



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE ____ OF ____

February 2016

Data Qualified?
Yes / No

STORET Station Name: Eightmile Creek

Date: 04/06/2016
(mm/dd/yyyy)

STORET Station ID: 61TLHR0012

Latitude: 29.80482
(Decimal Degrees)

WBID: 3607 RQ: 2016-3-14-56

ORG ID: 21FLTLHR Longitude: -83.28885
(Decimal Degrees)

Receiving Body of Water: Steinhatchee

Field ID: 61TLHR0012

County: Dixie

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Chris Green									
Colby Marshall									

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Equipment ID		
Collection Method		
☒ Wading	Via Boat	
☐ From Shore	☐ Canoe/Kayak	
☐ Other (note below)	☐ Electric Motor	
	☐ Gasoline Motor	

Water Level: Dry / Low / Normal / <u>High</u> / Flooded						Matrix: <u>Fresh</u> / Marine / DI					
Meter ID# <u>12 YSI 600 XLM</u>				Photos: <u>Yes</u> / No				Tide Falling: Yes / No / <u>NA</u>			
Time Zone	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	<u>13:20</u>	<u>0.3</u>	<u>0.9</u>	<u>6.8</u>	<u>74</u>	<u>7.2</u>		<u>0.8</u>	<u>315</u>	<u>18.9</u>	
CEN											

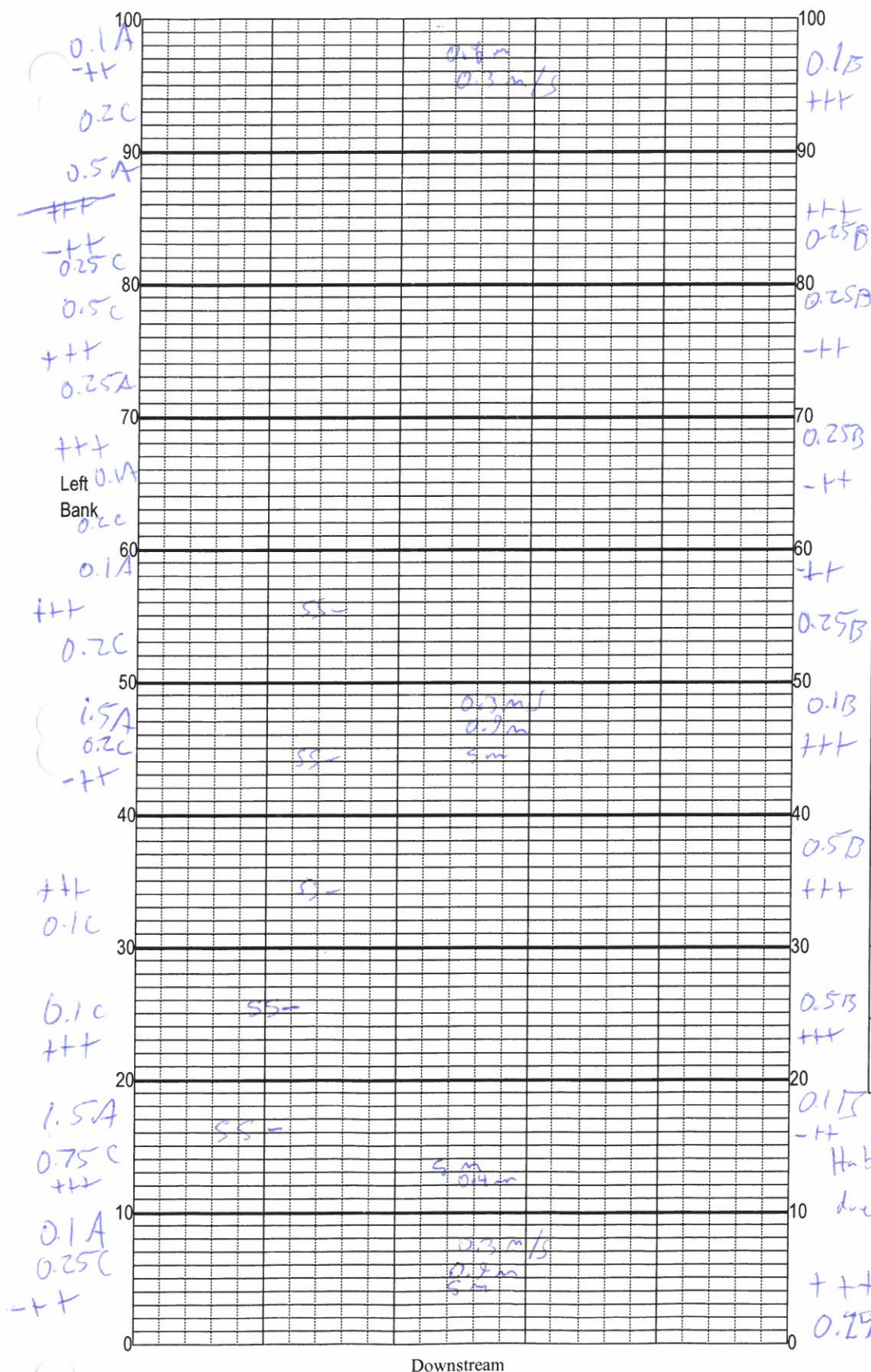
Biological Samples Collected:		None	<u>HA</u>	<u>SCI</u>	<u>LVS</u>	<u>RPS</u>	LVI	Other
Parameter Suite	Parameter Methods			Preservation		Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP			☒ Ice	☒ H2SO4	<u>SA-5259020</u>	<u>9/16</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP			☐ Ice	☐ HNO3			☐ <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/C)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS			☒ Ice				
Physical/Aggregate (Kit B/D)	☐ Alkalinity / W-F / W-TSS / TURBIDITY			☐ Ice				
Macroinvertebrates	☒ MI-FW-QLDC			☒ Formalin				
Microbiology	☐ E Coli ☐ F Coli ☐ Enteroc ☐ QPCR			☐ Ice				
Periphyton	☐ ALGAE-ID			☐ Ice				
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R			☐ Ice				
	☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH			☐ Other				

Notes: <u>SCI-13:45</u>		Place Label Here (If Available)	
Signature: <u>Ch S</u>		Date: <u>4-6-16</u>	

Field Parameters Entered into LIMS: 6/13/16 cm (Initials/Date)
Date Migrated to STORET: cm 7/1/14 (Initials/Date)

Field Parameters QC in LIMS: PB 6-20-16 (Initials/Date)
Field Sheets Scanned/Saved: CB 7-21-16 (Initials/Date)

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



Location: Eight mile Creek

Date: 4-6-16

Sampler: CG / cm

100 m: Latitude _____ Longitude _____
0 m: Latitude _____ Longitude _____
Substrates: Code key, draw proportionate habitat abundance. %
A Snags 0.6
B Roots/undercut banks 0.6
C Leaf Packs (or mats) 0.5
D Aquatic Macrophytes _____
E _____ _____
_____ _____
Pools total # observed = 5 # range expected = 2-3
Average width 0.6 5 m
Average depth 0.6 m
Velocity measured at 50 meter mark.
WQ & chemistry taken at 0 meter mark.
Habitat Smothering: SS (-, +, +)
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:

Habitat possibly scarred
due to recent high water flow

+++
0.758

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

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

SAMPLING AGENCY: <u>B034</u>		STORET STATION NUMBER: <u>GITLH0012</u>	DATE (MM/DD/YY): <u>4/6/16</u>	RECEIVING BODY OF WATER: <u>Steinatchee River</u>
REMARKS:	COUNTY: <u>Dixie</u>	LOCATION: <u>Eight Mile Creek</u>	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>14</u>	20 19 18 17 16	15 <u>14</u> 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>3</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 4 3 2 1
Water Velocity <u>19</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 <u>19</u> 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 <u>15</u> ----- Primary Score <u>51</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. <u>15</u> 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 <u>19</u>	20 <u>19</u> 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability Right Bank <u>8</u> Left Bank <u>8</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. 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 <u>10</u> Left Bank <u>10</u>	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 <u>10</u> Left Bank <u>10</u> ----- Secondary Score <u>75</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

126

TOTAL SCORE

Date: <u>4/6/16</u>	Analyst: <u>Chris Green</u>	Signature: <u>[Signature]</u>
---------------------	-----------------------------	-------------------------------

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

SAMPLE ID _____ ORG ID 21FLTLHR LATITUDE 29.80482
 COUNTY Dixie STORET # G1TLHR0012 LONGITUDE -83.28885
 DATE 4/6/16 TIME 13:45 SAMPLING AGENCY 8034
 SITE NAME Eightmile Creek
 FIELD ID/NAME G1TLHR0012 RECEIVING BODY OF WATER Stain Latchers

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>50</u> Silviculture <u>10</u> Field/Pasture <u>40</u> 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 _____ m wide <u>0.3</u> m/s <u>0.3</u> m/s <u>0.3</u> m/s <u>0.3</u> m deep <u>0.3</u> m deep <u>0.5</u> m deep				
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>718</u> Right Bank: <u>718</u>				Hydrologic Modification Score (per FT 3101) _____				
High Water Mark: <u>1.6</u> + <u>0.9</u> = <u>2.5</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No				
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 Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: <u>0.3</u> <u>18.9</u> <u>7.2</u> <u>6.8</u> <u>74</u> <u>315</u> _____ <u>0.8</u> Mid: _____ _____ _____ _____ _____ _____ _____ Bottom: _____ _____ _____ _____ _____ _____ _____ Meter ID: <u>600 xlm H 12</u>		
Woody Debris (Snags) <u>0.6</u> <u>5</u> _____ Undercut Banks / Roots <u>0.6</u> <u>5</u> _____ Leaf Packs or Mat <u>0.5</u> <u>5</u> _____ Aquatic Vegetation _____ _____ _____ Rock or Shell Rubble.. _____ _____ _____ Sand..... <u>98.3</u> <u>5</u> _____ Mud / Muck / Silt _____ _____ _____ Other _____ _____ _____ Other _____ _____ _____			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☐ Yes ☐ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____ Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____		
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☒ ☐ ☐ ☐ Fish: ☐ ☒ ☐ ☐ Aquatic Plants: ☐ ☒ ☐ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) _____ Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐		
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 Green/Margell SIGNATURE: Ch 3 DATE: 4/6/16

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Eightmile Creek County: Dixie Date: 4/6/16 Investigators: Marshall / Green

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			60	1	N			
	2					2				
	3					3				
	4			93		4				
	5					5			95	
	6					6				
	7					7				
	8					8				
	9					9				
10	1				70	1				
	2					2				
	3					3				
	4			94		4				
	5					5			94	
	6					6				
	7					7				
	8					8				
	9					9				
20	1				80	1				
	2					2				
	3					3				
	4					4				
	5			93		5			93	
	6					6				
	7					7				
	8					8				
	9					9				
30	1				90	1				
	2					2				
	3					3				
	4					4				
	5			94		5			92	
	6					6				
	7					7				
	8					8				
	9					9				
40	1				100	1				
	2					2				
	3					3				
	4					4				
	5			96		5			94	
	6					6				
	7					7				
	8					8				
	9					9				
50	1					1				
	2					2				
	3					3				
	4					4				
	5			97		5				
	6					6				
	7					7				
	8					8				
	9					9				

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%.

STORET Station Number: GTLHR 0012

Secchi depth 0.8
Estimated? NA

points ranked 4-6 NA
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-2016-3-14-56

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

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

Waterbody: <u>Eightmile Creek</u>	Date: <u>4/6/16</u>	County: <u>Dixie</u>	Storet Number: <u>G/T/LH002</u>
-----------------------------------	---------------------	----------------------	---------------------------------

Analyst: Chris Green / Colby Marshall	Signature: 
---------------------------------------	--

Comments: $LUS < 2m^2$

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.

Spaces for additional taxa names:																					
	Meter Mark									Specime n collected (check)		Meter Mark									Specime n collected (check)
HERBACEOUS SPECIES	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90		90-100	HERBACEOUS SPECIES	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	
Alternanthera philoxeroides											Micranthemum glomeratum										
Bacopa caroliniana											Micranthemum umbrosum										
Bacopa monneri											Myriophyllum aquaticum										
Bidens mitis											Najas guadelupensis										
Boehmeria cylindrica											Nuphar luteum										
Centella asiatica											Orontium aquaticum										
Ceratophyllum demersum											Panicum hemitomon										
Chara											Panicum repens										
Cicuta maculata											Panicum rigidulum										
Cladium jamaicense											Pistia stratioides										
Colocasia esculenta											Polygonum glabra										
Commelina diffusa											Polygonum hydropiperoides										
Commelina virginica											Polygonum punctatum										
Crinum americanum											Pontedaria cordata										
Diodia virginiana											Potamogeton illinoensis										
Eichhornia crassipes											Ruellia simplex										
Eleocharis (wispy viviparous)											Sacciolepis striata										
Hydrilla verticillata											Sagittaria kurziana										
Hydrocotyle											Sagittaria lancifolia										
Hygrophila polysperma											Sagittaria latifolia										
Hymenocallis											Salvinia minima										
Lachnanthes caroliniana											Samolus parviflora										
Landoltia punctata											Saururus cernuus										
Lemna											Sparganium americanum										
Limnophila sessiflora											Typha										
Ludwigia leptocarpa											Vallisneria americana										
Ludwigia palustris											Zizania aquatica										
Ludwigia peruviana																					
Ludwigia repens																					
Luziola fluitans																					
If no Dominant or Co-Dominant were selected, indicate with "X"																					
Indicate %																					