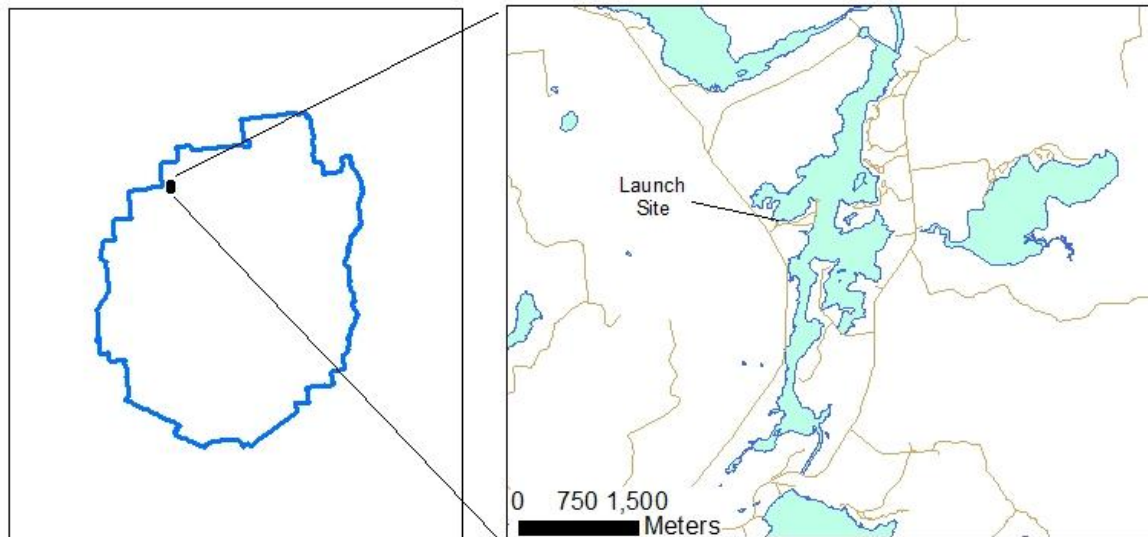


## Blake Falls Reservoir Aquatic Plant Survey 2012



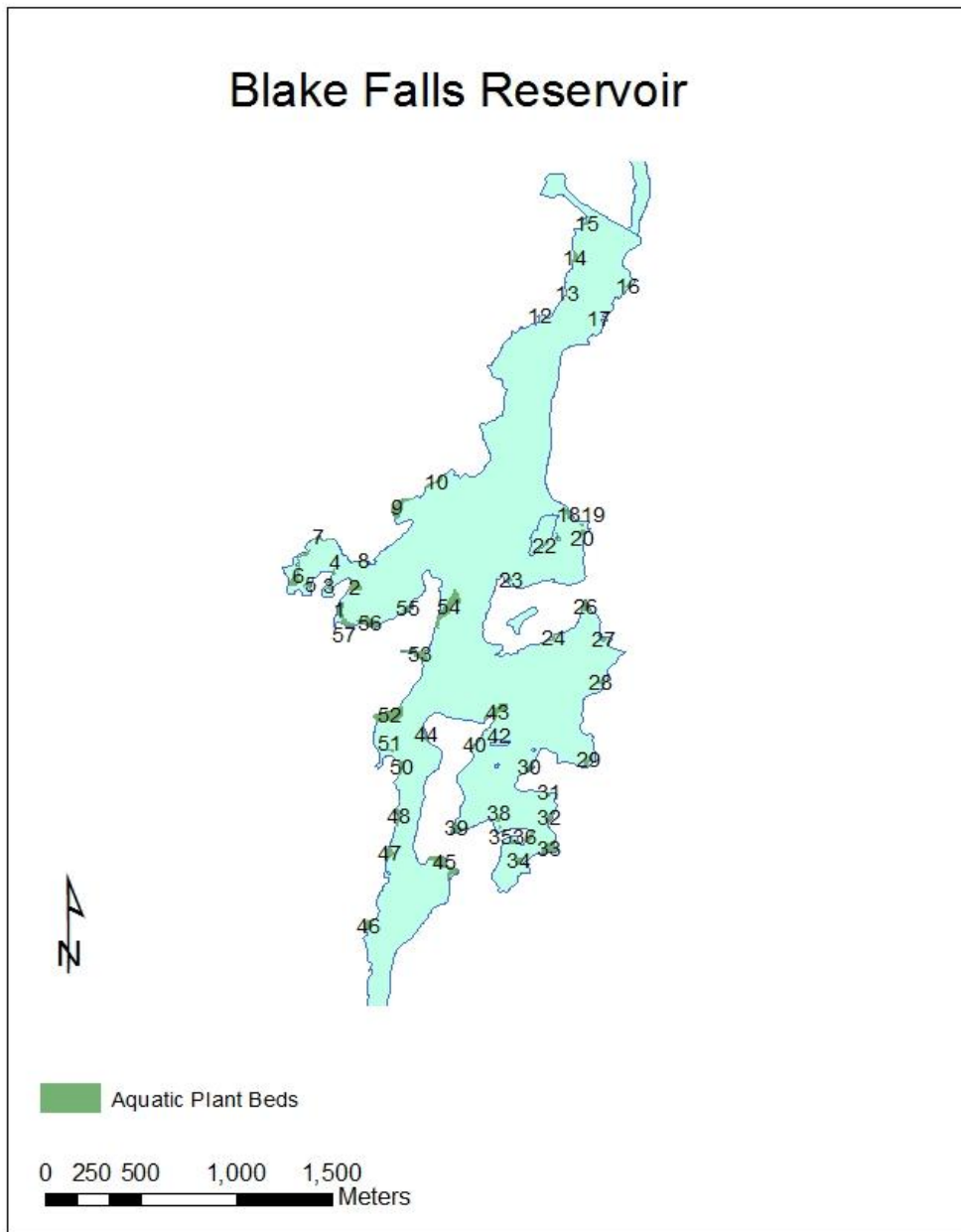
Map 8: Location of Blake Falls Reservoir.

Blake Falls Reservoir is located in the town of Parishville in St. Lawrence County, New York (Map 8). The 642 acre lake was accessed by a hardtop DEC boat launch on the western shore. The launch can be found on the Raquette River Road off from State Route 56, approximately 6 miles south of South Colton and 12.6 miles north of the intersection of 56 and State Route 3.

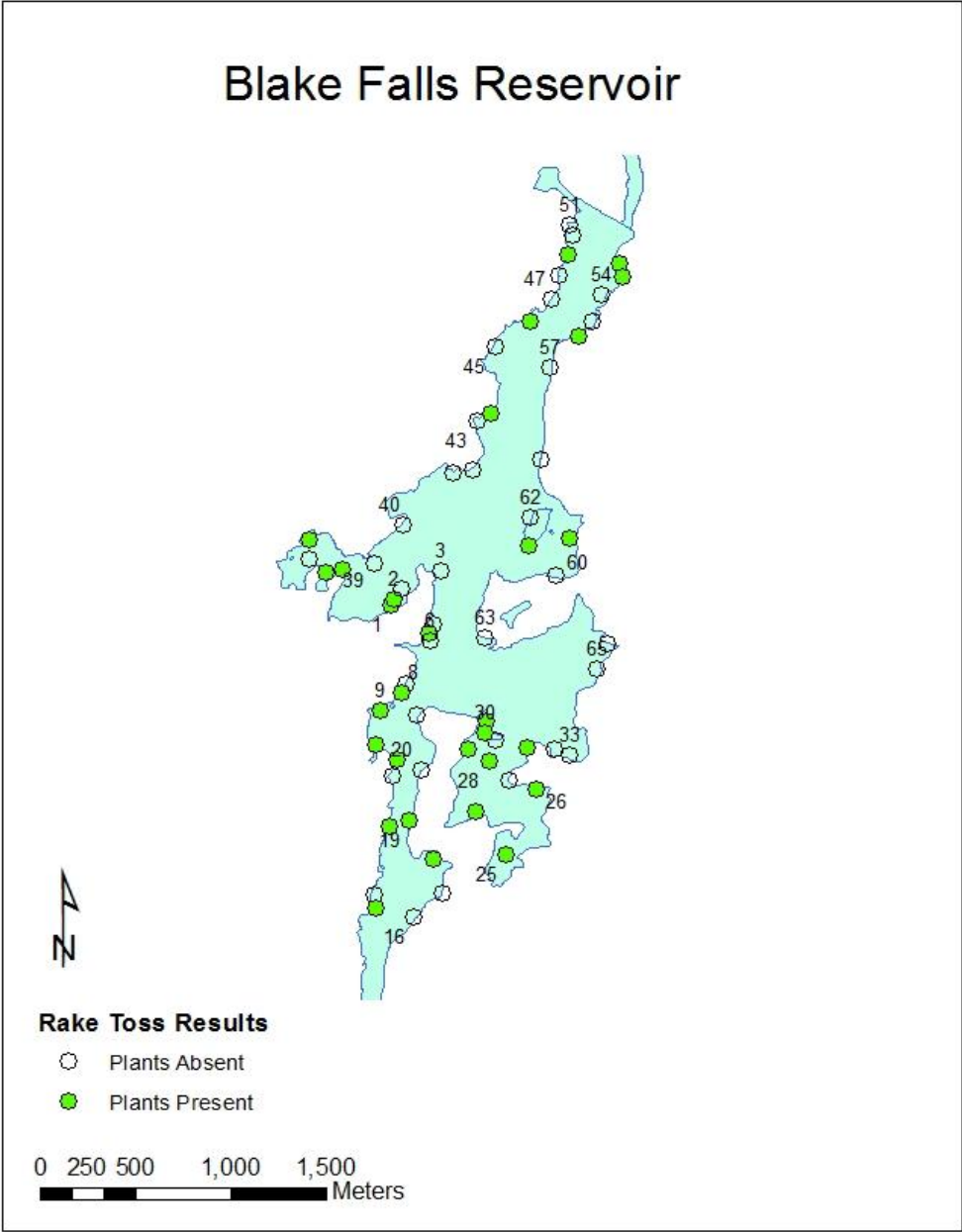
An aquatic plant survey of Blake Falls Reservoir was conducted on 21-June-2012. Twoleaf or Variable-leaf watermilfoil (*Myriophyllum heterophyllum*) was detected during this survey (Map 11). The range in which this plant is deemed native or non-native is under debate and in some states this plant is classified as invasive. Aquatic plant coverage in Blake Falls Reservoir was relatively low, comprised of 57 plant beds that collectively covered 22.8 acres or 3.5% of the surface area of the lake (Map 9). Seventeen different aquatic species were identified during this survey. Common species of this water body included many members of the pondweed genus *Potamogeton*, of which the most common was Ribbon-leaf (*P. epihydris*). Purple bladderwort (*Utricularia purpurea*) was a native species found which could easily be confused as an invasive species (Table 6).

Of the 65 rake tosses spaced throughout the littoral zone of the lake (Map 10), 30 rakes had acquired plants upon recovery (46%). All plants found on the rakes after retrieval were detected during the surface survey (Table 7).

Variable-leaf watermilfoil in Blake Falls Reservoir consisted of 35 beds that covered 14.3 acres. This was 2.2% of the surface area of the reservoir and 62.7% of the total aquatic plant coverage in the reservoir (Map 11 & Table 8).

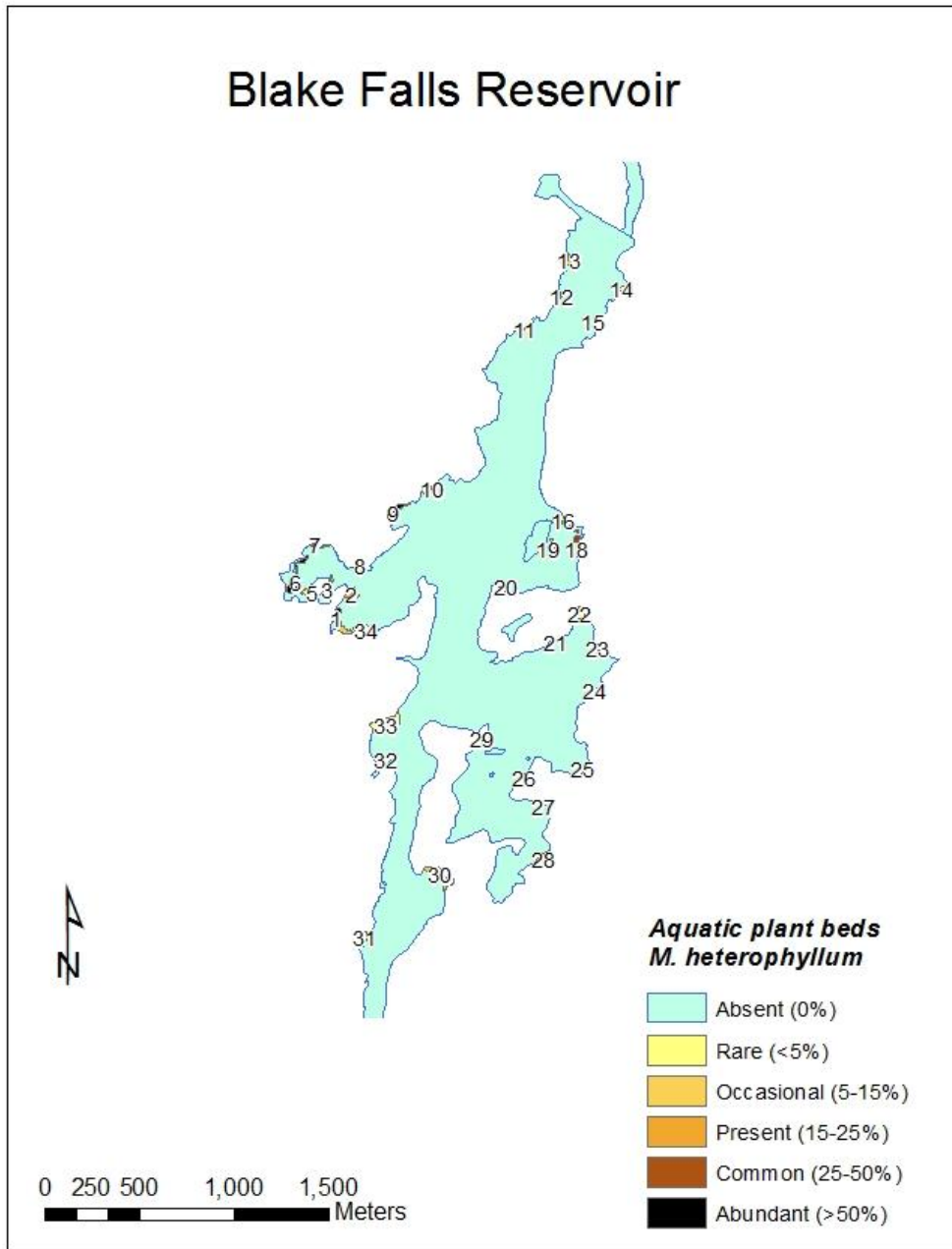


Map 9: Location of the aquatic plant beds detected in Blake Falls Reservoir during the surface survey performed on 21 June, 2012.  
 Data for Plant Beds can be found on Table 6.



Map 10: Rake toss locations on Blake Falls Reservoir, 21 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 7.



Map 11: Location of the *Myriophyllum heterophyllum* beds detected in Blake Falls Reservoir during the surface survey performed on 21 June, 2012. Data for *M. heterophyllum* beds can be found on Table 8.

Table 6: Percent cover of aquatic plant species detected at each plant bed in Blake Falls Reservoir. Refer to Map 9 for bed locations. A = Abundant (<50% cover), C = Common (25-50%), P = Present (15-25%), O = Occasional (5-15%), and R = Rare (<5%).

| Blake Falls Reservoir             |                        |                        | Plant Bed Number |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
|-----------------------------------|------------------------|------------------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| Scientific Name                   | Common Name            | AREA (M <sup>2</sup> ) | 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 | 29 |   |
| <i>Brasenia schreberi</i>         | Water shield           |                        | -                | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |   |
| <i>Eleocharis sp.</i>             | Hairgrass              |                        | -                | - | - | - | C | - | O | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | O  | -  | -  | -  | -  | -  | -  | -  | -  |   |
| <i>Eriocaulon sp.</i>             | Pipewort               |                        | -                | - | - | - | - | - | - | - | R | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | O  | -  | -  | -  | -  | -  | -  | -  | -  |   |
| <i>Isoetes sp.</i>                | Quillwort              |                        | -                | - | R | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |   |
| <i>Lobelia dortmanna</i>          | Water lobelia          |                        | R                | - | - | R | P | - | O | - | R | -  | -  | -  | -  | -  | R  | -  | -  | -  | -  | -  | R  | -  | -  | -  | -  | -  | -  | R  | -  |   |
| <i>Myriophyllum heterophyllum</i> | Twoleaf watermilfoil   |                        | A                | P | C | O | R | A | A | O | A | P  | O  | -  | O  | O  | -  | R  | A  | R  | C  | C  | O  | -  | P  | -  | R  | R  | O  | R  | C  |   |
| <i>Nitella sp.</i>                | Brittlewort            |                        | -                | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |   |
| <i>Nuphar variegata</i>           | Spatterdock            |                        | -                | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | R  | -  | R  |   |
| <i>Potamogeton amplifolius</i>    | Large-leaf pondweed    |                        | -                | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |   |
| <i>Potamogeton epihydrus</i>      | Ribbon-leaf pondweed   |                        | O                | P | P | R | R | O | P | O | P | C  | -  | -  | -  | O  | P  | P  | -  | A  | -  | R  | P  | O  | -  | -  | C  | R  | P  | P  | P  |   |
| <i>Potamogeton perfoliatus</i>    | Clasping-leaf pondweed |                        | -                | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |   |
| <i>Potamogeton pusillus</i>       | Small pondweed         |                        | -                | - | - | A | - | R | - | R | R | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | C  | O  | -  | -  | -  | -  | -  | -  | -  |   |
| <i>Potamogeton robbinsii</i>      | Robbins pondweed       |                        | -                | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |   |
| <i>Sagittaria graminea</i>        | Grassy arrowhead       |                        | -                | - | A | - | A | O | O | O | O | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | C  | -  | -  | -  | -  | -  | -  | -  | -  |   |
| <i>Sparganium sp.</i>             | Bur-reed               |                        | -                | R | R | - | O | - | - | - | - | -  | -  | -  | A  | -  | R  | -  | A  | A  | A  | -  | C  | -  | -  | O  | -  | -  | C  | R  | -  | - |
| <i>Utricularia purpurea</i>       | Purple bladderwort     |                        | -                | - | - | - | - | R | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |   |
| <i>Vallisneria americana</i>      | Eel-grass              |                        | -                | C | - | R | - | - | O | R | O | P  | -  | P  | P  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | A  | A  | - |

|                                   |                        |                        | Plant Bed Number |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
|-----------------------------------|------------------------|------------------------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| Scientific Name                   | Common Name            | AREA (M <sup>2</sup> ) | 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 | 57 |   |
| <i>Brasenia schreberi</i>         | Water shield           |                        | -                | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | - |
| <i>Eleocharis sp.</i>             | Hairgrass              |                        | -                | -  | R  | -  | O  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | O  | R  | O  | -  | -  | P  | -  | R  | R  | O  | O  | R  | R  |   |
| <i>Eriocaulon sp.</i>             | Pipewort               |                        | -                | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | O  | -  | -  | -  | -  | -  | -  | -  | -  | - |
| <i>Isoetes sp.</i>                | Quillwort              |                        | -                | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | - |
| <i>Lobelia dortmanna</i>          | Water lobelia          |                        | -                | R  | R  | R  | O  | R  | -  | -  | -  | -  | -  | R  | R  | -  | -  | O  | -  | -  | R  | -  | -  | -  | O  | R  | O  | O  | O  | P  |   |
| <i>Myriophyllum heterophyllum</i> | Twoleaf watermilfoil   |                        | P                | R  | -  | O  | -  | -  | -  | -  | -  | -  | -  | R  | R  | -  | -  | O  | C  | -  | -  | -  | -  | R  | R  | -  | -  | -  | R  | O  |   |
| <i>Nitella sp.</i>                | Brittlewort            |                        | -                | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | R  | -  | -  | -  | -  |   |
| <i>Nuphar variegata</i>           | Spatterdock            |                        | -                | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | - |
| <i>Potamogeton amplifolius</i>    | Large-leaf pondweed    |                        | -                | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | - |
| <i>Potamogeton epihydrus</i>      | Ribbon-leaf pondweed   |                        | -                | O  | P  | P  | P  | P  | P  | -  | P  | O  | P  | P  | A  | C  | C  | P  | A  | P  | P  | A  | P  | P  | C  | C  | O  | O  | O  | -  |   |
| <i>Potamogeton perfoliatus</i>    | Clasping-leaf pondweed |                        | P                | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | O  | -  | -  | -  | -  | -  | -  | -  | -  | - |
| <i>Potamogeton pusillus</i>       | Small pondweed         |                        | -                | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | - |
| <i>Potamogeton robbinsii</i>      | Robbins pondweed       |                        | -                | -  | -  | -  | -  | R  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | R  | -  | -  | -  | -  | -  |   |
| <i>Sagittaria graminea</i>        | Grassy arrowhead       |                        | -                | R  | R  | R  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | R  | -  | -  | -  | R  | O  | -  | -  | -  | -  | R |
| <i>Sparganium sp.</i>             | Bur-reed               |                        | O                | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | O  | P  | C  | P  | -  | O  | R  | -  | P  | -  | O  | -  | P  | -  | -  | -  | - |
| <i>Utricularia purpurea</i>       | Purple bladderwort     |                        | -                | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | - |
| <i>Vallisneria americana</i>      | Eel-grass              |                        | -                | -  | -  | O  | -  | -  | -  | -  | -  | -  | -  | P  | -  | -  | R  | -  | O  | -  | -  | -  | -  | -  | -  | -  | O  | R  | P  | P  |   |

Table 7: Species present on the rake at each of the rake toss locations and abundance. Refer to Map 10 for Rake locations.

| Blake Falls Reservoir             |                      | Rake Toss Numbers |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----------------------------------|----------------------|-------------------|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Scientific Name                   | Common Name          | 1                 | 2 | 5 | 8 | 9 | 10 | 11 | 13 | 15 | 18 | 19 | 22 | 23 | 24 | 25 | 26 | 28 | 30 | 31 | 35 | 36 | 38 | 44 | 46 | 49 | 52 | 53 | 56 | 59 | 61 |
| <i>Eleocharis sp.</i>             | Hairgrass            | O                 | - | - | - | R | -  | O  | C  | P  | -  | -  | R  | R  | R  | -  | -  | R  | -  | -  | -  | R  | -  | -  | -  | R  | -  | O  | R  | R  | -  |
| <i>Myriophyllum heterophyllum</i> | Twoleaf watermilfoil | -                 | - | - | - | - | -  | -  | -  | R  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| <i>Nitella sp.</i>                | Brittlewort          | -                 | - | - | - | - | P  | -  | -  | -  | -  | -  | R  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |    |
| <i>Potamogeton epihydrus</i>      | Ribbon-leaf pondweed | -                 | - | - | - | P | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |    |
| <i>Sagittaria graminea</i>        | Grassy arrowhead     | -                 | - | - | R | R | R  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |    |
| <i>Sparganium sp.</i>             | Bur-reed             | -                 | - | R | - | - | -  | O  | -  | R  | P  | R  | -  | -  | -  | R  | -  | -  | -  | -  | -  | -  | -  | -  | R  | O  | O  | -  | -  | O  | -  |
| <i>Utricularia purpurea</i>       | Purple bladderwort   | R                 | R | O | R | R | O  | -  | -  | -  | O  | -  | -  | -  | -  | O  | R  | -  | C  | R  | -  | R  | R  | -  | -  | R  | R  | -  | -  | R  | R  |
| <i>Vallisneria americana</i>      | Eel-grass            | -                 | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | R  | -  | -  | -  | -  | -  | -  | -  | -  | -  |

Table 8: Percent cover of *Myriophyllum heterophyllum* detected at each plant bed in Blake Falls Reservoir. Refer to Map 11 for *M. heterophyllum* locations. A = Abundant (<50% cover), C = Common (25-50%), P = Present (15-25%), O = Occasional (5-15%), and R = Rare (<5%).

| Blake Falls Reservoir             |                      |                        | Plant Bed Number |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |
|-----------------------------------|----------------------|------------------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| Scientific Name                   | Common Name          | AREA (M <sup>2</sup> ) | 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| <i>Myriophyllum heterophyllum</i> | Twoleaf watermilfoil |                        | A                | P | C | O | R | A | A | O | A | P  | O  | O  | O  | R  | A  | R  | C  | C  |

|                                   |                      |                        | Plant Bed Number |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----------------------------------|----------------------|------------------------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Scientific Name                   | Common Name          | AREA (M <sup>2</sup> ) |                  | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 |
| <i>Myriophyllum heterophyllum</i> | Twoleaf watermilfoil |                        |                  | O  | P  | R  | R  | O  | R  | C  | P  | R  | O  | R  | O  | C  | R  | R  | R  | O  |