetation >12 to 18m	Width of vegetation 6 to 12 m. human activities close to system	Less than 6 m of buffer zone due to intensive human activities
Right Bank 10 Left Bank 10	10 9	8 7 6	5 4	3 2 1
Riparian Zone Vegetation Quality	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.	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed.	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).
Right Bank 10 Left Bank 10 Secondary Score 79	10 9	8 7 6	5 4	3 2 1

TOTAL SCORE

Date: 3/4/19	Analyst:	Signature:
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



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

Location: Mandarin River
Date: 3/4/19
Sampler: JP/PO

100 m: Latitude _____
Longitude _____
0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

	Snags	15	15
	Roots/undercut banks	2	
	Leaf Packs (or mats)	6	10
	Aquatic Macrophytes		
	Pools	total # observed =	
		# range expected =	

Average width _____ m
Average depth _____ m

Velocity measured at _____ meter mark.

WQ & chemistry taken at _____ 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

1. bellordae 2 in leaf

5.5m wide

AK 79245

Comments: 1.5 INCH RAIN Previous Weekends

	Meter Mark				Meter Mark	
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Revision Date: March 1, 2014

79245 ✓

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet										
Site: <u>MANDARIN @ LORROTH</u>			County: <u>DUVAL</u>		Date: <u>03-04-19</u>		Investigators: <u>J. Parrish, P. O'Rourke</u>			
					STORET Station Number: <u>20030681</u>					
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			96		5				96
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N			70	1	N			
	2					2				
	3					3				
	4			96		4				
	5					5				92
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N			80	1	N			
	2					2				
	3					3				
	4			96		4				
	5					5				90
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N			90	1	N			
	2					2				
	3					3				
	4			96		4				
	5					5				90
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N			100	1	N			
	2					2				
	3					3				
	4			96		4				
	5					5				88
	6					6				
	7					7				
	8					8				
	9					9				
50	1	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			88						
	6									
	7									
	8									
	9									

Secchi depth 0.33
Estimated?

points ranked 4-6 0
total points assessed 99
% 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-2019-02-25-67

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

79245

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

SAMPLE ID Duval ORG ID 21FIA LATITUDE _____
 COUNTY Duval STORET # 20030687 LONGITUDE _____
 DATE 03-04-19 TIME 1300 SAMPLING AGENCY _____
 SITE NAME MANDARIN Drain @
 FIELD ID/NAME _____ RECEIVING BODY OF WATER LSTJ

RIPARIAN ZONE / STREAM FEATURES

Meter ID: DEP# 154181

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 5.6 m wide	
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>218</u> Right Bank: <u>218</u>				Hydrologic Modification Score (per FT 3101) ☐				0.25 m/s	
High Water Mark: <u>0.3</u> + <u>0.3</u> = <u>0.6</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☐ No				0.3 m deep	
Artificially ☐ No ☐ Mostly recovered, more sinuous Channelized: ☒ Some recovery ☐ 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 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 <table border="1"> <thead> <tr> <th></th> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> <th>SECCHI (M)</th> </tr> </thead> <tbody> <tr> <td>Top:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>0.35</u></td> </tr> <tr> <td>Mid:</td> <td><u>0.15</u></td> <td><u>19.6</u></td> <td><u>7.13</u></td> <td><u>3.24</u></td> <td><u>35.5</u></td> <td><u>259.4</u></td> <td><u>0.12</u></td> <td>TOTAL DEPTH</td> </tr> <tr> <td>Bottom:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>0.3</u></td> </tr> </tbody> </table>							Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top:								<u>0.35</u>	Mid:	<u>0.15</u>	<u>19.6</u>	<u>7.13</u>	<u>3.24</u>	<u>35.5</u>	<u>259.4</u>	<u>0.12</u>	TOTAL DEPTH	Bottom:								<u>0.3</u>
	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)																																				
Top:								<u>0.35</u>																																				
Mid:	<u>0.15</u>	<u>19.6</u>	<u>7.13</u>	<u>3.24</u>	<u>35.5</u>	<u>259.4</u>	<u>0.12</u>	TOTAL DEPTH																																				
Bottom:								<u>0.3</u>																																				
Woody Debris (Snags) <u>15</u> Undercut Banks / Roots <u>2</u> Leaf Packs or Mat <u>106</u> Aquatic Vegetation <u>106</u> Rock or Shell Rubble <u>75</u> Sand <u>75</u> Mud / Muck / Silt <u>75</u> Other <u>75</u> Other <u>75</u>			System Type: Stream ☐ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐																																						
			Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____			Water Surface Oils Normal ☐ Sheen ☐ Globbs ☐ Slick ☐ Other ☐																																						
			Algae Sample Taken? ☒ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: <u>340274050</u> Exp: <u>10-01-19</u>			Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐																																						
			Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐																																									

ABUNDANCE

	Not Obs.	Rare	Common	Abundant
Periphyton:	☒	☐	☐	☐
Fish:	☐	☒	☐	☐
Aquatic Plants:	☐	☐	☒	☐
Iron/Sulfur Bacteria:	☐	☐	☒	☐

AMBIENT FIELD CONDITIONS / NOTES:

Hydrologic Disturbance Scoring ☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ 7-8 ☐ 9-10

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

SAMPLING TEAM

J. Parrish, R. O'Connor

SIGNATURE

[Signature]

03-04-19

2385 Mandarin Drain

last revised Jan 25, 2018

Central Laboratory Submittal Form

Customer: NE-DIST

Requester: Jeremy M. Parrish

Field Report Prepared By:

P.O'Connor

Project ID: SMP

Collected By:

J. Parrish, P.O'Connor

Sampling Agency:

DEAR NED ROC

Location	WIN ID/Field ID:		☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>03-04-19</u> Time <u>1300</u>	☒ Eastern ☐ Central	Composite end Date _____ Time _____	Bottle Group(s) (See pg 2)	
Field ID	MANDARIN DRAIN AT MANDARIN RD AND LORETTO RD		Matrix (type, e.g., Salt, Fresh, etc) <u>Surface Water Fresh</u>		Diss. Oxygen <u>3.24</u>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L) _____	
WIN/STORET			Temp (C) <u>19.6</u>	pH <u>7.13</u>	Sample Depth <u>0.15</u>	☐ ft ☒ m	Sp. Conductance (umho/cm) <u>259.4</u>	
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt) <u>0.12</u>	Comments <u>DO% 35.5</u>			A
Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____	☐ 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 _____ Time _____	☐ 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 _____ Time _____	☐ 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: <u>P.O'Connor</u>	Date/Time <u>03-04-19 1600</u>	Shipping Method <u>Fed Ex</u>	Number of Coolers Shipped: <u>1</u>	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 ACS JAX
	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	1
	ALGAL_ID						
Group: B	Bottle Type:	PJ-2L	# of Bottles: 2	Preservative:	Formalin	Enter Number of Bottles Sent to Lab	0

Macro Invertebrates not sampled



ALS Contact: Jerry Allen

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