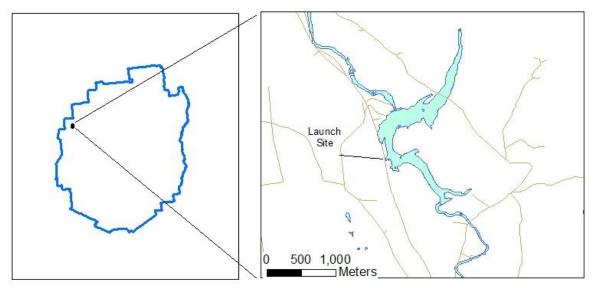
## **Little River Flow Aquatic Plant Survey 2012**



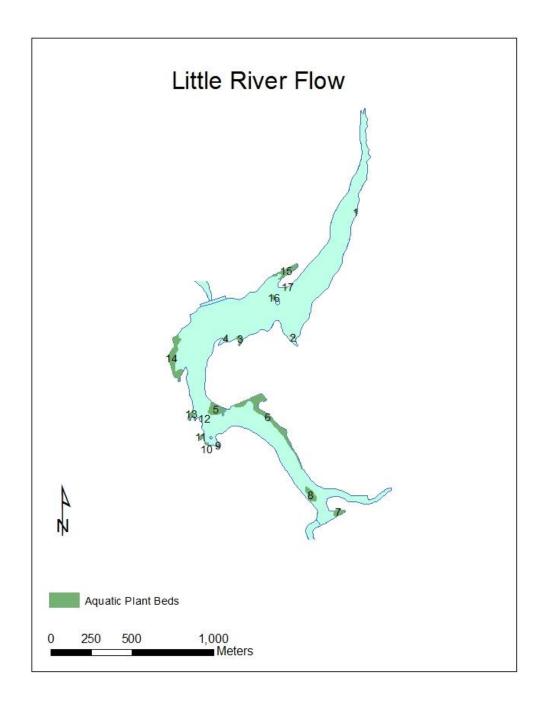
Map 43: Location of Little River Flow.

Little River Flow is located in the town of Fine in St. Lawrence County, New York (Map 3). The 222 acre water body was accessed by canoe carry from New York State Route 3, about 4 miles south-west of Fine.

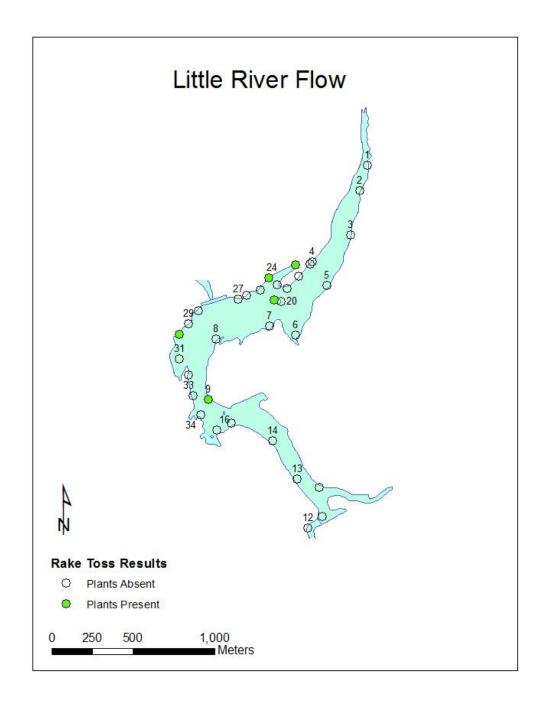
An aquatic plant survey of Little River Flow was conducted on 09-August-2012. Twoleaf or Variable-leaf watermilfoil (*Myriophyllum heterophyllum*) was detected during this survey (Map 46). The range in which this plant is deemed native or non-native is under debate and in some states this plant is classified as invasive. Aquatic plant coverage in Little River Flow was relatively low, comprised of 17 plant beds that collectively covered 12.2 acres or 5.5% of the surface area of the lake (Map 44). Eighteen different aquatic species were identified during this survey. Common species of this water body included Ribbon-leaf pondweed (*Potamogeton. epihydris*), and Bur-reed (*Sparganium sp.*). Purple bladderwort (*Utricularia purprea*), Flatleaf bladderwort (*U. intermedia*), and Coontail (*Ceratophyllum sp.*) could easily be confused with invasive species (Table 30).

Of the 34 rake tosses spaced throughout the littoral zone of Little River Flow (Map 45), 5 rakes had acquired plants upon recovery (14.7%). Shortspike watermilfoil (*Myriophyllum sibiricum*) was the only aquatic plant species recovered on the rake that was not detected during the surface survey (Table 31).

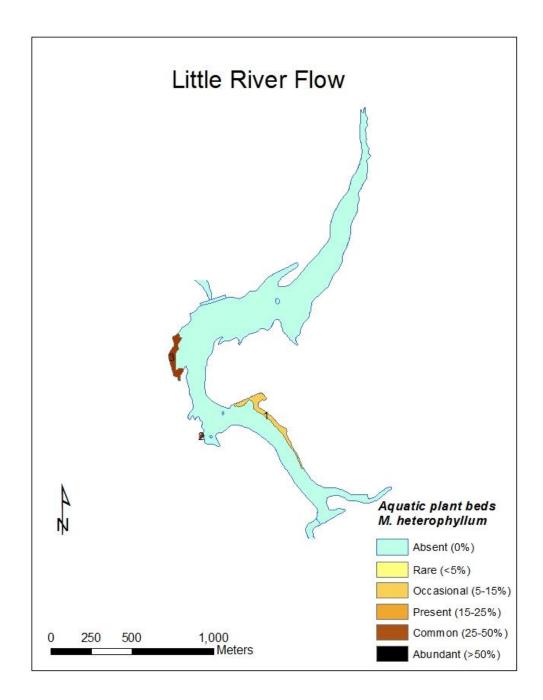
Variable-leaf watermilfoil in Little River Flow was found in 3 beds which covered 6.8 acres. This was 3.1% of the surface area of Little River Flow and 55.7% of the total aquatic plant coverage in the lake (Map 46 & Table 32).



Map 44: Location of the aquatic plant beds detected in Little River Flow during the surface survey performed on 09 Aug, 2012. Data for Plant Beds can be found on Table 30.



Map 45: Rake toss locations on Little River Flow, 09 Aug, 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 31.



Map 46: Location of the *Myriophyllum heterophyllum* detected in Little River Flow during the surface survey performed on 09 Aug, 2012. Data for *M. heterophyllum* beds can be found on Table 32. Table 30: Percent cover of aquatic plant species detected at each plant bed in Little River Flow. Refer to Map 44 for bed locations. A = Abundant (<50% cover), C = Common (25-50%), P = Present (15-25%), O = Occasional (5-15%), and R = Rare (<5%).

Little River Flow				Plant Bed Numbers															
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Scientific Name	Common Name	AREA (M <sup>2</sup> )	265	447	1270	361	5824	16352	1985	3740	351	383	725	9	1681	10570	4445	664	351
Ceratophyllum sp.	Coontail		-	-	-	1	-	-	-	-	I	I	I	-	R	-	-	-	-
Eleocharis sp.	Hairgrass		0	R	-	-	-	0	0	-	1	Ρ	R	-	0	-	0	-	С
Eriocaulon sp.	Pipewort		-	-	-	-	-	-	-	-	-	-	-	-	0	С	-	-	-
Myriophyllum heterophyllum	Twoleaf watermilfoil		-	-	-	-	-	0	-	-	-	-	С	1	-	С	-	-	-
Najas sp.	Water naiad		С	С	С	Р	С	Α	С	-	-	-	С	-	Α	С	C	R	-
Nitella sp.	Brittlewort		-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-
Potamogeton epihydrus	Ribbon-leaf pondweed		С	Р	Р	С	С	Α	Р	С	Р	С	0	С	0	-	Р	Р	0
Potamogeton perfoliatus	Clasping-leaf pondweed		-	-	-	-	-	-	-	-	-	-	-	-	-	Р	-	-	-
Potamogeton pusillus	Small pondweed		-	-	-	-	-	Α	-	-	С	-	-	-	-	-	-	-	-
Potamogeton spirillus	Spiral-fruit pondweed		-	-	-	-	-	-	-	-	-	-	0	-	R	-	-	-	-
Potamogeton zosterformis	Flatstem pondweed		-	-	-	-	-	-	-	-	-	R	-	-	С	R	-	-	-
Sagittaria graminea	Grassy arrowhead		Р	-	R	-	-	-	R	-	-	-	Р	-	0	0	Р	Α	С
Sparganium sp.	Bur-reed		0	R	R	0	Р	Р	С	С	0	-	-	Ρ	0	0	0	0	-
Utricularia intermedia	Flatleaf bladderwort		-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-
Utricularia purprea	Purple bladderwort		-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-
Utricularia vulgaris	Common bladderwort		-	-	-	-	-	-	-	-	-	0	0	-	-	-	0	-	-
Vallisneria americana	Eel-grass		-	-	-	1	-	-	-	-	1	-	I	-	-	-	-	-	R

Table 31: Species present on the rake at each of the rake toss locations and abundance. Refer to Map 45 for Rake locations.

Little River Flow		Rake Toss Numbers						
Scientific Name Common Name		9	21	23	24	30		
Eleocharis sp.	Hairgrass	-	-	-	R	0		
Myriophyllum sibiricum	Shortspike watermilfoil	-	-	-	-	0		
Najas sp.	Water naiad	-	0	-	-	Р		
Nitella sp.	Brittlewort	R	-	0	-	-		

Table 32: Percent cover of *Myriophyllum heterophyllum* detected at each plant bed in Little River Flow. Refer to Map 46 for *M. heterophyllum* locations. A = Abundant (<50% cover), C = Common (25-50%), P = Present (15-25%), O = Occasional (5-15%), and R = Rare (<5%).

Little River Flow			Plant Bed			
			1	2	3	
Scientific Name	Common Name	AREA (M <sup>2</sup> )	16352	725	10570	
Myriophyllum heterophyllum	Twoleaf watermilfoil		0	С	С	