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## APPENDIX D

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### Point-Intercept Aquatic Macrophyte Survey Data



## Big Saint Germain Lake

	Scientific Name	Common Name	LFOO (%)	
			2010	2019
Dicots	<i>Myriophyllum spicatum</i>	Eurasian water milfoil	0.0	0.0
	<i>Ceratophyllum demersum</i>	Coontail	17.2	18.8
	<i>Myriophyllum sibiricum</i>	Northern water milfoil	9.5	9.2
	<i>Ranunculus aquatilis</i>	White water crowfoot	5.7	1.8
	<i>Nuphar variegata</i>	Spatterdock	1.4	0.4
	<i>Ranunculus flammula</i>	Creeping spearwort	1.4	0.0
	<i>Nymphaea odorata</i>	White water lily	1.0	0.4
	<i>Bidens beckii</i>	Water marigold	0.3	1.1
	<i>Utricularia vulgaris</i>	Common bladderwort	0.7	0.0
	<i>Myriophyllum tenellum</i>	Dwarf water milfoil	0.0	0.7
Non-dicots	<i>Potamogeton crispus</i>	Curly-leaf pondweed	0.0	0.0
	<i>Vallisneria americana</i>	Wild celery	38.5	45.6
	<i>Najas flexilis</i>	Slender naiad	30.4	42.3
	<i>Potamogeton gramineus</i>	Variable-leaf pondweed	20.9	19.1
	<i>Potamogeton richardsonii</i>	Clasping-leaf pondweed	19.9	13.6
	<i>Elodea canadensis</i>	Common waterweed	5.1	18.4
	<i>Potamogeton friesii</i>	Fries' pondweed	7.8	12.5
	<i>Potamogeton zosteriformis</i>	Flat-stem pondweed	13.2	3.3
	<i>Potamogeton praelongus</i>	White-stem pondweed	12.5	2.2
	<i>Potamogeton pusillus</i>	Small pondweed	4.1	8.5
	<i>Nitella</i> spp.	Stoneworts	10.1	1.1
	<i>Sagittaria</i> sp. (rosette)	Arrowhead sp. (rosette)	4.7	6.6
	<i>Chara</i> spp.	Muskgrasses	0.7	9.6
	<i>Isoetes</i> spp.	Quillwort spp.	0.0	9.6
	<i>Heteranthera dubia</i>	Water stargrass	6.4	1.8
	<i>Eleocharis acicularis</i>	Needle spikerush	2.4	3.7
	<i>Isoetes lacustris</i>	Lake quillwort	5.1	0.0
	<i>Potamogeton amplifolius</i>	Large-leaf pondweed	3.7	0.7
	<i>Schoenoplectus acutus</i>	Hardstem bulrush	2.7	1.5
	<i>Potamogeton spirillus</i>	Spiral-fruited pondweed	0.3	2.2
	Filamentous algae	Filamentous algae	0.0	2.6
	<i>Potamogeton berchtoldii</i>	Slender pondweed	0.0	2.2
	<i>Potamogeton strictifolius</i>	Stiff pondweed	0.0	1.8
	<i>Potamogeton robbinsii</i>	Fern-leaf pondweed	1.0	0.4
	<i>Eleocharis palustris</i>	Creeping spikerush	1.4	0.0
	<i>Lemna turionifera</i>	Turion duckweed	1.0	0.0
	<i>Stuckenia pectinata</i>	Sago pondweed	0.7	0.0
	<i>Potamogeton hybrid 1</i>	Pondweed Hybrid 1	0.0	0.7
	<i>Spirodela polyrhiza</i>	Greater duckweed	0.3	0.0
	<i>Sagittaria rigida</i>	Stiff arrowhead	0.3	0.0
	<i>Potamogeton illinoensis</i>	Illinois pondweed	0.3	0.0
	<i>Lemna trisulca</i>	Forked duckweed	0.0	0.4

## Lake Content

	Scientific Name	Common Name	LFOO (%)	
			2010	2019
Dicots	<i>Myriophyllum spicatum</i>	Eurasian water milfoil	0.0	0.0
	<i>Ceratophyllum demersum</i>	Coontail	64.1	49.7
	<i>Ranunculus aquatilis</i>	White water crowfoot	8.5	0.0
	<i>Myriophyllum tenellum</i>	Dwarf water milfoil	2.7	3.1
	<i>Nymphaea odorata</i>	White water lily	2.0	1.0
	<i>Myriophyllum sibiricum</i>	Northern water milfoil	1.4	0.7
	<i>Nuphar variegata</i>	Spatterdock	0.7	0.3
	<i>Brasenia schreberi</i>	Watershield	0.7	0.3
Non-dicots	<i>Potamogeton crispus</i>	Curly-leaf pondweed	0.0	0.0
	<i>Potamogeton robbinsii</i>	Fern-leaf pondweed	46.4	51.7
	<i>Potamogeton zosteriformis</i>	Flat-stem pondweed	59.0	37.0
	<i>Elodea canadensis</i>	Common waterweed	25.8	32.5
	<i>Vallisneria americana</i>	Wild celery	22.7	29.5
	<i>Potamogeton praelongus</i>	White-stem pondweed	14.2	3.8
	<i>Potamogeton amplifolius</i>	Large-leaf pondweed	8.8	5.5
	<i>Potamogeton richardsonii</i>	Clasping-leaf pondweed	5.8	5.8
	<i>Isoetes echinospora</i>	Spiny-spored quillwort	7.1	0.0
	<i>Eleocharis acicularis</i>	Needle spikerush	2.7	3.4
	Filamentous algae	Filamentous algae	1.0	4.5
	<i>Chara spp.</i>	Muskgrasses	0.7	4.1
	<i>Lemna trisulca</i>	Forked duckweed	2.0	1.7
	<i>Sagittaria sp. (rosette)</i>	Arrowhead sp. (rosette)	1.0	2.1
	<i>Lobelia dortmanna</i>	Water lobelia	2.0	1.0
	<i>Isoetes spp.</i>	Quillwort spp.	0.0	3.1
	<i>Heteranthera dubia</i>	Water stargrass	1.7	1.4
	<i>Najas flexilis</i>	Slender naiad	0.7	1.7
	Freshwater sponge	Freshwater sponge	2.0	0.3
	<i>Potamogeton pusillus</i>	Small pondweed	0.3	1.7
	<i>Sparganium eurycarpum</i>	Common bur-reed	1.0	0.7
	<i>Juncus pelocarpus</i>	Brown-fruited rush	0.3	0.7
	<i>Potamogeton gramineus</i>	Variable-leaf pondweed	0.0	0.7
	<i>Potamogeton friesii</i>	Fries' pondweed	0.7	0.0
	<i>Nitella spp.</i>	Stoneworts	0.7	0.0
	<i>Elatine minima</i>	Waterwort	0.7	0.0
	<i>Spirodela polyrhiza</i>	Greater duckweed	0.0	0.3
	<i>Sparganium angustifolium</i>	Narrow-leaf bur-reed	0.3	0.0
	<i>Sagittaria graminea</i>	Grass-leaved arrowhead	0.3	0.0
	<i>Potamogeton illinoensis</i>	Illinois pondweed	0.3	0.0
	<i>Pontederia cordata</i>	Pickerelweed	0.0	0.3
	<i>Lemna turionifera</i>	Turion duckweed	0.3	0.0
	<i>Lemna minor</i>	Lesser duckweed	0.0	0.3
	<i>Eriocaulon aquaticum</i>	Pipewort	0.0	0.3

## Fawn Lake

	Scientific Name	Common Name	LFOO (%)	
			2010	2019
Dicots	<i>Myriophyllum spicatum</i>	Eurasian water milfoil	0.0	0.0
	<i>Ceratophyllum demersum</i>	Coontail	97.6	81.5
	<i>Myriophyllum sibiricum</i>	Northern water milfoil	16.9	12.3
	<i>Nymphaea odorata</i>	White water lily	15.7	12.3
	<i>Ranunculus aquatilis</i>	White water crowfoot	10.8	0.0
	<i>Nuphar variegata</i>	Spatterdock	2.4	0.0
	<i>Bidens beckii</i>	Water marigold	0.0	1.2
Non-dicots	<i>Potamogeton crispus</i>	Curly-leaf pondweed	0.0	0.0
	<i>Elodea canadensis</i>	Common waterweed	96.4	95.1
	<i>Potamogeton robbinsii</i>	Fern-leaf pondweed	65.1	39.5
	<i>Potamogeton zosteriformis</i>	Flat-stem pondweed	74.7	9.9
	<i>Vallisneria americana</i>	Wild celery	24.1	32.1
	<i>Potamogeton amplifolius</i>	Large-leaf pondweed	21.7	4.9
	<i>Chara spp.</i>	Muskgrasses	0.0	27.2
	<i>Najas flexilis</i>	Slender naiad	4.8	18.5
	<i>Potamogeton richardsonii</i>	Clasping-leaf pondweed	15.7	6.2
	<i>Potamogeton praelongus</i>	White-stem pondweed	19.3	0.0
	<i>Potamogeton berchtoldii</i>	Slender pondweed	0.0	19.8
	<i>Potamogeton spirillus</i>	Spiral-fruited pondweed	7.2	9.9
	<i>Potamogeton vaseyi</i>	Vasey's pondweed	1.2	8.6
	<i>Potamogeton foliosus</i>	Leafy pondweed	0.0	7.4
	<i>Nitella spp.</i>	Stoneworts	7.2	0.0
	<i>Lemna turionifera</i>	Turion duckweed	4.8	2.5
	<i>Spirodela polyrhiza</i>	Greater duckweed	3.6	2.5
	<i>Lemna trisulca</i>	Forked duckweed	3.6	1.2
	<i>Sagittaria graminea</i>	Grass-leaved arrowhead	3.6	0.0
	<i>Heteranthera dubia</i>	Water stargrass	0.0	3.7
	<i>Typha angustifolia</i>	Narrow-leaved cattail	1.2	0.0
	<i>Sparganium eurycarpum</i>	Common bur-reed	1.2	0.0
	<i>Sagittaria latifolia</i>	Common arrowhead	1.2	0.0
	<i>Calla palustris</i>	Water arum	1.2	0.0

## Alma Lake

	Scientific Name	Common Name	LFOO (%)	
			2010	2019
Dicots	<i>Myriophyllum spicatum</i>	Eurasian water milfoil	0.0	0.0
	<i>Myriophyllum tenellum</i>	Dwarf water milfoil	15.3	19.0
	<i>Utricularia resupinata</i>	Northeastern bladderwort	18.6	3.3
	<i>Ranunculus flammula</i>	Creeping spearwort	8.7	1.1
	<i>Brasenia schreberi</i>	Watershield	3.3	4.3
	<i>Nymphaea odorata</i>	White water lily	3.3	0.5
	<i>Nuphar variegata</i>	Spatterdock	0.5	0.0
Non-dicots	<i>Potamogeton crispus</i>	Curly-leaf pondweed	0.0	0.0
	<i>Nitella spp.</i>	Stoneworts	75.4	14.7
	<i>Elodea canadensis</i>	Common waterweed	37.2	1.6
	<i>Chara spp.</i>	Muskgrasses	1.1	14.7
	<i>Potamogeton amplifolius</i>	Large-leaf pondweed	9.3	6.0
	<i>Potamogeton pusillus</i>	Small pondweed	11.5	2.2
	<i>Isoetes spp.</i>	Quillwort spp.	0.0	8.2
	<i>Juncus pelocarpus</i>	Brown-fruited rush	6.0	1.1
	<i>Elodea nuttallii</i>	Slender waterweed	0.0	5.4
	<i>Potamogeton illinoensis</i>	Illinois pondweed	0.0	4.3
	<i>Isoetes lacustris</i>	Lake quillwort	4.4	0.0
	<i>Lobelia dortmanna</i>	Water lobelia	3.3	0.5
	<i>Eleocharis acicularis</i>	Needle spikerush	1.6	2.2
	<i>Elatine minima</i>	Waterwort	3.3	0.5
	<i>Eriocaulon aquaticum</i>	Pipewort	1.6	1.1
	<i>Vallisneria americana</i>	Wild celery	1.1	1.1
	<i>Sagittaria sp. (rosette)</i>	Arrowhead sp. (rosette)	1.6	0.0
	<i>Sparganium angustifolium</i>	Narrow-leaf bur-reed	1.1	0.0
	<i>Freshwater sponge</i>	Freshwater sponge	0.5	0.5
	<i>Sparganium sp.</i>	Bur-reed sp.	0.0	0.5
	<i>Carex lasiocarpa</i>	Narrow-leaved woolly sedge	0.5	0.0
<i>Fissidens spp. &amp; Fontinalis spp.</i>	Aquatic Moss	0.0	0.5	

## Moon Lake

	Scientific Name	Common Name	LFOO (%)	
			2010	2019
Dicots	<i>Myriophyllum spicatum</i>	Eurasian water milfoil	0.0	0.0
	<i>Myriophyllum tenellum</i>	Dwarf water milfoil	10.3	14.9
	<i>Utricularia resupinata</i>	Northeastern bladderwort	7.9	13.4
	<i>Ranunculus flammula</i>	Creeping spearwort	3.8	3.0
	<i>Brasenia schreberi</i>	Watershield	2.4	0.5
	<i>Ceratophyllum demersum</i>	Coontail	0.3	1.5
	<i>Utricularia vulgaris</i>	Common bladderwort	0.0	0.5
	<i>Nymphaea odorata</i>	White water lily	0.3	0.0
Non-dicots	<i>Potamogeton crispus</i>	Curly-leaf pondweed	0.0	0.0
	<i>Nitella</i> spp.	Stoneworts	41.0	1.5
	<i>Juncus pelocarpus</i>	Brown-fruited rush	13.4	7.5
	<i>Elodea canadensis</i>	Common waterweed	7.9	8.5
	<i>Chara</i> spp.	Muskgrasses	2.4	11.9
	<i>Vallisneria americana</i>	Wild celery	3.4	6.5
	<i>Isoetes lacustris</i>	Lake quillwort	6.2	0.0
	<i>Potamogeton pusillus</i>	Small pondweed	1.7	5.5
	<i>Isoetes</i> spp.	Quillwort spp.	0.0	7.5
	<i>Eleocharis acicularis</i>	Needle spikerush	1.4	5.5
	<i>Eriocaulon aquaticum</i>	Pipewort	3.4	1.0
	<i>Elatine minima</i>	Waterwort	3.8	0.0
	<i>Sagittaria</i> sp. (rosette)	Arrowhead sp. (rosette)	1.4	3.0
	<i>Zizania palustris</i>	Northern wild rice	2.4	0.0
	<i>Sparganium angustifolium</i>	Narrow-leaf bur-reed	2.4	0.0
	<i>Elodea nuttallii</i>	Slender waterweed	0.0	3.0
	<i>Lobelia dortmanna</i>	Water lobelia	1.4	0.5
	<i>Gratiola aurea</i>	Golden pert	1.7	0.0
	<i>Potamogeton spirillus</i>	Spiral-fruited pondweed	0.3	1.5
	<i>Potamogeton amplifolius</i>	Large-leaf pondweed	0.3	1.5
	Filamentous algae	Filamentous algae	0.0	2.0
	<i>Najas flexilis</i>	Slender naiad	0.0	1.5
	<i>Eleocharis palustris</i>	Creeping spikerush	1.0	0.0
	Freshwater sponge	Freshwater sponge	0.3	0.5
	<i>Schoenoplectus subterminalis</i>	Water bulrush	0.0	0.5
	<i>Heteranthera dubia</i>	Water stargrass	0.3	0.0

## Found Lake

	Scientific Name	Common Name	LFOO (%)		
			2010	2018	2020
Dicots	<i>Ceratophyllum demersum</i>	Coontail	30.9	7.0	4.8
	<i>Myriophyllum tenellum</i>	Dwarf watermilfoil	2.6	3.4	2.7
	<i>Nuphar variegata</i>	Spatterdock	1.9	1.5	1.1
	<i>Nymphaea odorata</i>	White water lily	0.7	1.5	1.1
	<i>Brasenia schreberi</i>	Watershield	0.7	0.9	0.0
	<i>Utricularia vulgaris</i>	Common bladderwort	0.5	0.3	0.0
	<i>Ranunculus aquatilis</i>	White water crowfoot	0.2	0.0	0.0
	<i>Myriophyllum sibiricum</i>	Northern watermilfoil	0.2	0.0	0.0
Non-dicots	<i>Elodea canadensis</i>	Common waterweed	43.3	0.3	2.1
	<i>Chara &amp; Nitella</i>	Charophytes	28.1	7.6	7.0
	<i>Vallisneria americana</i>	Wild celery	7.2	14.4	25.1
	<i>Potamogeton robbinsii</i>	Fern-leaf pondweed	8.6	15.3	16.0
	<i>Nitella spp.</i>	Stoneworts	20.9	0.0	0.0
	<i>Chara spp.</i>	Muskgrasses	8.4	7.6	7.0
	<i>Potamogeton zosteriformis</i>	Flat-stem pondweed	19.3	0.0	0.0
	<i>Potamogeton amplifolius</i>	Large-leaf pondweed	18.1	0.6	0.5
	<i>Potamogeton praelongus</i>	White-stem pondweed	9.8	8.9	1.1
	<i>Potamogeton gramineus</i>	Variable-leaf pondweed	7.0	2.8	7.5
	<i>Najas flexilis</i>	Slender naiad	5.1	4.3	8.0
	<i>Potamogeton berchtoldii &amp; P. pusillus</i>	Slender & Small pondweeds	10.5	0.6	2.7
	<i>Potamogeton pusillus</i>	Small pondweed	10.5	0.6	0.5
	<i>Juncus pelocarpus</i>	Brown-fruited rush	3.7	2.4	5.3
	<i>Isoetes spp.</i>	Quillwort spp.	2.6	1.8	5.3
	<i>Eleocharis acicularis</i>	Needle spikerush	1.9	0.9	3.2
	<i>Elatine minima</i>	Waterwort	3.3	0.0	1.1
	<i>Potamogeton berchtoldii</i>	Slender pondweed	0.0	0.0	2.1
	<i>Eleocharis palustris</i>	Creeping spikerush	0.9	1.2	0.0
	<i>Potamogeton vaseyi</i>	Vasey's pondweed	1.6	0.0	0.0
	<i>Potamogeton richardsonii</i>	Clasping-leaf pondweed	0.5	0.0	1.1
	<i>Potamogeton hybrid 1</i>	Pondweed Hybrid 1	1.4	0.0	0.0
	<i>Lobelia dortmanna</i>	Water lobelia	0.2	0.3	1.1
	<i>Najas guadalupensis</i>	Southern naiad	0.0	0.0	1.1
	<i>Potamogeton illinoensis</i>	Illinois pondweed	0.5	0.0	0.0
	<i>Sparganium fluctuans</i>	Floating-leaf bur-reed	0.0	0.3	0.0
	<i>Sparganium angustifolium</i>	Narrow-leaf bur-reed	0.0	0.3	0.0
	<i>Sagittaria sp. (rosette)</i>	Arrowhead sp. (rosette)	0.0	0.3	0.0
	<i>Pontederia cordata</i>	Pickeralweed	0.2	0.0	0.0
	<i>Persicaria amphibia</i>	Water smartweed	0.2	0.0	0.0
	<i>Fissidens spp. &amp; Fontinalis spp.</i>	Aquatic Moss	0.0	0.3	0.0
	<i>Elodea nuttallii</i>	Slender waterweed	0.0	0.3	0.0
	<i>Carex vesicaria</i>	Blister sedge	0.2	0.0	0.0