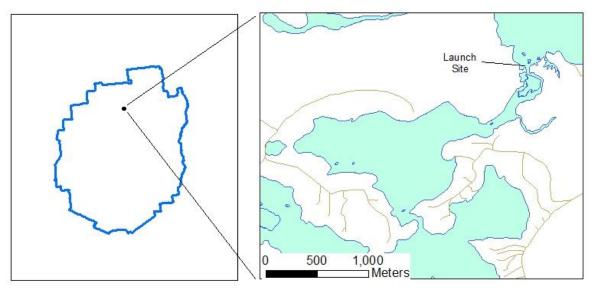
Spitfire Lake & Slough Aquatic Plant Survey 2012

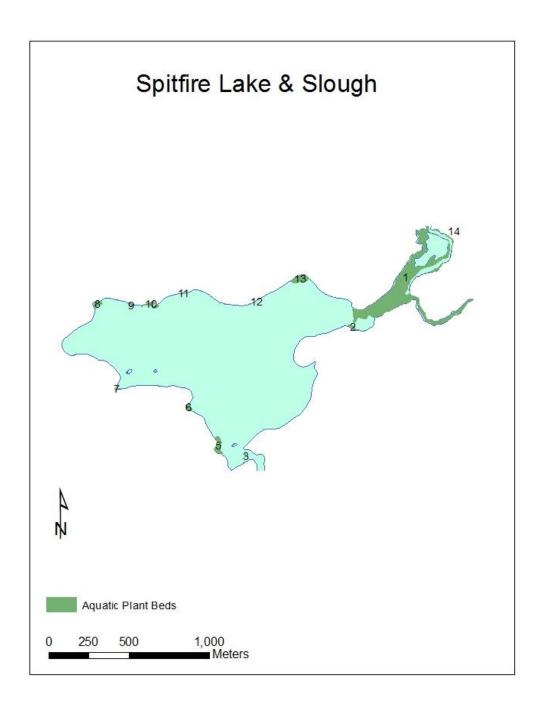


Map 100: Location of Spitfire Lake & Slough.

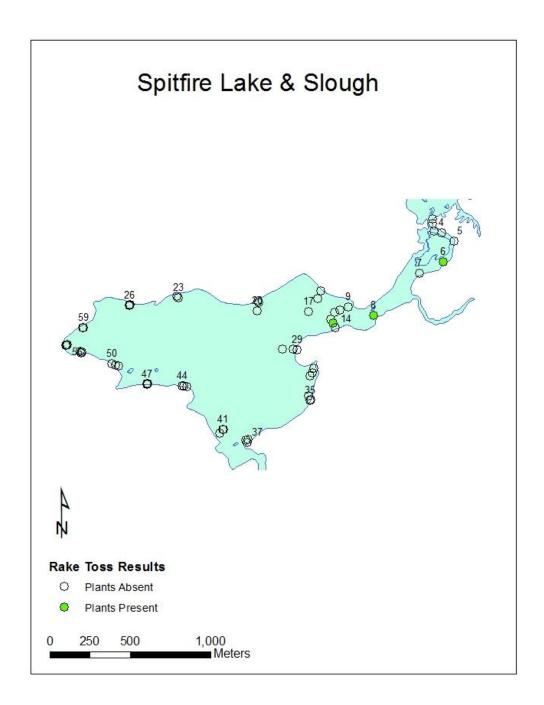
Spitfire Lake is located in the town of Brighton in Franklin County, New York (Map 100). The 275 acre water was accessed through Lower St. Regis Lake to the north. The NY state canoe launch is located on Paul Smith's College campus at the intersection of State Routes 86 and 30.

An aquatic plant survey of Spitfire Lake was conducted on 14-June-2012. No invasive aquatic species were detected during the survey. Aquatic plant coverage in Spitfire Lake was moderate, comprised of 13 aquatic plant beds that collectively covered 23.6 acres or 8.6% of the surface area of the lake (Map 101). Fourteen different aquatic species were identified during this survey. Common species of the lake included Bur-reed (*Sparganium sp.*), and Spatterdock (*Nuphar variegata*). Common bladderwort (*Utricularia vulgaris*) and Shortspike watermilfoil (*Myriophyllum sibiricum*) were the only species found which could be easily confused with invasive species (Table 69).

Of the 59 rake tosses spaced throughout the littoral zone of the lake (Map 102), 3 had acquired plants upon recovery (5.1%). All plants found on the rakes after retrieval were detected during the surface survey (Table 70).



Map 101: Location of the aquatic plant beds detected in Spitfire Lake & Slough during the surface survey performed on 14 June, 2012. Data for Plant Beds can be found on Table 69.



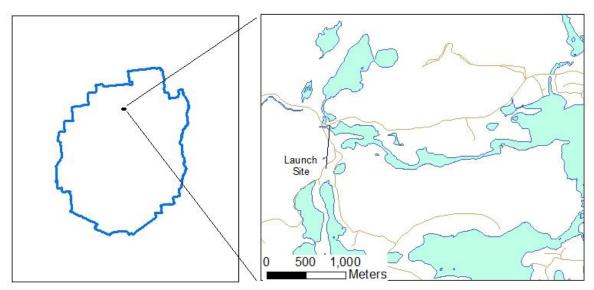
Map 102: Rake toss locations on Spitfire Lake & Slough, 14 June, 2012. Open circles represent locations where no plants were detected, closed circles represent locations where plants were encountered on the rake. Data for Rake Tosses can be found on Table 70. Table 69: Percent cover of aquatic plant species detected at each plant bed in Spitfire Lake. Refer to Map 101 for bed locations. A = Abundant (<50% cover), C = Common (25-50%), P = Present (15-25%), O = Occasional (5-15%), and R = Rare (<5%).

Spitfire Lake			Plant Bed Numbers												
			1	2	3	4	5	6	7	8	9	10	11	12	13
Scientific Name	Common Name	AREA (M ²)	81184	797	224	75	3527	1297	169	1584	251	2113	151	16	3992
Brasenia schreberi	Water shield		0	-	-	-	-	-	-	-	-	-	1	-	-
Eriocaulon sp.	Pipewort		-	-	-	-	-	-	-	0	R	0	Р	-	-
Myriophyllum sibiricum	Shortspike watermilfoil		R	-	-	-	-	-	-	-	-	-	1	-	-
Nuphar variegata	Spatterdock		0	R	-	R	С	0	0	0	-	0	1	-	-
Nymphaea odorata	White waterlily		R	R	-	-	А	-	-	-	-	-	1	-	-
Potamogeton amplifolius	Large-leaf pondweed		Р	-	С	-	-	-	-	-	-	-	1	-	-
Potamogeton epihydrus	Ribbon-leaf pondweed		R	-	-	-	-	-	-	-	-	-	1	-	-
Potamogeton gramineus	Variable-leaf pondweed		0	-	-	-	-	-	-	-	-	-	1	-	R
Potamogeton natans	Floating pondweed		-	-	-	-	-	-	А	-	-	-	1	-	-
Potamogeton perfoliatus	Clasping-leaf pondweed		-	-	0	-	-	-	-	-	-	-	1	-	-
Sagittaria graminea	Grassy arrowhead		R	R	-	-	-	-	-	-	R	0	-	R	0
Sparganium sp.	Bur-reed		R	R	-	Α	0	С	Р	R	R	0	1	R	R
Utricularia vulgaris	Common bladderwort		R	-	-	-	-	-	-	-	-	-	-	-	-
Vallisneria americana	Eel-grass		R	-	-	-	-	-	-	-	-	-	-	-	-

Table 70: Species present on the rake at each of the rake toss locations and abundance. Refer to Map 102 for Rake locations.

Spitfire Lake		Rake	Rake Toss Numbers							
Scientific Name	Common Name	6	8	13						
Sagittaria graminea	Grassy arrowhead	-	-	R						
Sparganium sp.	Bur-reed	0	-	-						
Utricularia vulgaris	Common bladderwort	-	0	-						

St. Regis River Aquatic Plant Survey 2012

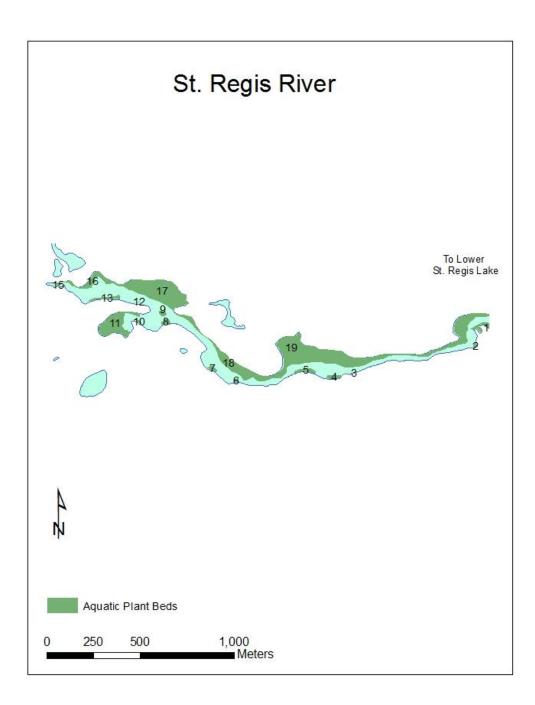


Map 103: Location of St. Regis River.

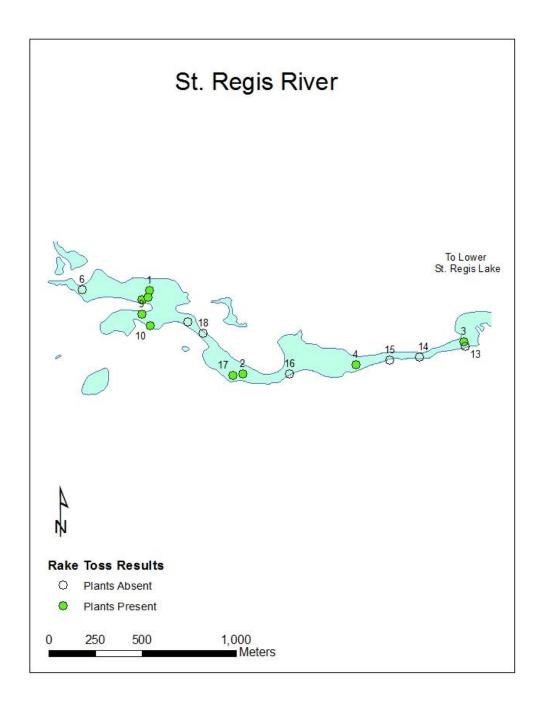
The St. Regis River is located in the town of Brighton in Franklin County, New York (Map 103). The 75 acre section of river was accessed from a canoe launch on the Keese Mill Road, 2.5 miles from New York State Route 30 in Paul Smiths, New York.

An aquatic plant survey of the St. Regis River was conducted on 12-June-2012. No invasive aquatic species were detected during the survey. Aquatic plant coverage in the St. Regis River was relatively high, comprised of 15 aquatic plant beds that collectively covered 39.5 acres or 52.7% of the surface area of the river (Map 104). Twenty-two different aquatic species were identified during this survey. Common species included White waterlily (*Nymphaea odorata*) and Watershield (*Brasenia schreberi*). Coontail (*Ceratophyllum sp.*), Alternate-leaf milfoil (*Myriophyllum alterniflorum*), Shortspike watermilfoil (*M. sibiricum*), Purple bladderwort (*Utricularia purprea*), and Common bladderwort (*U. vulgaris*) were species detected during the survey that could easily be confused with invasive species (Table 71).

Of the 18 rake tosses spaced throughout the littoral zone of the river (Map 105), 10 had acquired plants upon recovery (58.8%). All plants found on the rakes after their retrieval were detected during the surface survey (Table 72).



Map 104: Location of the aquatic plant beds detected in St. Regis River during the surface survey performed on 12 June, 2012. Data for Plant Beds can be found on Table 71.



Map 105: Rake toss locations on St. Regis River, 12 June, 2012. Open circles represent locations where no plants were detected, closed circles represent locations where plants were encountered on the rake. Data for Rake Tosses can be found on Table 72.

Table 71: Percent cover of aquatic plant species detected at each plant bed in St. Regis River. Refer to Map 104 for bed locations. A = Abundant (<50% cover), C = Common (25-50%), P = Present (15-25%), O = Occasional (5-15%), and R = Rare (<5%).

St. Regis River			Plant Bed Numbers																		
			16	17	18	19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Scientific Name	Common Name	AREA (M ²)	7153	30855	17205	74869	5545	357	226	1380	2024	404	889	1112	805	325	14392	57	1861	133	258
Brasenia schreberi	Water shield		0	-	Р	Р	С	С	-	-	Р	0	Α	Α	Α	-	С	-	R	R	R
Ceratophyllum sp.	Coontail		R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eleocharis sp.	Hairgrass		0	-	R	-	-	-	-	1	-	-	-	I	-	-	-	-	-	-	-
Elodea nuttalia	Western waterweed		R	R	-	-	-	-	-	1	-	-	-	I	-	-	-	-	-	0	0
Eriocaulon sp.	Pipewort		-	-	-	-	-	-	-	0	R	-	-	I	-	-	-	-	0	-	-
Myriophyllum alteriflorum	Alternate-leaf milfoil		-	0	-	-	-	-	-	1	-	-	-	I	-	-	-	-	-	-	-
Myriophyllum sibiricum	Shortspike watermilfoil		R	-	-	R	-	-	-	1	R	-	-	I	-	-	-	-	-	-	-
Nitella sp.	Brittlewort		-	С	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Р
Nuphar variegata	Spatterdock		Р	-	0	Р	Р	-	Р	Р	0	-	-	I	-	0	С	-	0	0	-
Nymphaea odorata	White waterlily		Р	-	0	С	А	-	0	0	Α	-	0	R	-	R	Α	R	0	Р	R
Potamogeton amplifolius	Large-leaf pondweed		0	-	Р	Р	С	С	-	-	-	С	R	С	С	-	-	А	R	0	-
Potamogeton epihydrus	Ribbon-leaf pondweed		R	R	-	0	0	-	-	-	R	-	R	-	-	-	-	-	-	Р	Α
Potamogeton natans	Floating pondweed		R	0	0	-	-	-	-	1	-	-	-	I	-	-	-	-	-	-	-
Potamogeton perfoliatus	Clasping-leaf pondweed		R	R	-	С	-	-	-	1	-	-	-	1	-	-	•	-	-	-	С
Potamogeton prealongus	White-stem pondweed		-	С	-	Р	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-
Potamogeton robbinsii	Robbins pondweed		Р	-	-	С	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-
Potamogeton zosterformis	Flatstem pondweed		-	-	-	-	-	-	-	1	-	-	R	1	-	-	•	-	-	-	-
Sagittaria graminea	Grassy arrowhead		0	-	R	0	-	-	-	1	-	-	-	I	-	-	R	-	-	-	R
Sparganium sp.	Bur-reed		Р	-	R	Р	-	-	0	Α	-	0	-	-	-	А	R	R	А	С	-
Utricularia purprea	Purple bladderwort		R	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-
Utricularia vulgaris	Common bladderwort		0	-	0	-	-	-	-	-	R	R	R	R	-	-	0	-	-	R	-
Vallisneria americana	Eel-grass		-	0	-	Р	-	-	С	-	-	-	-	-	-	-	R	-	-	-	-

(1)	Table 72: Species present on th	e rake at each of the rake toss locatio	ns and abundance. Refer to Ma	ap 105 for Rake locations.
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St. Regis River			Rake Toss Numbers							•	
Scientific Name	Common Name	1	2	3	4	7	8	9	10	12	17
Eleocharis sp.	Hairgrass	-	-	-	0	0	С	-	-	-	-
Elodea canadensis	Canadian waterweed	-	0	-	-	-	-	-	-	-	-
Elodea nuttalia	Western waterweed	-	-	-	-	-	-	-	R	-	-
Nitella sp.	Brittlewort	-	0	Р	-	0	-	-	-	-	R
Potamogeton robbinsii	Robbins pondweed	С	-	-	-	-	-	Α	0	-	-
Potamogeton zosterformis	Flatstem pondweed	-	-	-	-	-	-	-	-	R	R
Utricularia purprea	Purple bladderwort	-	-	-	-	-	-	-	R	-	-
Utricularia vulgaris	Common bladderwort	-	0	-	-	-	-	R	Α	-	-