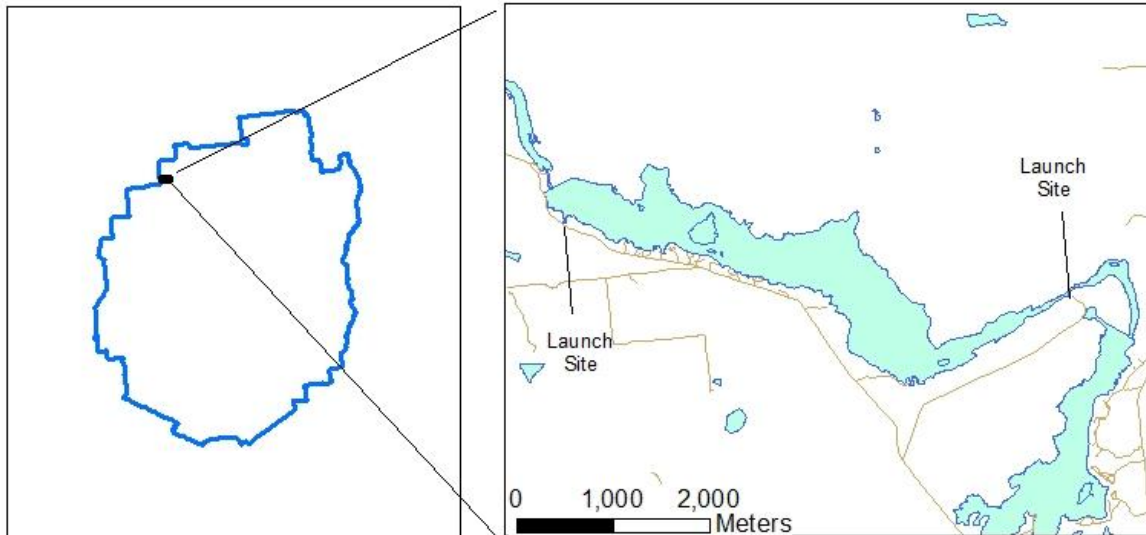


Rainbow Falls Reservoir Aquatic Plant Survey 2012



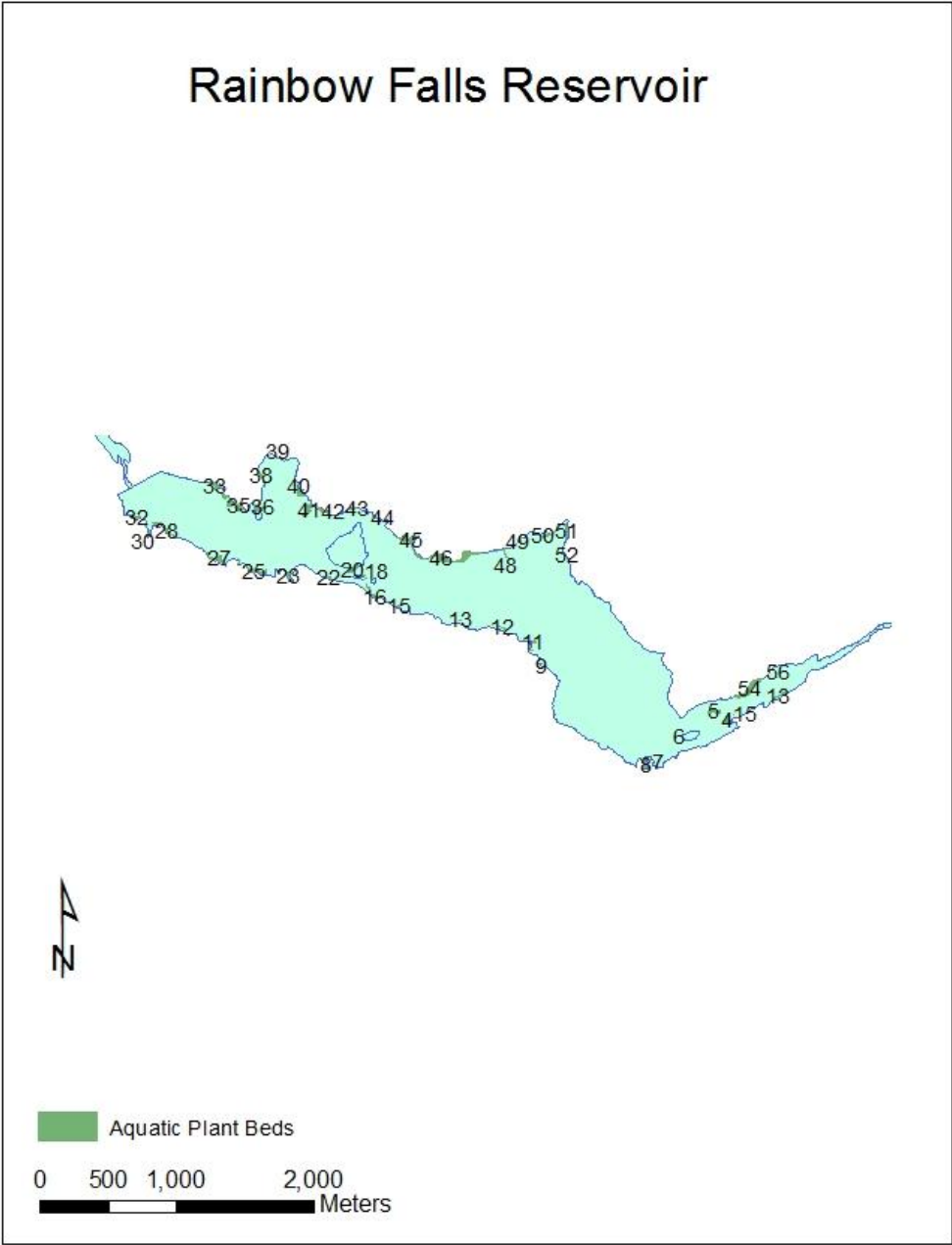
Map: 82: Location of Rainbow Falls Reservoir.

Rainbow Falls Reservoir is located in the town of Parishville in St. Lawrence County, NY (Map 82). The 739 acre reservoir was accessed by DEC hardtop boat launch on the south western shore. The launch can be found on the Raquette River Road, off from State Route 56, approximately 6 miles south of South Colton. A secondary access point was used on the eastern end from the Blake Falls Dam Road off from the Raquette River Road.

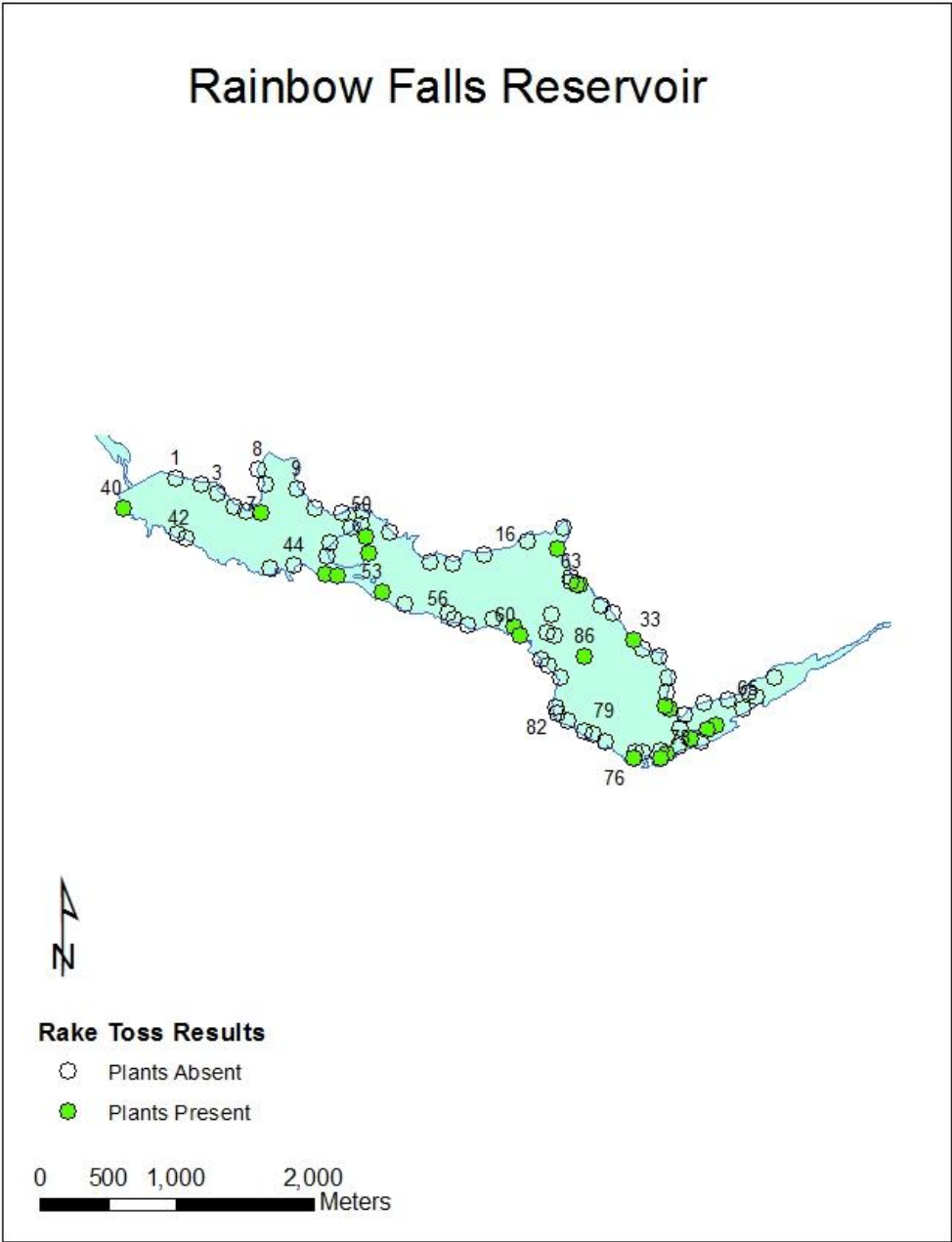
An aquatic plant survey of Rainbow Falls Reservoir was conducted on 27-June-2012. Twoleaf or Variable-leaf watermilfoil (*Myriophyllum heterophyllum*) was detected during this survey (Map 85). The range in which this plant is deemed native or non-native is under debate and in some states this plant is classified as invasive. Aquatic plant coverage in Rainbow Falls Reservoir was relatively low, comprised of 56 aquatic plant beds that collectively covered 23.8 acres or 3.2% of the surface area of the reservoir (Map 83). Fifteen different aquatic species were identified during this survey. Common species of the reservoir included Variable-leaf watermilfoil, Bur-reed (*Sparganium sp.*), and Ribbon-leaf pondweed (*Potamogeton epihydris*). Purple bladderwort (*Utricularia purpurea*) was the only species which could easily be confused with other invasive species (Table 56).

Of the 86 rake tosses spaced throughout the littoral zone of the lake (Map 84), 22 had acquired plants upon recovery (25.6%). Brittlewort (*Nitella sp.*) was the one species brought up on the rakes that was not detected during the surface survey (Table 57).

Variable-leaf watermilfoil in Rainbow Falls Reservoir consisted of 30 beds that covered 16.1 acres. This was 2.2% of the surface area of the reservoir and 67.6% of the total aquatic plant coverage in the reservoir (Map 85 & Table 58).

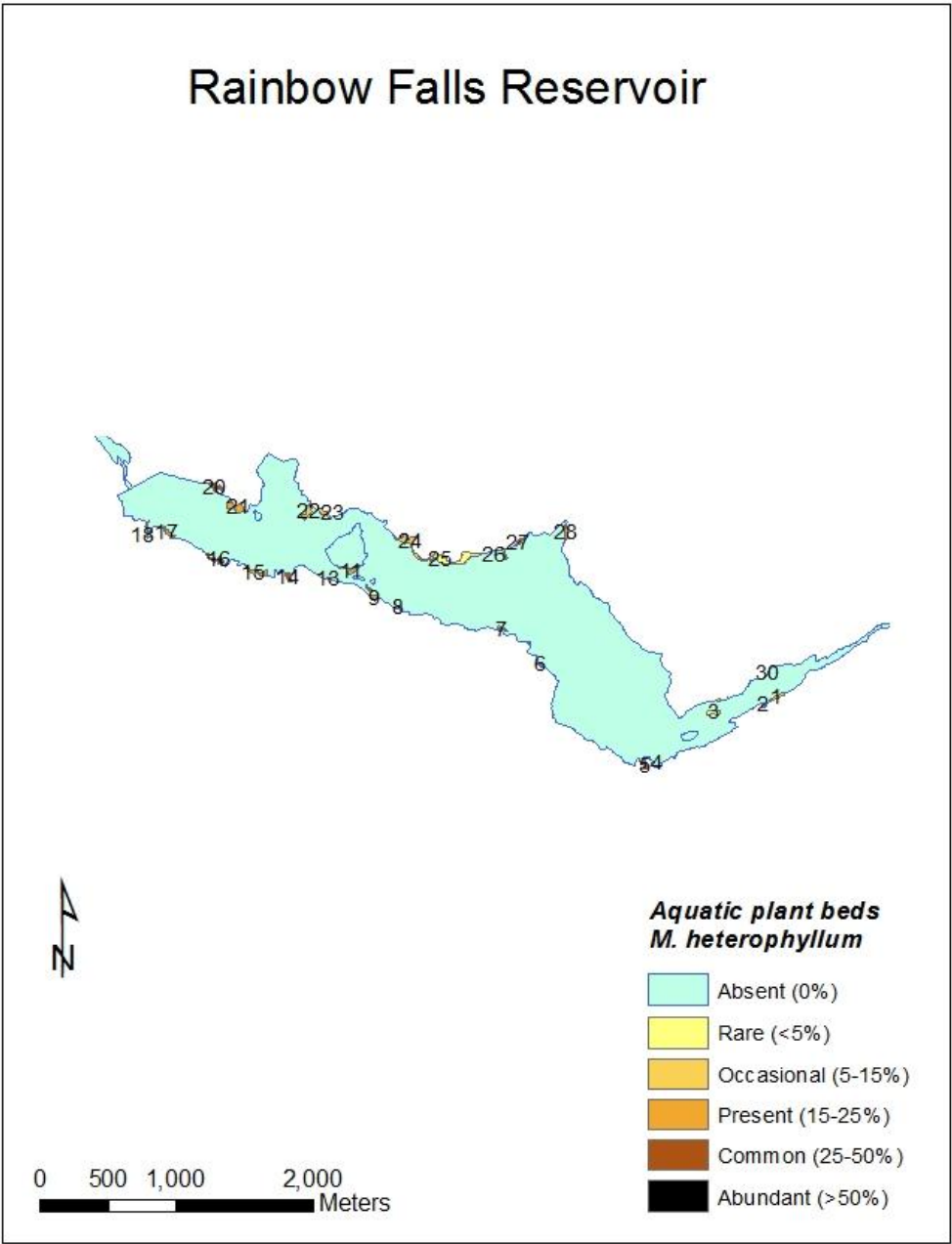


Map 83: Location of the aquatic plant beds detected in Rainbow Falls Reservoir during the surface survey performed on 27 June, 2012. Data for Plant Beds can be found on Table 56.



Map 84: Rake toss locations on Rainbow 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 57.



Map 85: Location *Myriophyllum heterophyllum* beds detected in Rainbow Falls Reservoir during the surface survey performed on 27 June, 2012.
Data for *M. heterophyllum* Beds can be found on Table 58.

Table 56: Percent cover of aquatic plant species detected at each plant bed in Rainbow Falls Reservoir. Refer to Map 83 for bed locations. A = Abundant (<50% cover), C = Common (25-50%), P = Present (15-25%), O = Occasional (5-15%), and R = Rare (<5%).

Rainbow Falls Reservoir			Plant Bed Numbers																												
Scientific Name	Common Name	AREA (M ²)	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	28	
<i>Brasenia schreberi</i>	Water shield		-	-	-	-	-	-	-	R	-	C	A	-	-	-	-	-	-	P	C	R	A	-	A	A	O	-	C	-	
<i>Eleocharis sp.</i>	Hairgrass		-	-	-	C	-	-	-	-	-	-	R	-	O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Eriocaulon sp.</i>	Pipewort		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Lobelia dortmanna</i>	Water lobelia		-	-	-	-	-	-	-	-	-	R	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	R	-
<i>Myriophyllum heterophyllum</i>	Twoleaf watermilfoil		O	C	-	-	R	-	O	A	R	-	-	P	-	-	A	P	C	-	-	P	P	A	C	-	P	-	A	P	
<i>Nuphar variegata</i>	Spatterdock		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	
<i>Potamogeton amplifolius</i>	Large-leaf pondweed		-	-	-	-	O	-	-	O	-	-	-	-	O	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Potamogeton epihydrus</i>	Ribbon-leaf pondweed		A	-	C	P	O	-	-	R	-	R	O	A	A	A	O	-	C	A	-	A	O	-	O	P	A	P	C	C	
<i>Potamogeton perfoliatus</i>	Clasping-leaf pondweed		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Potamogeton pusillus</i>	Small pondweed		R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	-	-	
<i>Sagittaria graminea</i>	Grassy arrowhead		O	-	-	O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	-	-	-	-	-	-	P	-	O
<i>Sparganium sp.</i>	Bur-reed		O	-	P	P	A	P	-	R	-	-	-	O	-	-	-	-	-	-	-	O	-	-	-	-	-	-	-	O	-
<i>Utricularia purpurea</i>	Purple bladderwort		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Vallisneria americana</i>	Eel-grass		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

			Plant Bed Numbers																												
Scientific Name	Common Name		29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	
<i>Brasenia schreberi</i>	Water shield		1452	984	534	1299	3433	1368	5398	3301	183	1346	204	2905	4021	2196	987	802	7273	12898	188	1085	1489	1970	2129	283	245	8242	40	223	
<i>Brasenia schreberi</i>	Water shield		-	A	R	-	P	R	R	-	A	A	C	A	R	-	-	-	R	R	-	-	-	-	-	-	-	-	-	-	-
<i>Eleocharis sp.</i>	Hairgrass		-	-	-	P	-	-	O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	O	-	-	
<i>Eriocaulon sp.</i>	Pipewort		-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Lobelia dortmanna</i>	Water lobelia		R	-	-	R	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Myriophyllum heterophyllum</i>	Twoleaf watermilfoil		-	R	O	-	C	-	P	-	-	-	-	-	O	O	-	-	O	R	-	O	A	-	P	-	O	-	O	-	
<i>Nuphar variegata</i>	Spatterdock		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Potamogeton amplifolius</i>	Large-leaf pondweed		-	-	-	-	-	O	-	-	-	-	-	-	R	O	-	-	O	O	P	O	-	A	-	-	-	-	-	-	
<i>Potamogeton epihydrus</i>	Ribbon-leaf pondweed		C	O	P	P	O	P	C	C	-	O	-	O	P	O	O	R	P	O	P	O	P	P	O	A	O	P	C	R	
<i>Potamogeton perfoliatus</i>	Clasping-leaf pondweed		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Potamogeton pusillus</i>	Small pondweed		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Sagittaria graminea</i>	Grassy arrowhead		O	-	P	P	O	-	O	R	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	O	-	-	
<i>Sparganium sp.</i>	Bur-reed		C	-	-	O	-	R	O	R	-	-	-	-	R	R	O	R	-	R	-	R	O	-	R	-	O	R	-	-	
<i>Utricularia purpurea</i>	Purple bladderwort		-	-	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Vallisneria americana</i>	Eel-grass		-	P	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 57: Species present on the rake at each of the rake toss locations and abundance. Refer to Map 84 for Rake locations.

Rainbow Falls Reservoir		Rake Toss Numbers																					
Scientific Name	Common Name	6	19	27	28	33	36	40	45	46	51	52	53	59	60	62	66	67	69	71	73	76	86
<i>Eleocharis</i> sp.	Hairgrass	-	-	-	-	-	-	-	O	R	-	-	-	R	-	-	R	P	-	P	R	R	-
<i>Myriophyllum heterophyllum</i>	Twoleaf watermilfoil	-	-	-	-	-	-	-	R	P	-	-	-	R	-	-	-	-	-	-	-	-	-
<i>Nitella</i> sp.	Brittlewort	-	R	-	-	R	R	-	-	R	-	R	-	-	-	-	O	-	O	-	-	-	-
<i>Potamogeton amplifolius</i>	Large-leaf pondweed	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-
<i>Potamogeton epihydrus</i>	Ribbon-leaf pondweed	-	-	-	-	-	-	R	-	P	-	-	O	-	-	-	-	-	-	-	R	-	-
<i>Potamogeton pusillus</i>	Small pondweed	-	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-
<i>Sagittaria graminea</i>	Grassy arrowhead	-	-	-	-	-	-	O	R	-	-	-	-	-	-	-	R	-	-	-	R	-	-
<i>Sparganium</i> sp.	Bur-reed	R	-	R	O	-	R	R	-	-	C	-	-	-	-	R	R	R	-	-	-	-	O
<i>Utricularia purpurea</i>	Purple bladderwort	R	-	-	-	-	R	P	O	-	R	-	R	O	R	-	-	R	-	-	-	-	R
<i>Vallisneria americana</i>	Eel-grass	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	-	-	-	-

Table 58: Percent cover of *Myriophyllum heterophyllum* detected at each plant bed in Rainbow Falls Reservoir. Refer to Map 85 for *M. heterophyllum* locations. A = Abundant (<50% cover), C = Common (25-50%), P = Present (15-25%), O = Occasional (5-15%), and R = Rare (<5%).

Rainbow Falls Reservoir			Plant Bed Numbers														
Scientific Name	Common Name	AREA (M ²)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<i>Myriophyllum heterophyllum</i>	Twoleaf watermilfoil		R	O	A	R	P	O	C	A	P	C	P	P	A	C	P

			Plant Bed Numbers																
Scientific Name	Common Name	AREA (M ²)	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
<i>Myriophyllum heterophyllum</i>	Twoleaf watermilfoil		A	P	R	O	C	P	O	O	O	R	O	A	P	O	O		