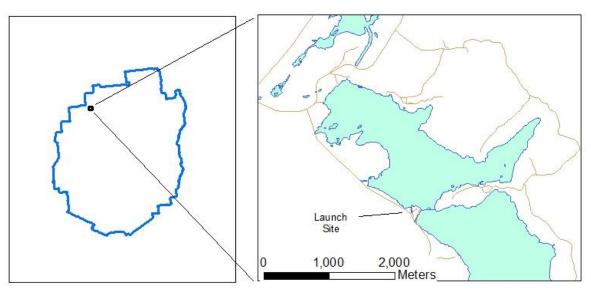
Stark Falls Reservoir Aquatic Plant Survey 2012



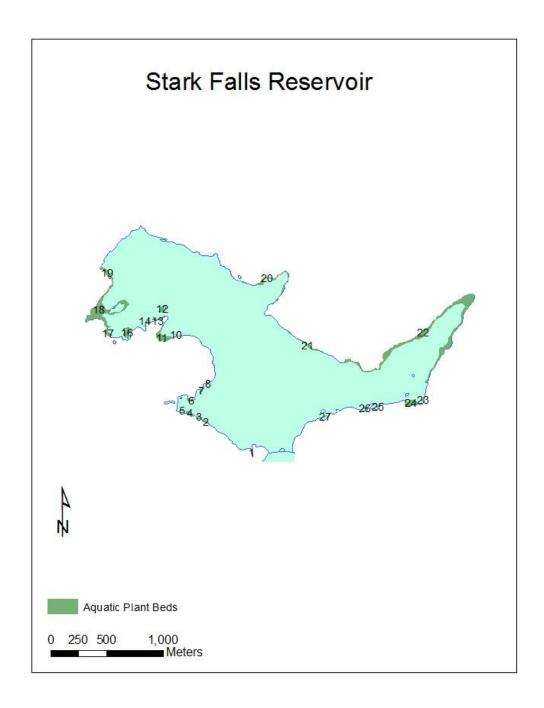
Map 106: Location of Stark Falls Reservoir.

Stark Falls Reservoir is located in the town of Parishville in St. Lawrence County, New York (Map 106). The 650 acre reservoir was accessed on the southern shore from a DEC hardtop launch. The launch is located on the Raquette River Road off from State Route 56, approximately 6 miles south of South Colton.

An aquatic plant survey of Stark Falls Reservoir was conducted on 27-June-2012. Twoleaf or Variable-leaf watermilfoil (*Myriophyllum heterophyllum*) was detected during this survey (Map 109). 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 of Stark Falls Reservoir was relatively low, comprised of 27 aquatic plant beds that collectively covered 31.5 acres or 4.8% of the surface area of the reservoir (Map 107). Common species in the reservoir included Variable-leaf watermilfoil, and Ribbon-leaf pondweed (*Potamogeton epihydrus*). Purple bladderwort was the only species detected that could easily be confused with an invasive species (Table 73).

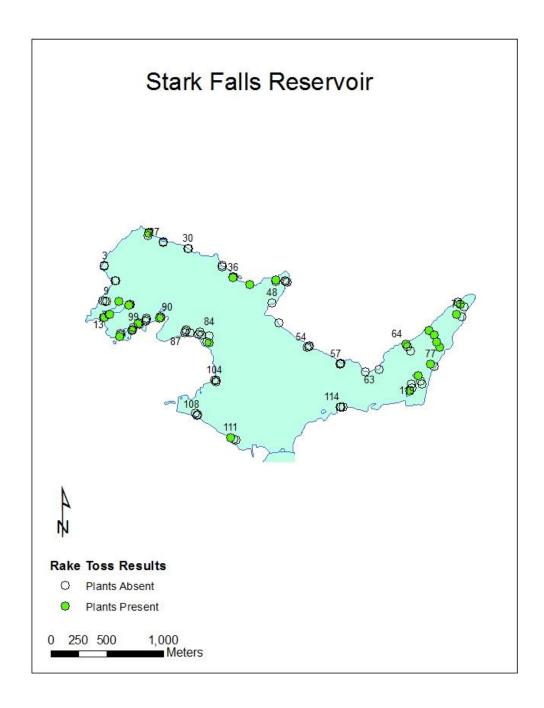
Of the 120 rake tosses spaced throughout the littoral zone of the reservoir (Map 108), 29 had acquired plants upon recovery (24.2%). All plants found on the rakes after retrieval were detected during the surface survey (Table 74)

Variable-leaf watermilfoil in Stark Falls Reservoir consisted of 24 beds that covered 29.6 acres. This was 4.6% of the surface area of the reservoir and 94.0% of the total aquatic plant coverage in the reservoir (Map 109 & Table 75).



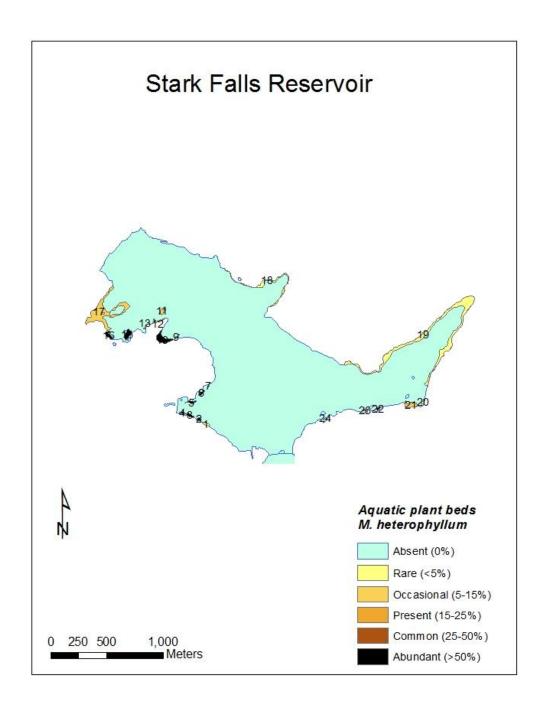
Map 107: Location of the aquatic plant beds detected in Stark Falls Reservoir during the surface survey performed on 27 June, 2012.

Data for Plant Beds can be found on Table 73.



Map 108: Rake toss locations on Stark Falls Reservoir, 27 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 74.



Map 109: Location of *Myriophyllum heterophyllum* beds detected in Stark Falls Reservoir during the surface survey performed on 27 June, 2012.

Data for *M. heterophyllum* Beds can be found on Table 75.

Table 73: Percent cover of aquatic plant species detected at each plant bed in Stark Falls Reservoir. Refer to Map 107 for bed locations. A = Abundant (<50% cover), C = Common (25-50%), P = Present (15-25%), O = Occasional (5-15%), and R = Rare (<5%).

Stark Falls Reservoir															Plar	nt Be	d Nu	mber	<u> </u>										
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Scientific Name	Common Name	AREA (M²)	490	1024	884	1334	759	1295	984	33	54	110	6820	1544	1268	337	148	3639	1977	30963	3934	7672	3385	52626	761	4185	533	518	306
Eleocharis sp.	Hairgrass		Р	-	-	-	-	Р	Р	-	-	-	Р	-	Р	-	-	Р	Р	R	-	-	-	-	-	-	-	-	-
Elodea canadensis	Canadian waterweed		Р	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eriocaulon sp.	Pipewort		1	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lobelia dortmanna	Water lobelia		1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	R	1	R	-	-	-	-	-	-	-	-	-
Myriophyllum heterophyllum	Twoleaf watermilfoil		1	R	Α	Α	Α	Α	Α	С	R	R	Α	0	R	R	Α	Α	Α	0	-	R	-	R	R	0	Α	С	0
Nitella sp.	Brittlewort		1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	R	-	-	-	-	-	-	-	-	-
Nuphar variegata	Spatterdock		0	-	-	-	-	-	-	-	1		-	-	-	-	-	R	-	R	R	-	-	0	0	R	R	0	-
Potamogeton amplifolius	Large-leaf pondweed		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-
Potamogeton epihydrus	Ribbon-leaf pondweed		R	Α	R	-	0	R	С	С	-	-	Р	Α	Α	0	0	Р	0	0	R	R	R	R	С	Α	С	С	Р
Potamogeton natans	Floating pondweed		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	0	-	-	-	-	-	-	-
Potamogeton zosterformis	Flatstem pondweed		-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-
Sagittaria graminea	Grassy arrowhead		Р	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	R	R	R	R	-	-	-	-	Α
Sparganium sp.	Bur-reed		R	-	-	-	-	0	-	-	-	-	R	0	0	-	-	0	-	R	-	0	R	R	0	-	-	-	-
Utricularia purprea	Purple bladderwort		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Р	-	-	-	-
Vallisneria americana	Eel-grass		1	-	-	-	-	R	-	-	-	-	-	-	0	Α	-	-	R	R	R	R	R	-	-	-	-	-	-

Table 74: Species present on the rake at each of the rake toss locations and abundance. Refer to Map 108 for Rake locations.

Stark Falls Reservoir								-						Ra	ke '	Tos	s Nu	ımk	ers											
Scientific Name	Common Name	10	11	14	15	16	21	22	23	34	35	36	37	42	64	67	68	70	73	74	75	77	79	89	96	97	102	111	117	120
Eleocharis sp.	Hairgrass	R	-	-	R	-	R	-	R	ı	-	ı	ı	ı	-	R	R	R	-	R	ı	R	-	R	R	0	-	R	-	-
Eriocaulon sp.	Pipewort	-	-	-	-	-	-	-	-	ı	-	ı	ı	١	-	-	-	-	-	1	ı	ı	-	-	-	ı	R		-	-
Lobelia dortmanna	Water lobelia	-	-	-	R	-	-	-	-	ı	-	1	ı	-	-	-	-	-	-	ı	ı	1	-	-	-	ı	-	-	-	-
Nitella sp.	Brittlewort	-	-	R	-	-	-	-	-	ı	-	ı	-	ı	R	-	-	-	R	-	-	ı	-	-	R	R	-	-	-	R
Potamogeton epihydrus	Ribbon-leaf pondweed	-	-	-	-	R	-	-	-	ı	-	ı	ı	R	-	-	-	-	-	-	ı	ı	-	-	-	ı	-	-	-	-
Potamogeton zosterformis	Flatstem pondweed	-	-	-	-	-	-	-	-	ı	-	ı	ı	ı	-	-	-	-	-	-	ı	ı	R	-	-	ı	R	-	-	-
Sagittaria graminea	Grassy arrowhead	-	-	-	R	-	-	R	-	ı	-	ı	ı	ı	-	-	-	-	-	1	ı	ı	-	-	-	ı	-	-	R	-
Sparganium sp.	Bur-reed	-	-	-	-	-	-	-	-	R	R	R	R	ı	-	-	-	-	ı	1	R	ı	-	-	-	ı	-	-	-	-
Utricularia purprea	Purple bladderwort	-	-	-	-	-	-	-	-	- 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Vallisneria americana	Eel-grass	-	R	-	-	-	-	-	-	ı	-	-	-	ı	-	-	-	-	-	-	-	ı	-	-	-	-	-	-	-	-

Table 75: Percent cover of *Myriophyllum heterophyllum* detected at each plant bed in Stark Falls Reservoir. Refer to Map 109 for *M. heterophyllum* locations. A = Abundant (<50% cover), C = Common (25-50%), P = Present (15-25%), O = Occasional (5-15%), and R = Rare (<5%).

Stark Falls Reservoir			Plant Bed Numbers																							
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Scientific Name	Common Name	AREA (M²)	1024	884	1334	759	1295	984	33	54	110	6820	1544	1268	337	148	3639	1977	30963	7672	52626	761	4185	533	518	306
Myriophyllum heterophyllum	Twoleaf watermilfoil		R	Α	Α	Α	Α	Α	С	R	R	Α	0	R	R	Α	Α	Α	0	R	R	R	0	Α	С	0