FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End of Day CCV: (Yes) / No

WIN Station Name: Lake Haines @ Center **Date:** 10/19/2020

WIN/Field ID: G3CE0039 **WBID:** 1488C **ENR:** **Latitude:** 28.092

County: POLK **Org ID:** 21FLCEN **Longitude:** -81.7058

Receiving Body of Water: Sarasota Bay - Peace - Myakka **RQ-** 2020-09-28-42

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
[x] Natalie Ayala	x	x	x		
[x] Victoria Schwartz	x			x	x
[ ]					
[ ]					

Sampling Equipment

- [x] Sample Container
- [ ] Dipper
- [ ] Syringe
- [ ] Carboy
- [ ] Van Dorn
- [ ] Pole

Depth measured with: Secchi

Secchi Equipment ID: Knothead

Collection Method

- [ ] Wading
- [ ] From Shore
- [ ] Other
- [ ] Canoe/Kayak
- [ ] Electric Motor
- [x] Gasoline Motor

Water Level: [x] Normal [ ] Low [ ] High [ ] Dry [ ] Pooled [ ] Flooded

Meter ID# CRAW DADDY

Photos: YES **Flow:** NA **Tide:**

Tide Times: High: Low:

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

SBIO ID Numbers: SBIO 81641 MACROPHYTE 11732 LIMS 2203506

Notes:

Duplicate Sample

Time Zone: EST **Time:** N/A **Field ID:** N/A (WIN ID_DUP)

WIN DMT Activity ID:

Blank

Time Zone: **Time:** N/A **Field ID:** N/A (Blank Type_DDMMYYYY)

DI Source: N/A **Location:** N/A

DI Type: N/A **Equipment ID:** N/A

LIMS EVENT ID: CE-DIST-2020-10-20-01 **WIN Import ID:** 22871

Enter Field Parameters, Verify Station ID In LIMS DMT: KWM 11/12/20 (Initials/Date) **QC Station ID, Field Parameters In LIMS DMT:** TR 11/12/2020 (Initials/Date)

Scan/Save Field Sheets KWM 11/20/20 (Initials/Date) **Migrate Data to WIN:** KWM 11/20/20 (Initials/Date) **Verify Data In WIN:** (Initials/Date)

RQ-2020-09-28-42
Customer: WQAP
Project ID: SMP

Collected By: Natalie Ayala, Victoria Schwartz
Field Report Prepared By: Natalie Ayala
Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID: G3CE0039

Location: Lake Haines @ Center

Comments:

Matrix: Fresh

(Check one) ☒ GRAB ☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C⁰)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPTh)
10/19/2020	13:49 EST	6.95	87.2	27	7.12	0.282	1 ☐ VOB (S)	5	167.5	0.08
	Central Lab please use top row for login purposes									
	13:55 EST	6.49	81.4	27	6.86	4.596			167.8	0.08

Parameter Suite	Parameter Methods	Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H_2SO_4*	☒ <2	1	A
	Lot # SA0038110 **Exp:**	02/07/21			
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD	☒ Ice ☒ HNO_3*	☐ <2	1	A
	Lot # NA9301040 **Exp:**	10/28/20			
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice		1	A
	Filter Lot # 16930280				
	Syringe Lot # 9149785				
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice		1	A
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates (PJ-2L)	☐ MI-FW-QLDC	☐ Formalin			
Periphyton (PT-50ML)	☐ ALGAE-ID	☐ Ice			
Microbiology (Contract Lab Bottle)	☐ E Coli ☐ F Coli ☐ Enterococci ☐ Contract Lab	☐ Ice			
Molecular (QPCR-P-500ML)	☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD ☐	☐ Ice			
Tracers (BG-500ML)	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides (BG-500ML) (BG-1L)	☐ W-E8321-DI ☐ WE8321-MS ☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)	☐ Ice			
		☐ Ice			

Name:
Natalie Ayala
Victoria Schwartz

Signature: Natalie Ayala

Date: 10/19/2020

*2.0 ml of Preservative used unless noted otherwise.
**MCAA: Monochloroacetic acid buffer solution

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: 28.092

COUNTY: Polk STORET #: _____ LONGITUDE: -81.7058

DATE: 10/19/20 TIME: 13:48 SAMPLING AGENCY: 21FLCEN

SITE NAME: Lake Haines WBID: 1488C

FIELD ID/NAME: G3CE0039 LAKE SIZE: 1.04946 sq. miles RQ: 2020-09-28-42

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS): open land / urban

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Other (Specify)
30				50			20

LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer)

LDI: _____

Land Use Source & Year: _____

Local Watershed Erosion (select one) : ☐ None ☐ Slight ☒ Moderate ☐ Heavy

Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☐ Moderate ☐ Heavy

Artificially Impounded ☐ Yes ☒ No

STORMWATER INPUTS 8	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				
	20	19	18	17	16	15	14	13	12	11	10	9	(8)	7	6	5	4	3	2	1
LAKESIDE ALTERATIONS 6	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)				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	(6)	5	4	3	2	1
BUFFER ZONE 9	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				
	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 ☒ pH<2 ☐ No

Color Sample Taken? ☒ Yes ☐ No Lot # SA0038110 Exp. Date: 02/07/21

Alkalinity Sample Taken? ☒ Yes ☐ No

Water Level ☐ Low ☒ Normal ☐ High

Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____

Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____

Meter Readings:	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat. (%)	Cond. (UMHO/CM)	Salinity (PPT)
Top:	0.282	27.0	7.12	6.95	87.2	167.5	0.08
Mid-Depth:							
Bottom :	4.596	27.0	6.86	6.49	81.4	167.8	0.08

Meter ID: Crawdaddy

Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid

Color: ☒ Clear ☐ Tannic ☐ Green

SECCHI (M) 1.0 VOB ☐

Total Station Depth (M) 5.0

Sediment Type: (may check more than one) N/A Sample Taken? ☐ Yes ☒ No

☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated

☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____

Sediment Odors: N/A ☐ Normal ☐ Other (Specify): _____ ☐ Anaerobic

Biological Communities:

LVI Conducted? ☒ Yes ☐ No

Phytoplankton Sample Taken? ☐ Yes ☒ No

Sample Preserved? ☐ Yes ☐ No

Lot #: N/A Exp Date: N/A

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	☐	☐	☒	☐

Additional Notes:

Weather Conditions : Overcast w/ on/off rain
Choppy water

SAMPLING TEAM: Natalie Ayala / Victoria Schwark

SIGNATURE: [signature] / Nat Sq **DATE:** 10/19/20

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Lake Haines	County: Polk	Date: 10/19/20
Analyst: Natalie Ayala / Victoria Schwartz	Signature: [signature] / [signature]	STORET:

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

SPECIES	1	4	7	10	Collected? (√)
Acer rubrum	/		/	/	
Alternanthera philoxeroides	/	/			
Amaranthus australis					
Andropogon sp.	/				
Azolla filiculoides (A. caroliniana)		/			
Baccharis sp.					
Bacopa caroliniana					
Bacopa monnieri					
Bidens alba					
Bidens laevis					
Bidens mitis					
Blechnum serrulatum					
Boehmeria cylindrica					
Brasenia schreberi					
Cabomba caroliniana					
Canna					
Centella asiatica					
Cephalanthus occidentalis					
Ceratophyllum demersum	/	/			
Chara sp.					
Cinnamomum camphora					
Cladium jamaicense					
Colocasia esculenta	/		/		
*Commelina					
Crinum americanum					
***Cyperus alternifolius (C. involucratus)**					
Cyperus articulatus					
Cyperus haspan					
*Cyperus lecontei					
*Cyperus polystachyos					
*Cyperus odoratus		/			
*Cyperus surinamensis					
Cyrilla racemiflora					
Decodon verticillatus					
Diodia virginiana					
*Echinochloa crus-galli					
*Echinochloa muricatum					
Echinochloa walteri					
Eclipta prostrata (E. alba)					
Eichhornia crassipes	/	/	/	/	
*Eleocharis					
Eleocharis cellulosa					
*Eleocharis elongata					
Eleocharis equisetoides					
Eleocharis interstincta					
Eleocharis submersed viviparous					
*Eriocaulon compressum					
*Eriocaulon decangulare					
Eupatorium capillifolium					
Fraxinus					

SPECIES	1	4	7	10	Collected? (√)
Fuirena scirpoides					
Gordonia lasianthus					
Habenaria repens					
Hibiscus coccineus					
Hibiscus grandiflora					
Hydrilla verticillata	C	C	/	/	
Hydrocotyle sp.					
Hygrophila polysperma					
Hymenocallis sp.					
*Hypericum fasciculatum					
*Hypericum hypericoides					
*Hypericum myrtifolium					
Ilex cassine					
Ipomoea aquatica					
Ipomoea sagittata					
Itea virginica					
Juncus effusus					
*Juncus marginatus					
*Juncus megacephalus					
Juncus repens					
*Juncus scirpoides					
Lachnanthes caroliniana					
Leersia hexandra					
Landoltia punctata (Spirodela punctata)	/				
Lemna sp.	Sam	/			
Leucothoe racemosa (Eubotrys racemosa)					
Limnobium spongia					
Limnophila sessiliflora					
Liquidamber styraciflua					
*Ludwigia arcuata					
*Ludwigia grandiflora					
*Ludwigia hexapetala					
*Ludwigia leptocarpa		/			
Ludwigia (native)					
*Ludwigia octovalvis	/				
***Ludwigia peruviana**	/	/	/	D	
*Ludwigia repens					
Ludwigia suffruticosa					
Luziola fluitans (Hydrochloa carolinensis)					
Magnolia virginiana			/		
Mayaca fluviatilis					
Melaleuca quinquenervia					
Micranthemum glomeratum					
Micranthemum umbrosum					
Mikania scandens	/	/		/	
Mimosa pigra					
Myrica cerifera			/		

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

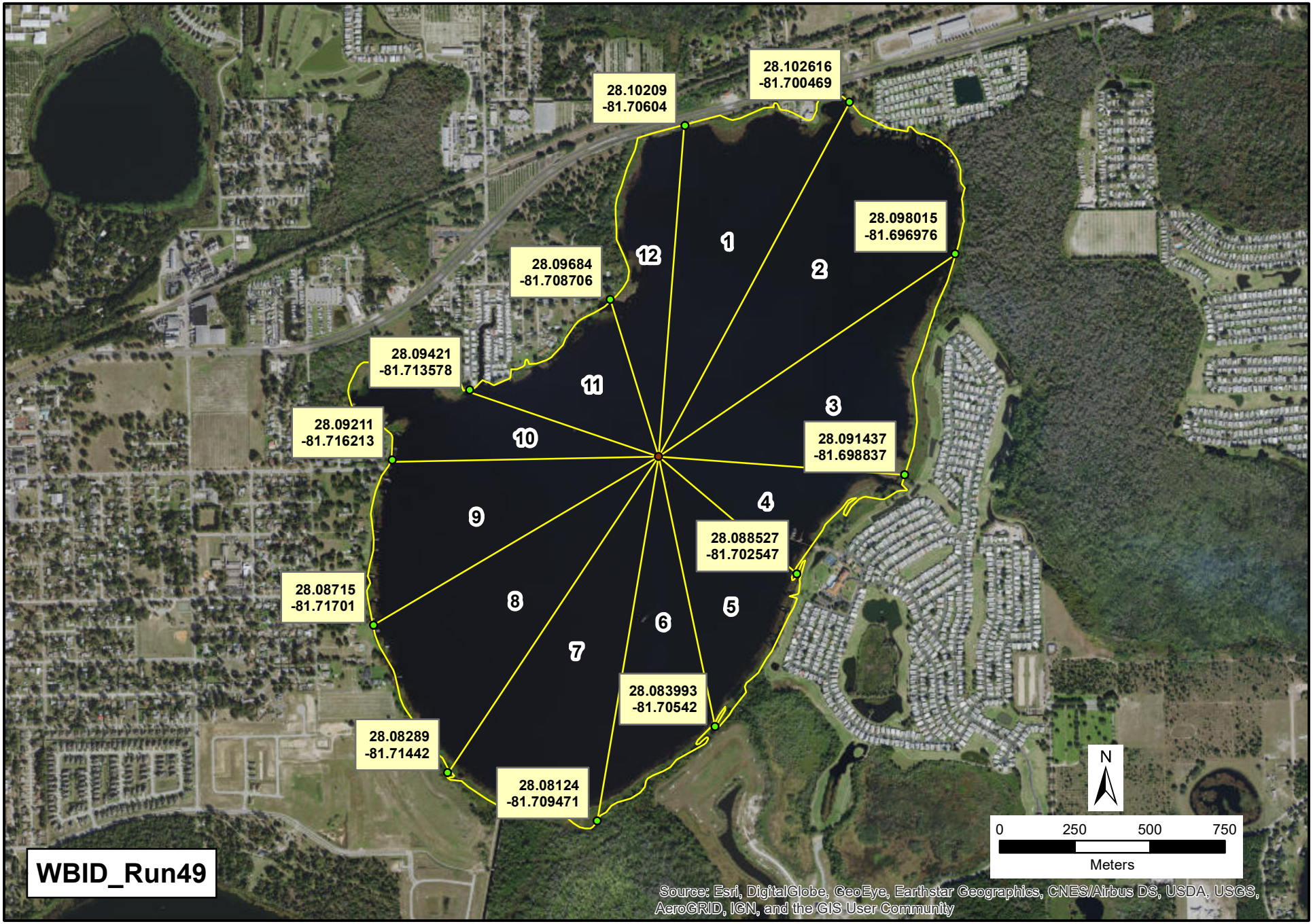
Site: Lake Haines

Date: 10/19/20

SPECIES	1	4	7	10	Collected? (√)
Myriophyllum aquaticum					
*Myriophyllum heterophyllum					
*Myriophyllum laxum					
*Myriophyllum pinnatum					
Myriophyllum spicatum					
*Najas filifolia					
*Najas guadalupensis	✓	✓			
*Najas minor					
Nelumbo lutea					
Nitella spp.					
Nuphar sp.	✓			✓	
Nymphaea mexicana					
Nymphaea odorata					
Nymphoides aquatica					
Nyssa sylvatica var. biflora					
Orontium aquaticum					
Osmunda cinnamomea					
Osmunda regalis					
Panicum hemitomon			VS	VS	
Panicum repens	✓		✓	✓	
Paspalidium geminatum					
*Paspalum repens					
Paspalum urvillei					
Peltandra sp.					
Persea sp.					
Pennisetum purpureum					
Phragmites australis					
Pinus elliottii					
Pistia stratioides					
Pluchea sp.					
*Polygonum glabrum (densiflorum)					
Polygonum hirsutum					
*Polygonum hydropiperoides					
*Polygonum punctatum					
*Polygonum punctatum	✓			✓	✓
Pontederia cordata					
*Potamogeton diversifolius					
*Potamogeton illinoensis					
*Potamogeton pusillus					
*Potamogeton pectinatus (Stuckenia pectinatus)					
Proserpinaca pectinata					
*Rhexia ______					
*Rhynchospora corniculata					
*Rhynchospora inundata					
Rhynochospora nitens					
Ricciocarpus natans					
Sabal palmetto					
Sacciolepis striata		✓	✓	✓	✓
*Sagittaria filiformis					
*Sagittaria graminea					
*Sagittaria isoetiformis					
Sagittaria lancifolia					
Sagittaria latifolia					

SPECIES	1	4	7	10	Collected? (√)
Salix caroliniana	✓	✓	✓		
Salvinia minima	✓	✓		✓	
Sambucus canadensis					
Sapium sebiferum	✓			✓	
Saururus cernuus					
Schinus terebinthifolius	✓		✓	✓	
*Schoenoplectus californicus					
*Schoenoplectus pungens					
*Schoenoplectus tabernaemontani (Scirpus validus)					
Scirpus cubensis (Oxycaryon cubense)		✓			
Scirpus cyperinus					
*Sesbania ______					
Solidago sp.					
Sparganium americanum					
Spartina bakeri					
Spirodela polyrhiza					
Taxodium sp.	✓			✓	
Thalia geniculata					
Thelypteris interrupta					
Thelypteris palustris					
Triadenum virginicum					
Typha sp.	C	C	D	C	
Urochloa mutica (Brachiaria mutica)				✓	
*Utricularia foliosa					
*Utricularia gibba (U. biflora)		✓			
*Utricularia inflata					
*Utricularia purpurea					
*Utricularia radiata					
*Utricularia resupinata					
Vallisneria americana	✓	✓	✓	✓	
Vigna luteola					
Vitis sp.					
*Websteria confervoides					
Wedelia trilobata (Sphagneticola trilobata)					
Wolffiella spp.					
Woodwardia virginica					
Xyris sp.					
Zizania aquatica					
Zizaniopsis milacea					
REMOVED, NOT WETLAND PLANT- KM ~~Broussonetia papyrifera (paper mulberry)~~	✓				✓
REMOVED, NOT WETLAND PLANT- KM ~~Enterolobium contortisiliquum~~			✓		

LVI Map for Lake Haines , WBID 1488C



Current Date: 5/13/2020

Date Saved: 5/13/2020