



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

Data Qualified?

Yes / No

April 2018

WIN Station Name: Alligator @ Jacaranda

Date: 11/29/2018

(mm/dd/yyyy)

WIN/ Field ID: G2SD0026

WBID: 2030A

Latitude: 27.05836

County: Sarasota

ORG ID:

Longitude: -82.39513

(Decimal Degrees)

Receiving Body of Water: Lemon Bay

RQ-2018- 11-26-78

(Decimal Degrees)

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
Maryann Dugan							☒ Sample Container	☐ Van Dorn	☐ Pole		
Nicole Reistad							☐ Carboy	☒ Syringe			
							☐ Dipper	☐ Other			
							Depth Measured with <u>82CCM</u>				
							Equipment ID <u>3312A</u>				
							Collection Method				
							☒ Wading	☐ Canoe/Kayak			
							☐ From Shore	☐ Electric Motor			
							☐ Other	☐ Gasoline Motor			
Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded							Meter ID# <u>PROMIXE</u>		Matrix: <u>Fresh</u> / Marine / DI		
Photos: Yes / <u>No</u> / Flow: No Flow / Intestinal / <u>Flowing</u> / NA							Tide: Rising/ Falling/ Slack/ <u>NA</u>		Tide Times: High <u>NA</u> Low <u>NA</u>		
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	1020	0.5	0.25	0.5	5.94	60.1	7.56	0.52	1039	15.7	
CEN				S							
Biological Samples Collected: None <u>HA</u> SCI <u>RPS</u> Algae ID <u>LVS</u> LVI Other:											
SBIO ID Numbers: SBIO-ID: <u>79098</u> HA-ID: <u>15503</u> RPS-ID: <u>9152</u> Macrophyte-ID: <u>11133</u> 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>SA819709D</u>	<u>07/11/19</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				
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-F / ☐ W-TSS / ☐ TURBIDITY					☐ Ice				
Macroinvertebrates		☐ ME-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-EB321-DI ☐ W-EB321-MS					☐ Ice				
Pesticides		☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-EB321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA					☐ Ice ☐ Other				
Notes:							Field ID/WIN ID <u>G2SD0026</u>				
							Location <u>Alligator @ Jacaranda</u>				
Signature: <u>[Signature]</u>							Date: <u>11/29/2018</u>				

Enter Field Parameters, Verify Station ID In LIMS DMT: 11/29/2018

QC Station ID, Field Parameters In LIMS DMT:

(Initials/Date)

Scan/Save Field Sheets

Migrate Data to WIN:

Verify Data in WIN:

(Initials/Date)

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

PUT STICKER UP ^ HERE 2030A <i>alligator</i> <i>JACARANDA</i>		STORET STATION NUMBER:	DATE (MM/DD/YYYY): <i>11/29/2018</i>	SAMPLING AGENCY: FDEP South ROC
FIELD ID/NAME: GSD 0026	COUNTY: <i>Volusia</i>	LOCATION:	RECEIVING BODY OF WATER: <i>Lemon Bay</i>	

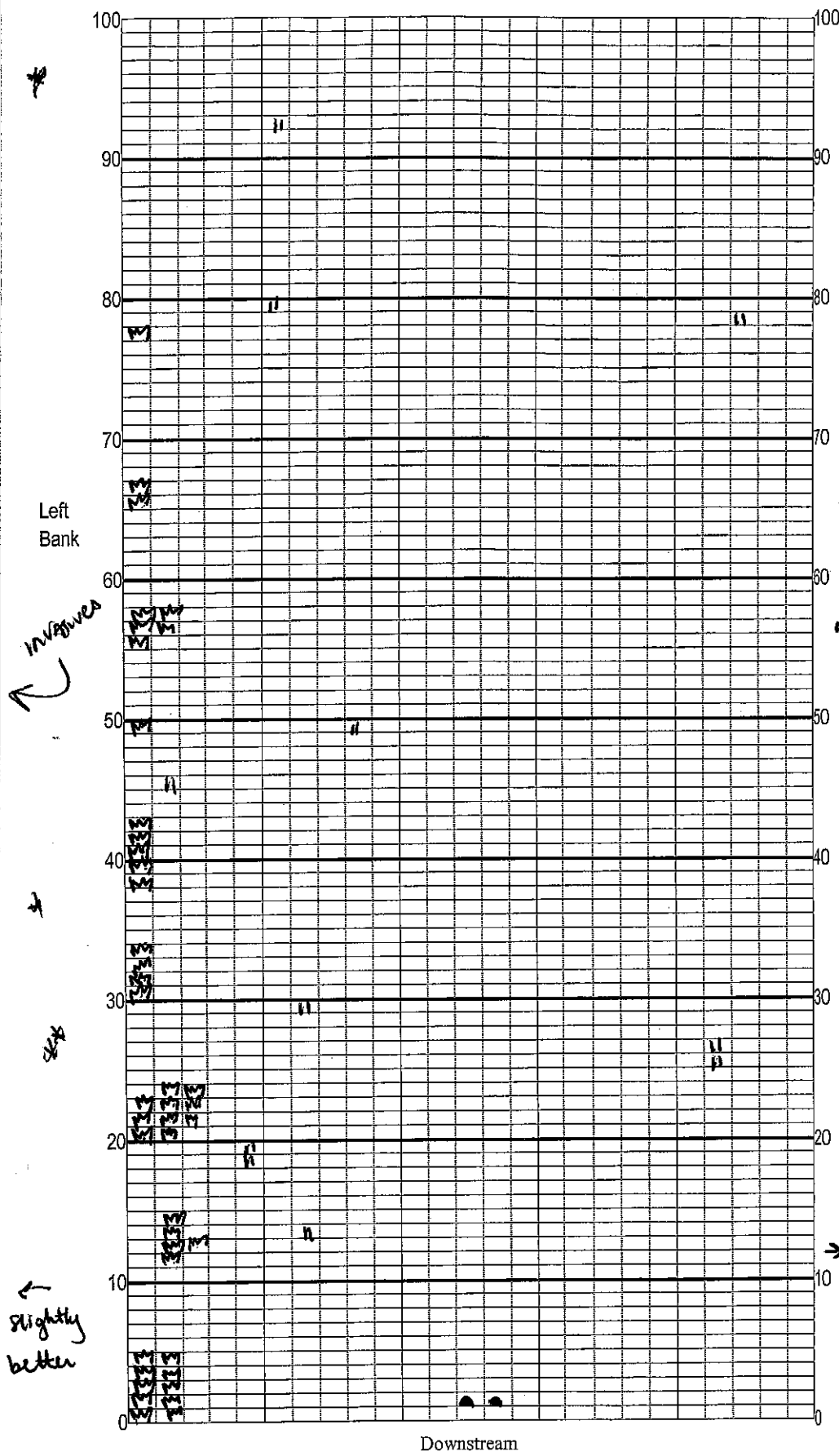
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh 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>1</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 <u>1</u>
Water Velocity <u>10</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 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 <u>10</u> 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>2</u> Primary Score <u>16</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. 5 4 3 <u>2</u> 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>2</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 <u>2</u> 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 <u>4</u> Left Bank <u>4</u>	10 9	8 7 6	5 <u>4</u> <i>R, L</i>	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 <u>2</u> Left Bank <u>10</u>	<u>10</u> 9	8 7 6	5 4	3 <u>2</u> 1 <i>R</i>
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 <u>2</u> Left Bank <u>4</u> Secondary Score <u>28</u>	10 9	8 7 6	5 <u>4</u> <i>L</i>	3 <u>2</u> 1 <i>R</i>

44

TOTAL SCORE

Date: <i>11/29/2018</i>	Analyst: <i>Maryann Jagan</i>	Signature: <i>MD</i>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: 2030A Alligator Creek

Date: 11/29/2018

Sampler: MD, NR

100 m: Latitude 27.058924
Longitude -82.394453

0 m: Latitude 27.058352
Longitude -82.395167

Substrates: Code key, draw proportionate habitat abundance. %

	Snags	<u>0.16</u>	<u>1.1</u>
	Roots/undercut banks	<u>0</u>	<u>0</u>
	Leaf Packs (or mats)	<u>0</u>	<u>0</u>
	Aquatic Macrophytes	<u>0.61</u>	<u>4.3</u>
	<u>Rocks</u>	<u>0.03</u>	<u>.2</u>
	Pools	total # observed = <u>0</u> # range expected = <u>1</u>	

Average width 7 m
Average depth 0.5 m

Velocity measured at 100 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:

1 box = .25 m²
.1 velocity = 105/m
.1 m/s

CANAL-LIKE
very mucky

0.8% AVAILABLE HABITAT

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

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

SAMPLE ID _____ ORG ID _____ LATITUDE 27.0583852
 COUNTY SARASOTA STORET # _____ LONGITUDE -82.395167
 DATE 11/29/2018 TIME _____ SAMPLING AGENCY S RDC
 SITE NAME Alligator (2) JACARANDA WED 2030A
 FIELD ID/NAME G2SD0024 RECEIVING BODY OF WATER Lemon Bay

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☐ Silviculture ☐ Field/Pasture ☐ Agricultural ☐ Residential ☒ Commercial ☒ Industry ☐ Other (Specify) ☐ <u>10</u> <u>85</u> <u>5</u>							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 <u>7.0</u> m wide			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>30</u> Right Bank: <u>2.0</u>			Hydrologic Modification Score (per FT 3101) ☐					
High Water Mark: <u>0.5</u> + <u>0.5</u> = <u>1.0</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>0.25</u> <u>15.7</u> <u>7.5</u> <u>5.94</u> <u>60.1</u> <u>1039</u> <u>0.52</u> <u>0.5</u> Mid: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☒ VOB Bottom: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Meter ID: <u>PRO-MOVE</u> TOTAL DEPTH <u>0.5</u>		
Woody Debris (Snags) ☐ ☐ ☐ Undercut Banks / Roots ☐ ☐ ☐ Leaf Packs or Mat ☐ ☐ ☐ Aquatic Vegetation ☐ ☐ ☐ Rock or Shell Rubble.. ☐ ☐ ☐ Sand..... ☐ ☐ ☐ 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 ☐ Globs ☐ 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

MARYANN DUGAN, NICOLE REISTAD

SIGNATURE:

Maryann Dugan

DATE:

11/29/2018

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>203A</u> <u>ALLIGATOR CREEK (1) JACARANDA</u>					County: <u>SARASOTA</u>		Date: <u>11/29/2018</u>		Investigators: <u>MD, NR</u>	
					STORET Station Number: <u>62SD00026</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			60	1	N			
	2					2				
	3					3				
	4					4				
	5			0		5			0	
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N			70	1	N			
	2					2				
	3					3				
	4					4				
	5			0		5			0	
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N			80	1	N			
	2					2				
	3					3				
	4					4				
	5			26		5			0	
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N			90	1	N			
	2					2				
	3					3				
	4					4				
	5			0		5			0	
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N			100	1	N			
	2					2				
	3					3				
	4					4				
	5			32		5			0	
	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			0						
	6									
	7									
	8									
	9									

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

Date: 11/29/18

County: Sacramento

Waterbody: Alligator

Analyst: MARYANN DUGAN, NICOLE REITAD

Signature: Kenneth S. Jones

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. **bold is exotic invasive**

62-160,800, F.A.C.