

**Request to amend Order of Conditions  
for lake management of Forge Pond / Lake Matawanakee  
to include the use of herbicide, algaecide, and DASH treatments  
to manage invasive plant growth**

**DEP nos. 204-0872 and 334-1714  
NHESP no. 05-18722**

**April 2025**

**Littleton Clean Lakes Committee  
Westford Healthy Lakes and Ponds Collaborative  
Friends of Forge Pond**



***Friends of Forge Pond***

# Introduction

Management of invasive plants in Forge Pond / Lake Matawanakee in Westford and Littleton, Massachusetts has focused on winter drawdowns, benthic mats, and Eco-Harvesting. Recent proliferation of invasive and nuisance plants in the lake is so severe that additional methods of dealing with it are sought. Littleton Clean Lakes Committee, Westford Healthy Lakes and Ponds Collaborative, and Friends of Forge Pond are requesting to amend the current Order of Conditions for lake management to also allow the use of herbicide and algaecide treatments and suction harvesting as additional methods for mitigating the plant growth.

## Overview

### **Lake management activities allowed by the current OOC**

The current Order of Conditions (OOC) for Forge Pond / Lake Matawanakee permits the use of winter drawdowns and physical harvesting of plants as methods of controlling invasive and nuisance plant growth in the lake. The original OOC for drawdowns was amended in 2023 to allow the additional use of physical plant harvesting.

The overall goal of these efforts is to preserve the quality of the lake in the face of accelerating eutrophication. Our lakes are treasured natural resources, but when lakes are surrounded by developed communities, they are prone to accelerated eutrophication and deterioration. This has been seen locally at Littleton's Mill Pond, which over just a few decades changed from being a vibrant lake with a 12-foot depth to a degraded pond with a 3-foot depth. Managing the ecology of the lakes is important for preserving their vitality.

### **Recent plant growth**

Forge Pond / Lake Matawanakee, located in Westford and Littleton, MA (Figures. 1, 2) has become infested by several non-native or invasive aquatic plant species. These include fanwort (*Cabomba caroliniana*), Eurasian milfoil (*Myriophyllum spicatum*), variable milfoil (*Myriophyllum heterophyllum*), curly-leaf pondweed (*Potamogeton crispus*) and European naiad (*Najas minor*). These species degrade recreational uses of the lake and degrade the habitat value of the lake's littoral zone (the area of rooted plant growth) by out-competing beneficial native species.

Native species that have in some cases become abundant in areas where swimming and boating occur include coontail (*Ceratophyllum demersum*), common bladderwort (*Utricularia vulgaris*), wild celery (*Vallisneria americana*), lesser duckweed (*Lemna minor*), ribbonleaf pondweed (*Potamogeton epihydrus*), thin-leaf pondweed (*Potamogeton pusillus*), white water lily (*Nymphaea odorata*), yellow water lily (*Nuphar lutea variegata*), and musk grass (*Chara vulgaris*).

While winter drawdowns have done a reasonable job of controlling the invasive and nuisance plants over much of the past decade, starting in 2023 the growth of plants in the lake has increased significantly, with areas that were previously populated by the plants now exhibiting much higher plant densities than before, and with invasive plant growth in many areas where the plants had not previously been present. Several life-long residents of the lake pointed out that the plant growth in both the summers of 2023 and 2024 was far more abundant than they had ever seen before.

The extent of the plant growth in the lake is shown by the aquatic vegetation monitoring survey of Forge Pond / Lake Matawanakee, performed by TRC in July 2024. The areal extent and density of the invasive species identified in this survey are shown in Figures 3 to 8.

There is concern that the high level of plant growth in the lake is the “new normal” and represents accelerating eutrophication of the lake, with the lake filling in with plants growing in ever-deeper sediment composed of the dying plants.

## Current plant management

### Winter drawdowns

The Friends of Forge Pond and the Littleton Clean Lakes Committee have been conducting winter drawdowns of the lake for about 10 years. Prior to that, drawdowns to control plant proliferation were carried out on-and-off going back nearly a century. Winter drawdowns can help control invasive aquatic plants in the lake, reducing invasive plant growth in shallow areas, supporting a healthy ecology for marine life and providing safe and clean swimming and boating areas. Drawdowns are environmentally favorable, freezing and drying plants in the exposed lakebed to inhibit plant growth, and are particularly effective in controlling plants that rely on fragmentation and vegetative propagules for overwintering and expansion, such as most of the invasive species present in the lake (Eurasian milfoil, variable milfoil, fanwort, and European naiad). About two weeks of sustained hard freeze with low water are needed to accomplish this. Results from drawdowns vary from year to year due to variations in precipitation, temperature, tributary inflows, and other conditions such as the presence or absence of beaver dams in Beaver Brook upstream of the lake. A series of annual drawdowns helps decrease invasive plant growth, improving both the wildlife habitat and the recreational quality of the lake.

### Eco-Harvesting

Over the summers of 2023 and 2024, a relatively new way of mitigating the invasive plants has been tried: Eco-Harvesting. This method collects the plants using a harvesting machine on a platform boat that engages the plants in the first few feet below the water surface and removes them into a hopper by wrapping the plants with continuously rotating rollers and a conveyor belt. Ideally, the full length of the plants can be removed, but frequently just the upper portion of the plant is removed. Since plant material is held between rollers and contained by the conveyor belt and hopper, the loss of plant fragments is minimal. The plants removed are composted away from the lake.

## Recent lake management experience

### Winter drawdowns

Recent winters have been warmer, significantly reducing the effectiveness of drawdowns. The warmer weather has made it difficult to lower the lake level to the target elevation and has prevented achieving the two-week period of sub-freezing temperature needed to successfully eliminate the exposed invasive plants.

The winters of 2022-2023 and 2023-2024 had very mild temperatures, with no interval of below-freezing temperatures lasting longer than two days, and the lake either never froze over completely (2022-2023) or froze over for just a couple of weeks (2023-2024). As a result, there didn't seem to be material reduction of invasive plants in the exposed lakebed following these drawdowns. In addition, the limited ice cover allowed overall plant growth in the lake to get an early start, with plants attaining mid-summer growth levels by late May, so summer plant levels were more extensive than usual.

Invasive plants are also extending across the lake surface in areas where they haven't normally been present. When plants extend further away from the shore into areas travelled by boats, propellers create plant fragments, further propagating the invasive plants.

The winter of 2024-2025 has been colder and the lake has had a complete ice cover for several weeks, so this most recent drawdown could be more effective, although this won't be known until the spring and summer of 2025.

As the effects of climate change continue to be felt, the experience of the recent warmer winters may become more common and additional methods for controlling invasive aquatic plants are expected to become important.

## Eco-Harvesting

Over the summers of 2023 and 2024, Eco-Harvesting has been used to remove plant material from the lake and dispose of it away from the lake. In both summers, the Eco-Harvesting activities were limited in scale and took place too late in the summer to allow adequate assessment of the impact, so the Eco-Harvesting provided inconclusive results.

In the summer of 2023, the Eco-Harvesting operation was limited in scale because of limited funding and in 2024 the amount of Eco-Harvesting was restricted by the Massachusetts Department of Environmental Protection (DEP) when it provided last-minute requirements severely limiting the amount of material that could be removed without a dredging permit. Further Eco-Harvesting on Forge Pond / Lake Matawanakee will require a dredging permit from DEP. This is currently being sought and it would allow up to 5,000 cubic yards of plant material to be removed in future Eco-Harvesting treatments. However, the mandated process for securing the permit will result in approval being obtained too late for Eco-Harvesting to be performed in the summer of 2025.

Also, both the 2023 and 2024 treatments took place too late in the summer to be fully effective, due to delays in obtaining the required WPA permits.

Performing larger treatments at an earlier time in the season will allow the effectiveness of the Eco-Harvesting process to finally be adequately assessed. If it is successful, this method may become an important means to deal with accelerated eutrophication.

## Requested additions to currently approved management activities

To continue efforts to effectively mitigate the growth of invasive plants in Forge Pond / Lake Matawanakee, despite the complications discussed above with the currently used approaches, two additional lake management methods are being requested: 1) herbicide and algaecide treatments and 2) suction harvesting treatments.

## Approval to request amending of existing Order of Conditions

The General Conditions of the lake management Order of Conditions for Forge Pond / Lake Matawanakee (DEP nos. 204-0872 (Littleton) and 334-1714 (Westford)) include the following:

*"(13) The work shall conform to the plans and special conditions contained in this order.*

*(14) Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent."*

Guidance was sought from the Westford and Littleton Conservation Commissions to determine if the addition of the use of herbicide, algaecide, and DASH treatments to the currently approved lake

management methods requires a new Notice of Intent or whether this can be accomplished by amending the existing lake management OOC.

At the Westford Conservation Commission meeting of March 26, 2025 and Littleton Conservation Commission meeting of April 8, 2025, the Commissions found that the proposed change to include herbicides, algaecides and suction harvesting was not significant enough to require the filing of a new Notice of Intent and that the Order of Conditions should be amended through the public hearing process and appropriate notifications.

## Herbicide and algaecide treatments

The first of the additional methods is the use of herbicide and algaecide treatments to manage invasive and nuisance aquatic plants. This approach is recognized as an appropriate and effective method of plant management by the Massachusetts Departments of Environmental Protection and Conservation and Recreation (ref: Eutrophication and Aquatic Plant Management in Massachusetts: Final Generic Environmental Impact Report (hereinafter, "GEIR"), section 4.6 [<https://www.mass.gov/files/documents/2016/08/sd/eutrophication-and-aquatic-plant-management-in-massachusetts-final-generic-environmental-impact-report-mattson.pdf>]).

## Effectiveness of treatments

Reporting the effectiveness of aquatic herbicides, GEIR, p. 4-89 states:

*A herbicide treatment can be an effective short-term management procedure to produce a rapid reduction in algae or vascular plants for periods of weeks to months. Although long-term effectiveness from herbicide treatments is possible, in most cases herbicide use is considered a short-term control technique. Herbicides are generally applied seasonally to every two years to achieve effective control. Systemic herbicides, which kill the entire plant including the roots, generally provide results with greater longevity than contact herbicides, which can leave roots alive to regrow. In many cases, use of a herbicide will reduce the amount of regrowth the following season. In some cases involving fluridone or 2,4-D, as many as five years of control can be gained (G. Smith, ACT, pers. comm., 1995). In other cases, however, several applications per year may be necessary to achieve control goals.*

While the use of herbicides can eliminate widespread growth of invasive plants such that only limited areas of growth subsequently need to be dealt with, we recognize that, in other cases, the long-term effects of regularly repeated herbicide application can be problematic. Our interactions with other lake management committees and with individual lake managers have highlighted that, depending on the extent of ongoing treatments, the selectivity of herbicides used and the specific native and invasive plants present, it is possible to skew the balance of plant life away from the naturally occurring native species. We intend to be judicious in our choices of herbicides, sparing in their application, and watchful to track the effects on the overall ecological balance of the lake. Right now, the invasive plants are rapidly damaging that ecology and have dramatically displaced the naturally occurring plant species. Our goal is to use just enough of the right treatments, in tandem with other means of addressing invasive plant growth, to mitigate the current state, without compromising the natural ability of the ecology to re-balance itself.

## Indications for appropriate use

Considerations indicative of appropriate application of herbicides and algaecides for the management of plants in lakes are provided in GEIR, p. 4-96:

1. *Periodic algal blooms impair recreation or water supply use, but are not a frequent occurrence (algaecides, mainly copper).*

2. An invasive plant species has been detected at non-dominant levels but is not amenable to physical control techniques.
3. An invasive plant species has become dominant and is greatly reducing the diversity of native species, affecting habitat and water uses.
4. Overall vegetative density is excessive over a large portion of the lake, negatively affects habitat and water uses, is not amenable to alternative control methods, but requires management to meet reasonable intended uses. In such cases it is recommended that herbicides be considered as part of a long-term plan that seeks to prolong the benefits of an individual treatment.

Item (1) is applicable in the current case, as algal blooms are very infrequent in Forge Pond / Lake Matawanakee, but have occurred on occasion. When water quality measurements indicate that algal blooms are about to occur, there is limited time to respond, so including the use of algaecide treatments in the permitted methods will allow them to be used expediently, if needed.

Item (2) can be considered to be applicable in the current case, if plants are considered “amenable” to control techniques when the techniques are “effective and available”, since existing control techniques are being found to either have limited effectiveness (drawdowns) or are currently not available (Eco-Harvesting).

Item (3) applies in the current case, as there are many areas of the lake where an invasive species (Eurasian milfoil, variable milfoil, or fanwort) is overwhelmingly dominant.

Item (4) is applicable in the current case, with very high plant density levels in significant portions of the lake, and current techniques are, again, found to either have limited effectiveness (drawdowns) or are currently not available (Eco-Harvesting).

## Requested herbicides and algaecides

GEIR, p. 4-84 states:

*Only aquatic herbicide and algaecide products registered for use in Massachusetts through the Department of Agricultural Resources may be used in Massachusetts, and then only by licensed applicators with proper permits (except in some water supply cases and ponds with no outlets).*

The list of aquatic herbicides approved by the Massachusetts Department of Agricultural Resources for use in water bodies in Massachusetts is found at this online site:

<https://www.mass.gov/lists/aquatic-herbicide-active-ingredients>.

Approval is requested, for use on Forge Pond / Lake Matawanakee, for the following aquatic herbicides and algaecides that are registered for use in Massachusetts through the Department of Agricultural Resources, as described in the associated online documentation:

- Aquatic Dyes <https://www.mass.gov/doc/aquatic-dyes/download>
- Copper Complexes <https://www.mass.gov/doc/copper/download>
- Diquat <https://www.mass.gov/doc/diquat-appendix/download>
- Endothall <https://www.mass.gov/doc/endothall/download>
- Florpyrauxifen-benzyl <https://www.mass.gov/doc/florpyrauxifen-benzyl/download>
- Flumioxazin <https://www.mass.gov/doc/flumioxazin/download>
- Fluridone <https://www.mass.gov/doc/fluridone/download>
- Imazapyr <https://www.mass.gov/doc/imazapyr/download>
- Sodium Carbonate Peroxyhydrate and Hydrogen Peroxide <https://www.mass.gov/doc/sodium-carbonate-peroxyhydrate-and-hydrogen-peroxide/download>
- Triclopyr <https://www.mass.gov/doc/triclopyr/download>

The following herbicides which are registered for use in Massachusetts through the Department of Agricultural Resources are NOT requested for use on Forge Pond / Lake Matawanakee:

- 2,4-D <https://www.mass.gov/doc/24-d/download>
- Glyphosate <https://www.mass.gov/doc/24-d-massdep-evaluation/download>
- Imazamox <https://www.mass.gov/doc/glyphosate/download>
- <https://www.mass.gov/doc/imazamox/download>

Approval is also requested for the use of herbicides and algaecides which are subsequently registered at a later date for use in Massachusetts through the Department of Agricultural Resources for treatment on aquatic plants. This will allow Forge Pond / Lake Matawanakee treatments to continue to take advantage of improvements in this technology.

## Treatment process

The use of herbicide and algaecide treatments on Forge Pond / Lake Matawanakee will be performed by licensed vendors. Prior to the treatments, a plant survey will be carried out to locate the significant areas of high-density invasive or nuisance plant growth that will require treatment. The treatments performed will make use of guidance and recommendations from lake management professionals, which could include the vendors providing the survey and/or treatment services, the Lakes and Ponds Division of Massachusetts Department of Conservation and Recreation, and Certified Lake Managers. Post-treatment plant surveys will also be performed to verify the results of the treatments. In some cases, a targeted follow-up treatment may be used, based on continued assessment of the plant growth in the treated areas.

## Impacts specific to the WPA

Impacts of herbicide and algaecide treatments, specific to the Wetlands Protection Act are provided by GEIR, p. 4-126:

*The following overall impact classification is offered as a generalization of impacts, with clarifying notes and caveats as warranted:*

1. *Protection of public and private water supply – Detriment (prohibition of many herbicides from drinking water supplies) or neutral (as a function of use restrictions).*
2. *Protection of groundwater supply – Detriment (prohibition of some herbicides, notably 2,4 D, within the recharge zone of wells) or neutral (as a function of use restrictions).*
3. *Flood control - Neutral (no significant interaction).*
4. *Storm damage prevention – Neutral (no significant interaction).*
5. *Prevention of pollution – Generally neutral (no significant interaction), but could be a detriment if plant die-off causes low oxygen in the lake.*
6. *Protection of land containing shellfish – Generally neutral (no significant interaction), but reduced algae might reduce food resources for shellfish, and direct toxicity is possible under unusual circumstances.*
7. *Protection of fisheries – Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover).*
8. *Protection of wildlife habitat – Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover).*

Regarding the Detriments mentioned in Items (1) and (2):

- Recent information (personal communication with staff members of Massachusetts Department of Conservation and Recreation, Lakes and Ponds Division) on the use of herbicides in water supplies is that 2,4-D (2,4-dichlorophenoxyacetic acid) is the only herbicide among those approved for aquatic use in Massachusetts that the Department of Environmental

Protection doesn't allow to be used near drinking wells. All other approved herbicides bind with sediment and break down to neutral compounds within inches of entry into the groundwater.

- The use of 2,4-D is not requested for use in Forge Pond / Lake Matawanakee.

## Suction harvesting

The second additional method requested is Suction Harvesting. This is a process of aquatic plant removal using divers to identify the target plants, loosen the plants by their roots and guide them into a suction device. This process is also known as Diver Assisted Suction Harvesting, or DASH. Plants are extracted with their root systems, providing a good chance of eliminating the unwanted vegetation, rather than only slowing growth temporarily. The suctioned material is moved through tubing to a tending boat and deposited into a mesh containment system. The plant material stays in the containment system and de-waters. Any silt on the plants predominantly drains back into the lake. The collected plant material is removed from the lake, staged, and disposed of (or composted) outside of all wetland resource areas associated with the lake. The work is expected to be provided by professional vendors that offer this service commercially.

A very beneficial feature of Suction Harvesting is the fact that the process should remove the entire plant, including the roots. As such, the plant in that location will not continue to grow or regrow. An area which has had the invasive plants removed by Suction Harvesting will be free of the plants, improving the likelihood that it will take some time before a reinfestation of the area by the invasive plant occurs.

Additionally, the Suction Harvesting process allows for careful selection of which plants are removed. This allows beneficial native plants to be left in place, providing a more normal ecology of the harvested area after the work is completed.

Suction harvesting is rather expensive and so it is not expected to be feasible for large areas of the lake, but generally suitable only for targeted areas. Since the areas to which the process would be applied are significantly smaller than the areas treated by the other methods applied within this OOC (i.e., drawdowns, Eco-Harvesting, herbicides and algaecides), it may not be necessary to perform full-lake plant surveys prior to performing suction harvesting. If areas of significantly dense growth of invasive or nuisance plants are identified, suction harvesting could be applied to them, such as localized plant "hot spots" and along waterfronts and beaches.

The method of suction harvesting is already included in the amended OOC of July 2023 for Forge Pond's / Lake Matawanakee's lake management (DEP nos. 204-0872 (Littleton) and 334-1714 (Westford)). More specifically, that amendment allowed physical harvesting of plant material, as explained in Special Condition #40:

*"Physical harvesting techniques allowed include mechanical harvesting with collection (aka eco harvesting). If the proponent seeks to implement manual hand pulling or suction harvesting, a work plan and maps shall be provided to the Commission for their review and approval at a regularly scheduled meeting. Prior to submitting such request, the proponent shall also receive approval from 'the Division' [i.e., Massachusetts Natural Heritage and Endangered Species Program]."*

We are restrained from using suction harvesting in 2025 until the previously mentioned dredging permit is obtained for the removal of larger amounts of plant material. Since suction harvesting is expected to be tried once this permit is obtained, the permission to use suction harvesting is sought at this time, while broadening of the existing lake management permit is already being sought.

## Final notes

### Affected areas remain unchanged by added treatments

The lake management OOC for Forge Pond / Lake Matawanakee (DEP nos. 204-0872 (Littleton) and 334-1714 (Westford)), amended for the inclusion of physical harvesting of plants, explains the following, on page 10b of the Westford amended OOC:

*"The Commission finds that the annual drawdown altered the Land Under Waterbody of the entire waterbody through the exposing of lake bottom sediments or the lowering of the water level and the areas of invasive and nuisance vegetation removal are within the same locations permitted by the existing Order of Conditions."*

In the same way, the areas affected by herbicide and algaecide treatments and DASH treatments are also within the same locations permitted by the existing amended Order of Conditions.

### Natural Heritage and Endangered Species Program (NHESP)

#### Absence of estimated habitats of rare wildlife

The current estimated habitats of rare wildlife near Forge Pond / Lake Matawanakee, as determined by the Natural Heritage and Endangered Species Program, are shown in Figures 9 and 10. There are no endangered species in the affected resource area of Forge Pond / Lake Matawanakee. The wetlands area of Beaver Brook, outside of and upstream of Forge Pond / Lake Matawanakee is designated as an estimated habitat of rare wildlife.

#### Requirement to notify NHESP

The existing Order of Conditions (DEP no. 204-0872 and 334-1714, NHESP no. 05-18722), which permits winter drawdowns and physical removal of plants on Forge Pond / Lake Matawanakee, contains the following requirement:

*Upon filing for any Renewal, Extension, or Amendment of the Orders of Conditions, The Applicant shall contact the Division for written response regarding impacts to Resource Area habitat of state-listed wildlife prior to issuance of a Renewal, Extension or Amendment to the Order of Conditions.*

In this case, "Division" refers to The Natural Heritage and Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife (NHESP).

The narrative for this request to amend the current Order of Conditions to include the use of herbicide and algaecide treatments and suction harvesting has been provided to the NHESP.

Figure 1: USGS Locus Map



Figure 1 – USGS Locus map



Figure 2 – Forge Pond / Lake Matawanakee showing the principal inflows of Beaver Brook and Gilson Brook and the Stony Brook outlet.

**Table 1**  
**Aquatic Plants Observed in Forge Pond / Lake Matawanakee During July 2024 Plant Survey**

Common Name	Scientific Name	Native or Exotic
Eurasian Milfoil	<i>Myriophyllum spicatum</i>	Exotic
Variable-leaf Milfoil	<i>Myriophyllum heterophyllum</i>	Exotic
Fanwort	<i>Cabomba caroliniana</i>	Exotic
Brittle Naiad	<i>Najas minor</i>	Exotic
Curly-leaf pondweed	<i>Potamogeton crispus</i>	Exotic
Canadian Waterweed	<i>Elodea canadensis</i>	Native
Common Bladderwort	<i>Utricularia macrorhiza</i>	Native
Common Duckweed	<i>Lemna minor</i>	Native
Coontail	<i>Ceratophyllum demersum</i>	Native
Floating-leaf Pondweed	<i>Potamogeton epihydrus</i>	Native
Little Floating Bladderwort	<i>Utricularia radiata</i>	Native
Thinleaf Pondweed	<i>Potamogeton pusillus</i>	Native
Water Celery (Tapegrass)	<i>Vallisneria americana</i>	Native
Watershield	<i>Brasenia schreberi</i>	Native
White Water Lily	<i>Nymphaea odorata</i>	Native
Yellow Water Lily	<i>Nuphar lutea variegata</i>	Native

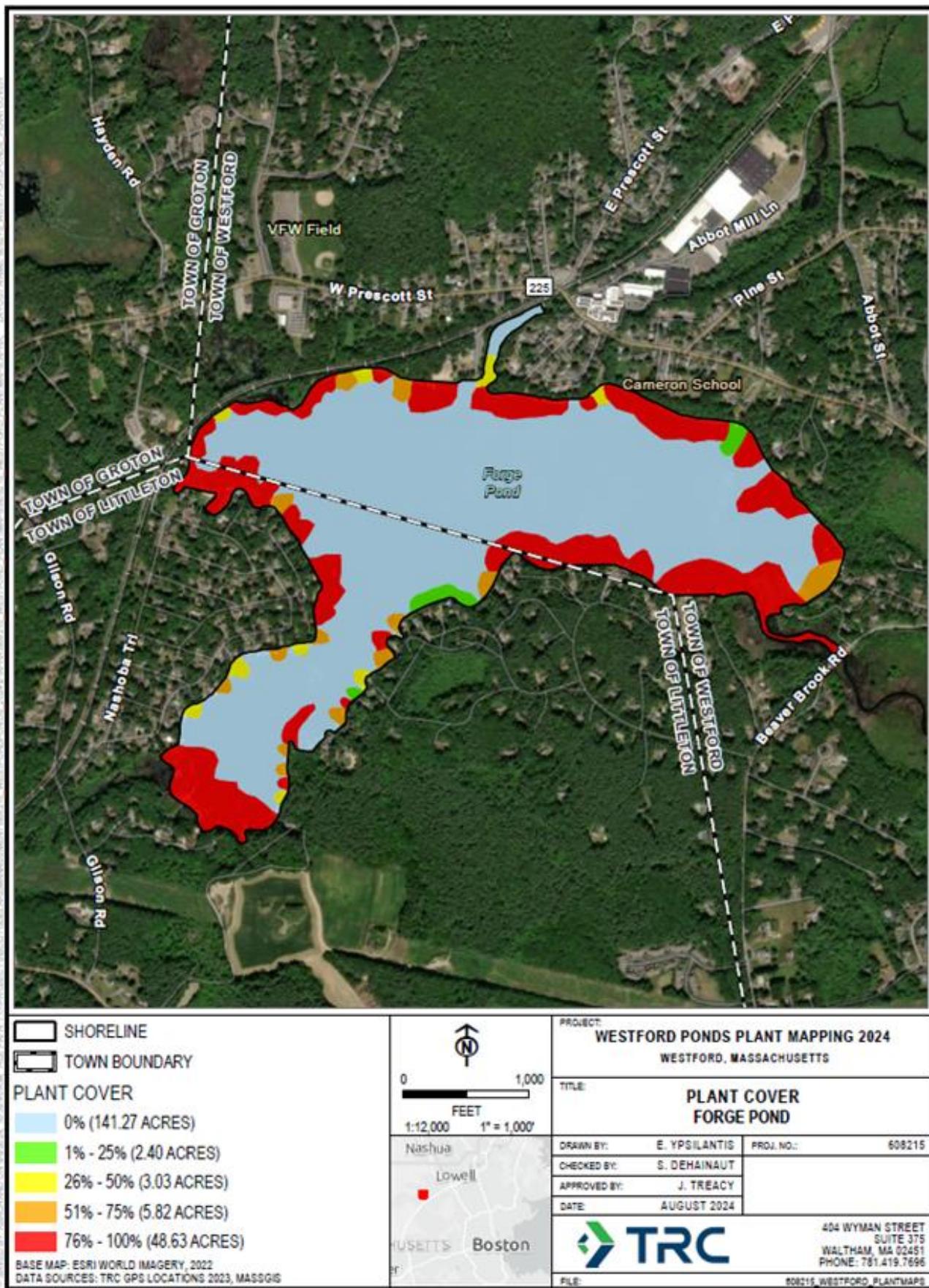


Figure 3. Plant cover on Forge Pond / Lake Matawanakee (July 2024)  
Map doesn't show the significant subsurface plant coverage in the deeper water of the south bay.

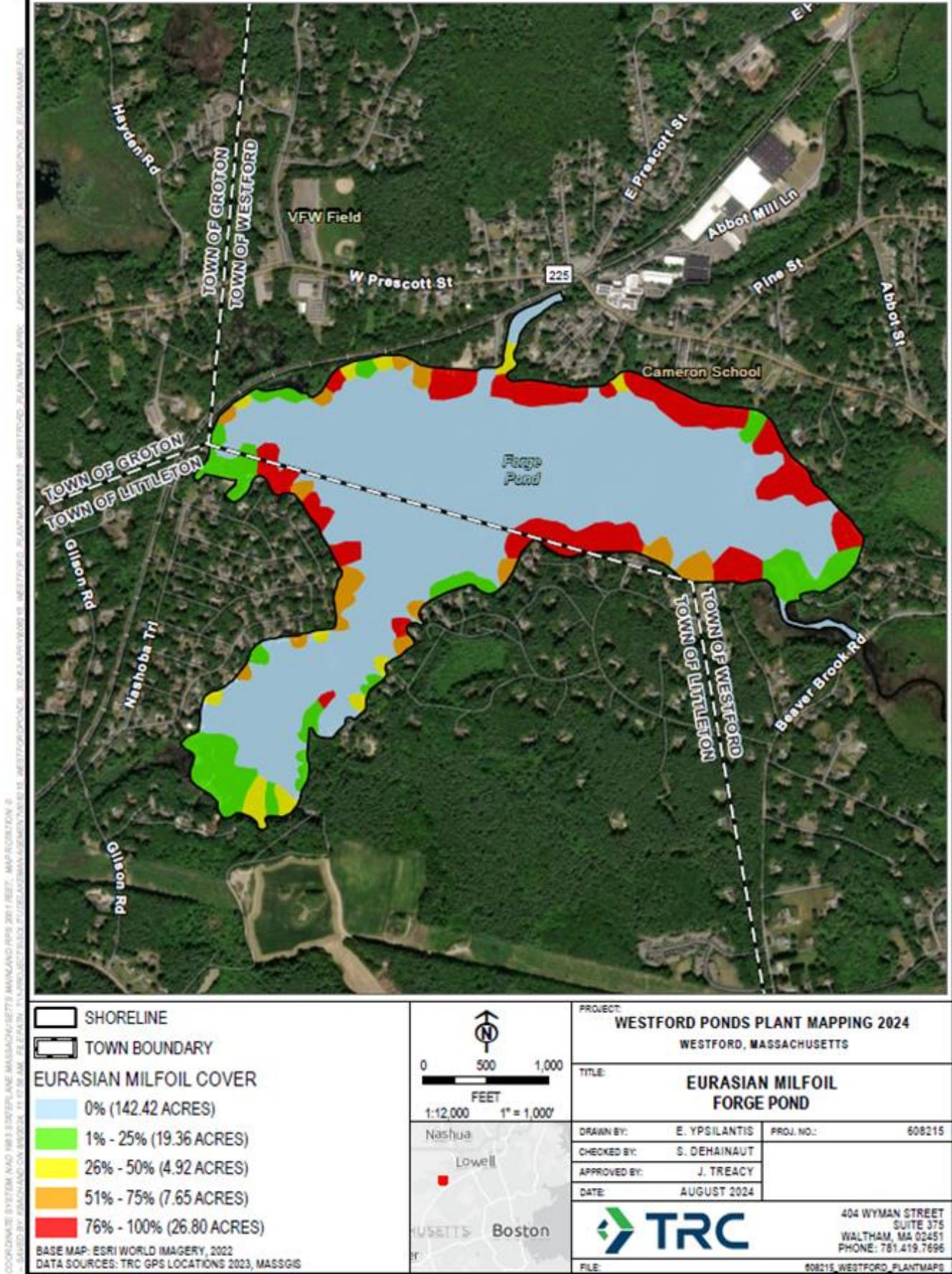


Figure 4. Extent of Eurasian Milfoil on Forge Pond / Lake Matawanakee (July 2024)

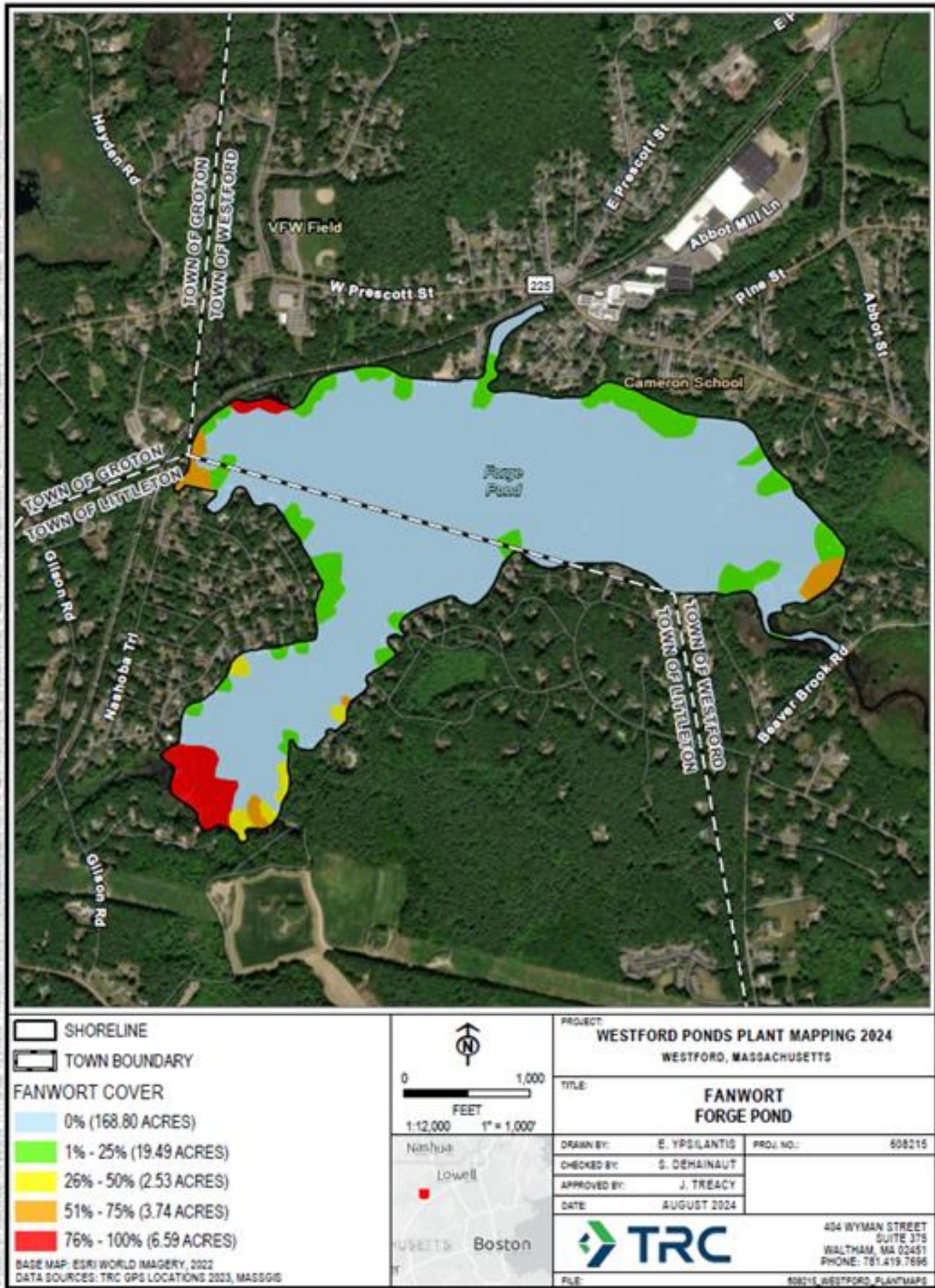
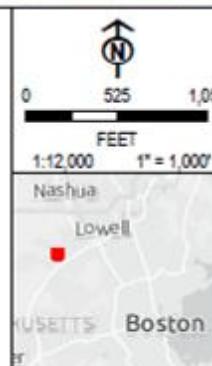
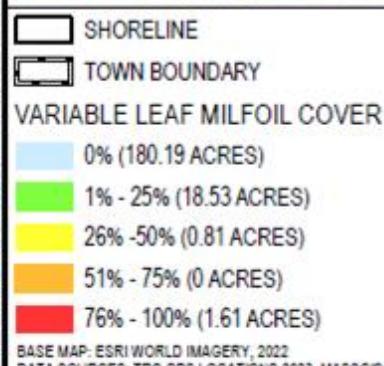
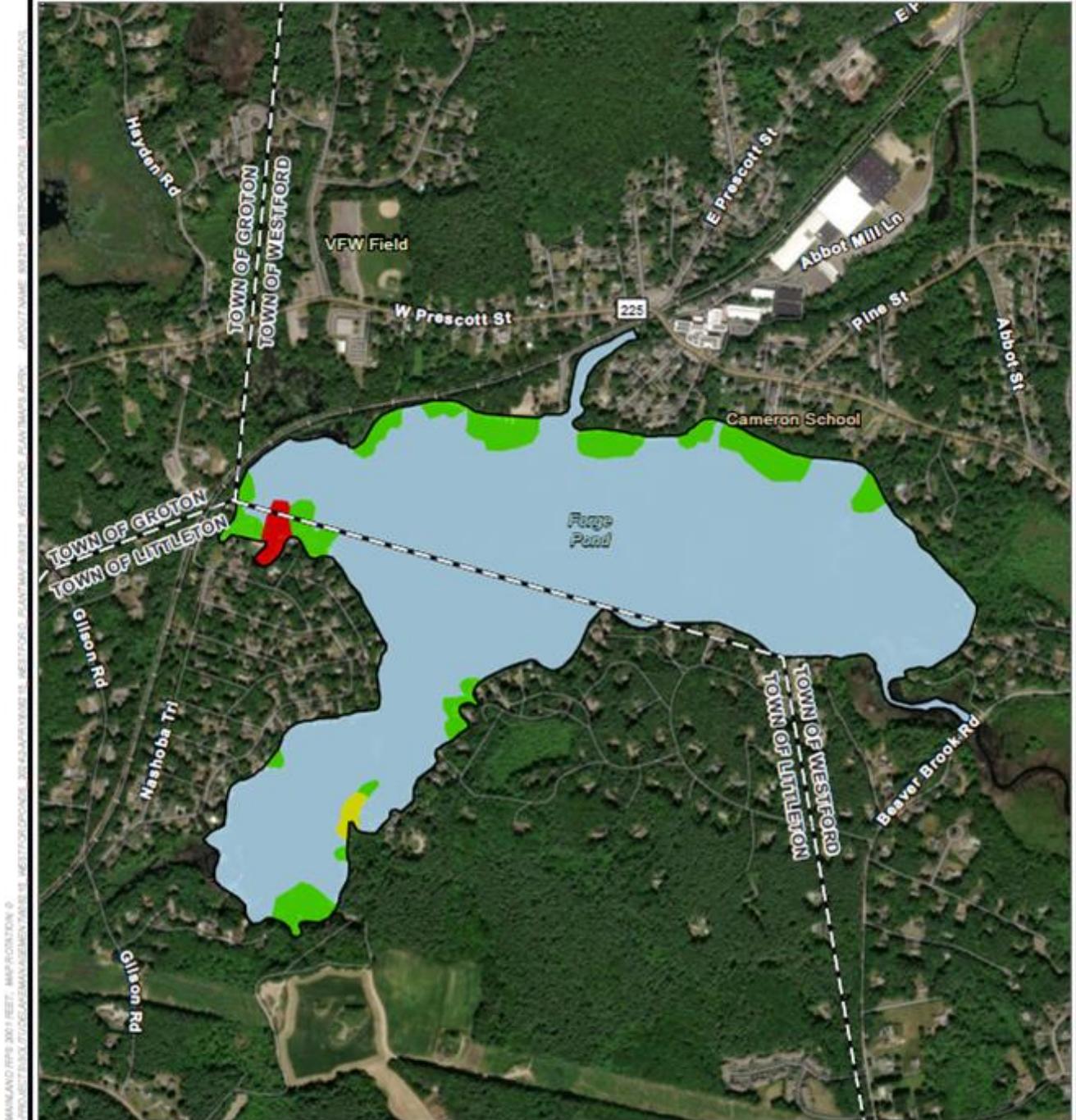


Figure 5. Extent of Fanwort on Forge Pond / Lake Matawanakee (July 2024)



PROJECT:  
**WESTFORD PONDS PLANT MAPPING 2024**  
WESTFORD, MASSACHUSETTS

**VARIABLE LEAF MILFOIL  
FORGE POND**

DRAWN BY:	E. YPSILANTIS	PROJ. NO.:	608215
CHECKED BY:	S. DEHAİNAUT		
APPROVED BY:	J. TREACY		
DATE:	AUGUST 2024		

**TRC**

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WALTHAM, MA 02451  
PHONE: 781.419.7696

FILE: 608215.WESTFORD.PLANTMAPS

Figure 6. Extent of Variable Leaf Milfoil on Forge Pond / Lake Matawanakee (July 2024)

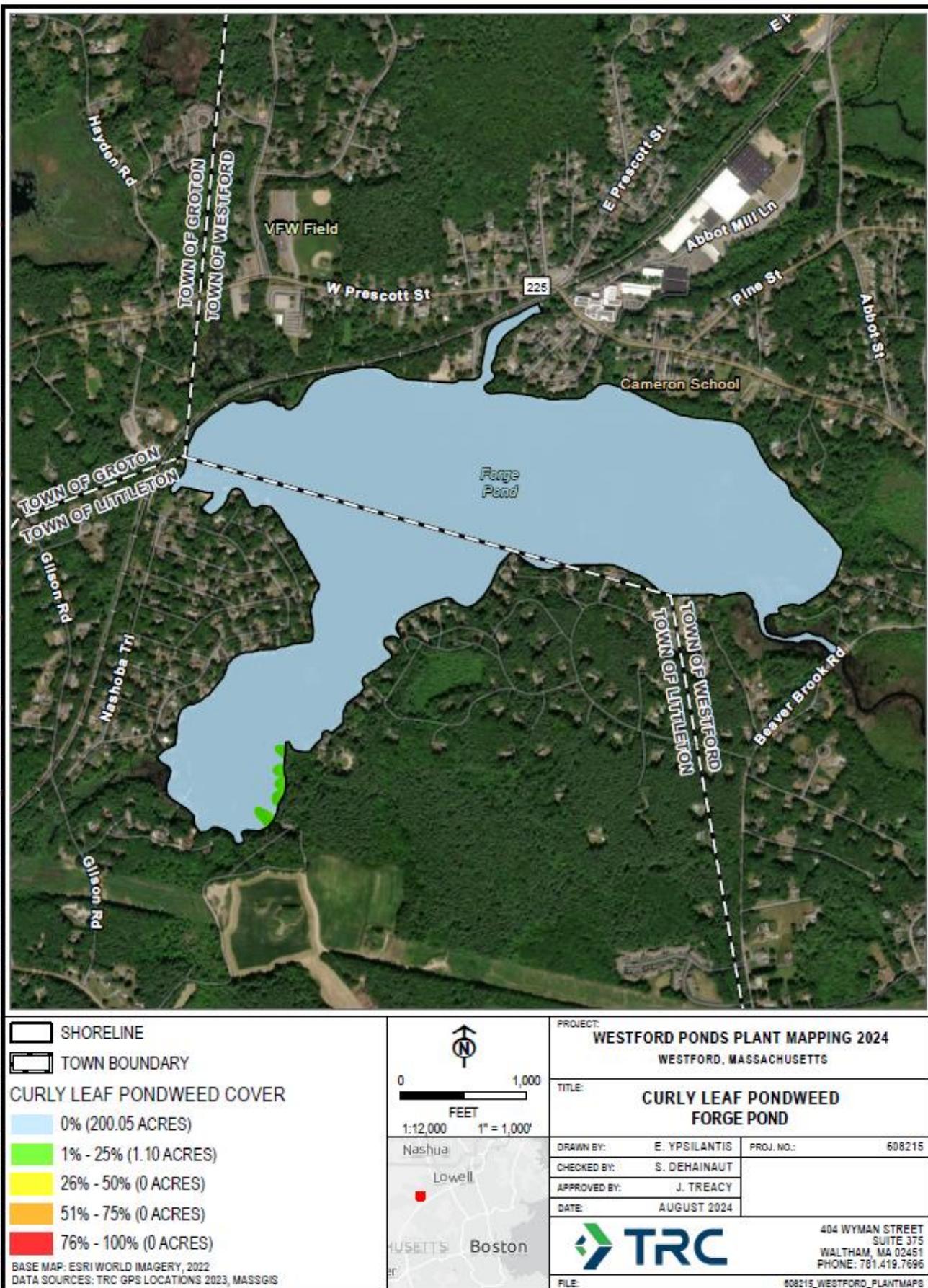


Figure 7. Extent of Curly Leaf Pondweed on Forge Pond / Lake Matawanakee (July 2024)

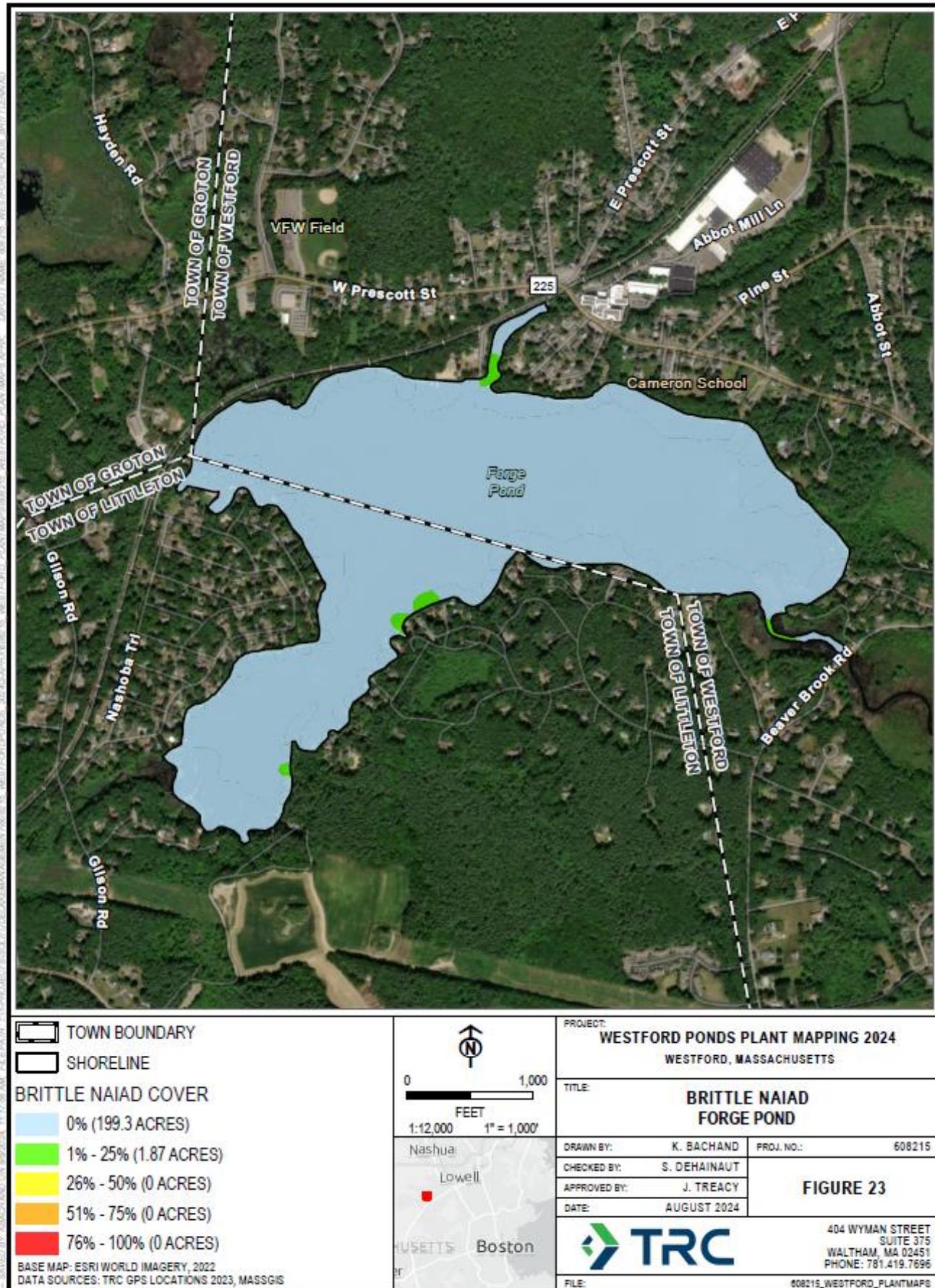


Figure 8. Extent of Brittle Naiad on Forge Pond / Lake Matawanakee (July 2024)

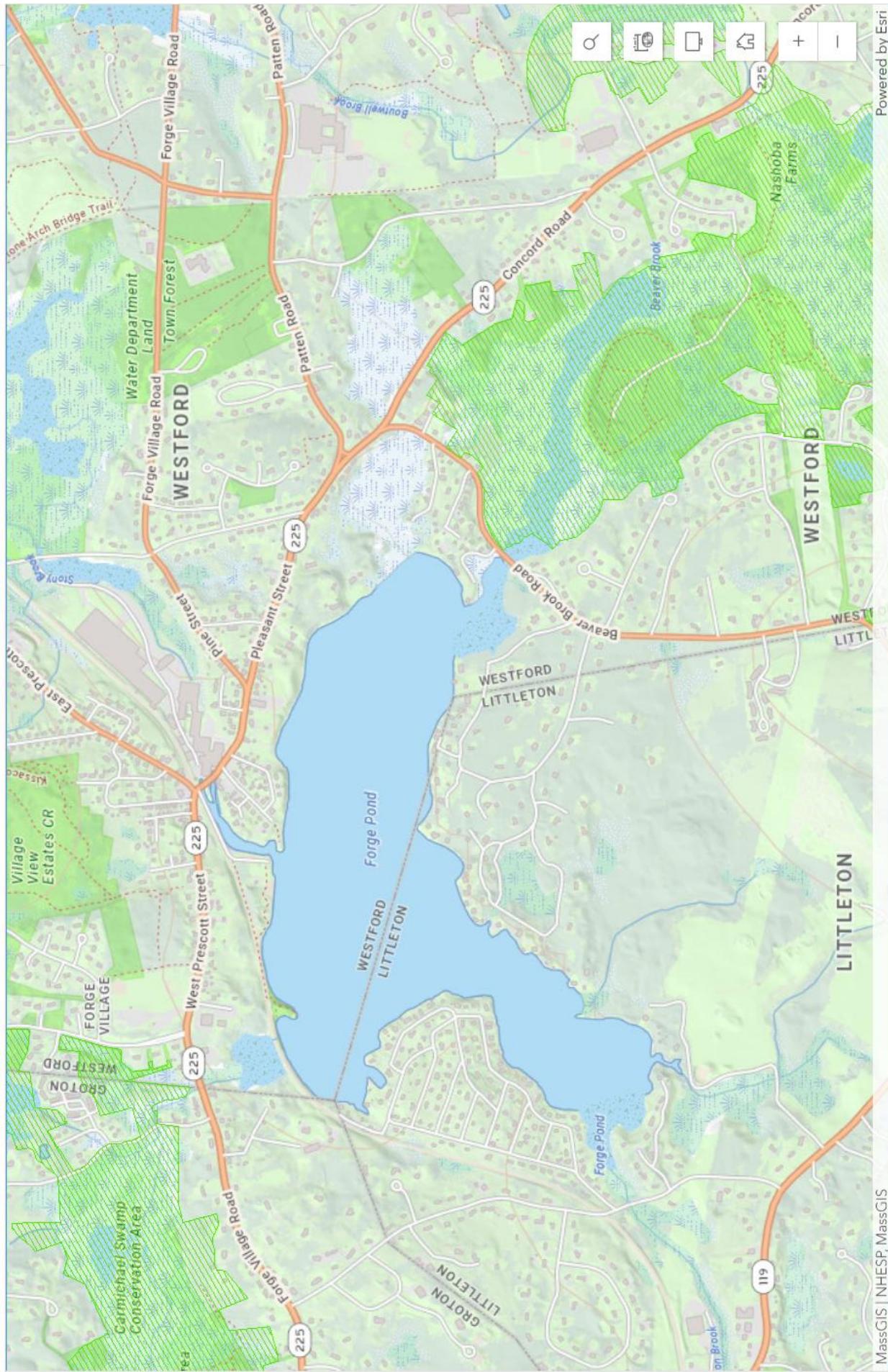


Figure 9. NHESP Estimated Habitats of Rare Wildlife near Forge Pond / Lake Matawanakee  
Ref: <https://massgis.maps.arcgis.com/apps/mapviewer/index.html?layers=e99c0aae177247ae85636102db6ede5f>

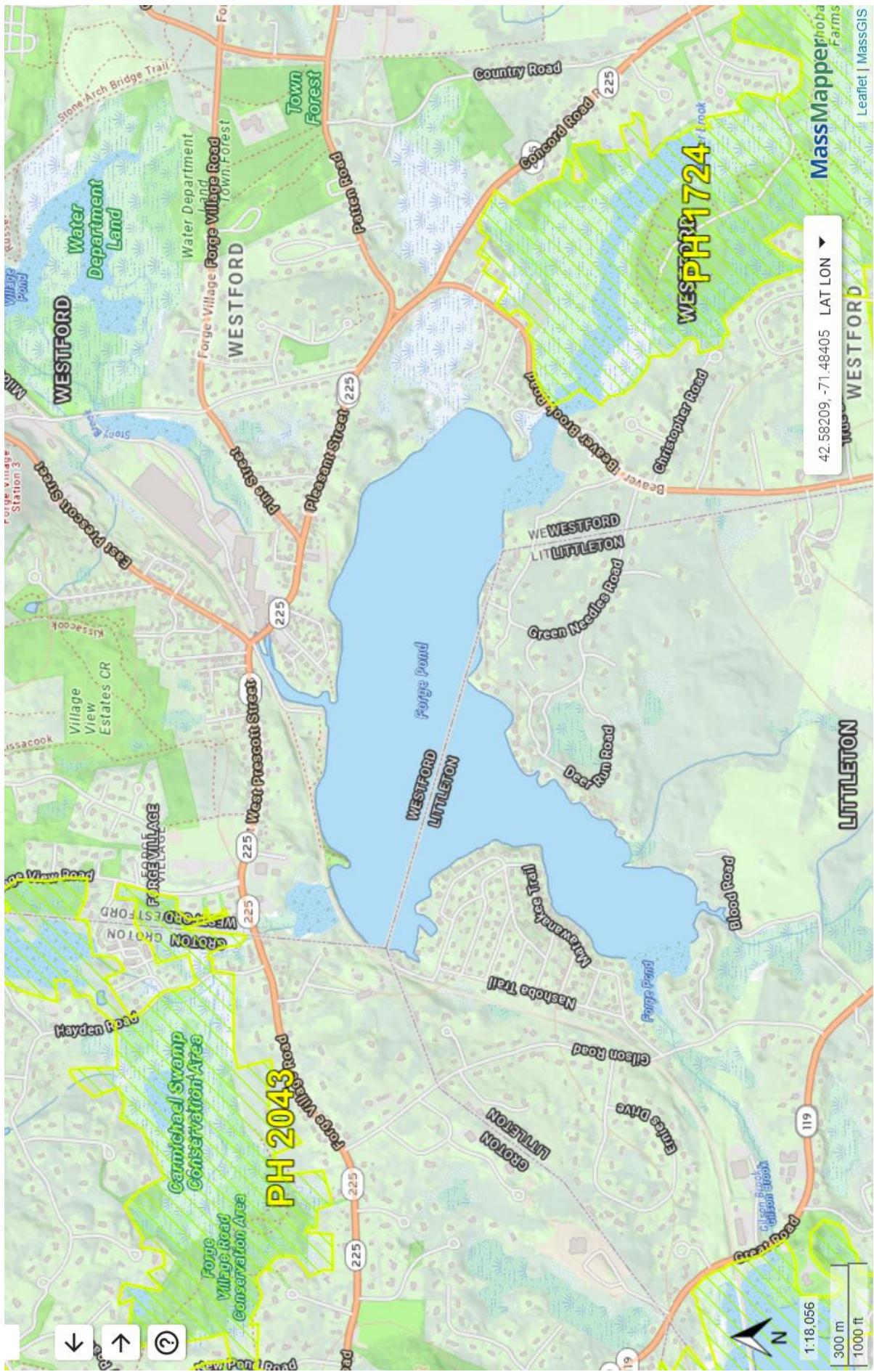


Figure 10. NHESP Estimated Habitats of Rare Wildlife near Forge Pond / Lake Matawanakee

Ref: [https://maps.massgis.digital.mass.gov/MassMapper/MassMapper.html?bl=2019%20Aerial%20Imagery\\_100&l=massgis:GISDATA.PRIHAB\\_POLY:Default](https://maps.massgis.digital.mass.gov/MassMapper/MassMapper.html?bl=2019%20Aerial%20Imagery_100&l=massgis:GISDATA.PRIHAB_POLY:Default)

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## References

GEIR (2004)

Generic Environmental Impact Report on Eutrophication and Aquatic Plant Management in Massachusetts. Executive Office of Environmental Affairs, Commonwealth of Massachusetts.

<https://www.mass.gov/files/documents/2016/08/sd/eutrophication-and-aquatic-plant-management-in-massachusetts-final-generic-environmental-impact-report-mattson.pdf>

Herbicides for Aquatic Vegetation Management

Online information about herbicides that have been approved for use in lakes and ponds in Massachusetts. Provided by Massachusetts Department of Agricultural Resources.

<https://www.mass.gov/herbicides-for-aquatic-vegetation-management>

Aquatic Herbicide Active Ingredients

Online Active Ingredient Fact Sheets for herbicides that have been approved for use in lakes and ponds in Massachusetts. Provided by Massachusetts Department of Agricultural Resources

<https://www.mass.gov/lists/aquatic-herbicide-active-ingredients>

NHESP Estimated Habitats of Rare Wildlife (2025)

Interactive maps of the habitats, provided by Natural Heritage and Endangered Species Program, Massachusetts Division of Fisheries and Wildlife.

<https://massgis.maps.arcgis.com/apps/mapviewer/index.html?layers=e99c0aae177247ae85636102db6ede5f>

[https://maps.massgis.digital.mass.gov/MassMapper/MassMapper.html?bl=2019%20Aerial%20Imager\\_y\\_100&l=massgis:GISDATA.ESTHAB\\_POLY\\_GISDATA.ESTHAB\\_POLY::Default\\_ON\\_100.massgis:GISDATA.PRIHAB\\_POLY\\_GISDATA.PRIHAB\\_POLY::Default\\_ON\\_100,Basemaps\\_MapFeaturesforImagery\\_ON\\_100](https://maps.massgis.digital.mass.gov/MassMapper/MassMapper.html?bl=2019%20Aerial%20Imager_y_100&l=massgis:GISDATA.ESTHAB_POLY_GISDATA.ESTHAB_POLY::Default_ON_100.massgis:GISDATA.PRIHAB_POLY_GISDATA.PRIHAB_POLY::Default_ON_100,Basemaps_MapFeaturesforImagery_ON_100)

## **Natural Heritage and Endangered Species Program (NHESP)**

The existing Order of Conditions (DEP no. 204-0872 and 334-1714, NHESP no. 05-18722), which permits winter drawdowns and physical removal of plants on Forge Pond / Lake Matawanakee, contains the following requirement:

*Upon filing for any Renewal, Extension, or Amendment of the Orders of Conditions, The Applicant shall contact the Division for written response regarding impacts to Resource Area habitat of state-listed wildlife prior to issuance of a Renewal, Extension or Amendment to the Order of Conditions.*

In this case, “Division” refers to The Natural Heritage and Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife (NHESP).

The narrative for this request to amend the current Order of Conditions to include the use of herbicide and algaecide treatments and suction harvesting has been provided to the NHESP.

## **Ecological Restoration Limited Project**

The use of winter drawdowns and physical removal of plants on Forge Pond / Lake Matawanakee, performed under the current Order of Conditions (DEP nos. 204-0872 and 334-1714 and NHESP no. 05-18722), is identified as an Ecological Restoration Limited Project under the Wetlands Protection Act. In the original Notice of Intent, this was affirmed in Mass. DEP WPA Form 3, Appendix A: Ecological Restoration Limited Project Checklists.

**The amendment to the existing Orders of Conditions which is requested in this application will maintain the project status as an Ecological Restoration Limited Project.**

As provided in the Wetlands Protection Act, the additional methods requested in this amendment still qualify for status as an Ecological Restoration Limited Project:

*WPA Section 310 CMR 10.53(4)(e)(5):*

*An Ecological Restoration Project that is not listed in 310 CMR 10.54(4)(e)2. through 4., that will improve the natural capacity of a Resource Area(s) to protect the interests identified in M.G.L. c. 131, § 40, may be permitted as an Ecological Restoration Limited Project provided that the project meets the eligibility criteria set forth in 310 CMR 10.54(4)(a) through (d). Such projects include, but are not limited to, the restoration, enhancement or management of Rare Species habitat, the restoration of hydrologic and habitat connectivity, the removal of aquatic nuisance vegetation to retard pond and lake eutrophication, the thinning or planting of vegetation to improve habitat value, riparian corridor re-naturalization, river floodplain reconnection, in-stream habitat enhancement, fill removal and regrading, flow restoration, and the installation of fish passage structures.*

In addition, the specific impacts of herbicide and algaecide treatments, as they relate to the Wetlands Protection Act, are identified by [GEIR, p. 4-126]:

*The following overall impact classification is offered as a generalization of impacts, with clarifying notes and caveats as warranted:*

- 1. Protection of public and private water supply – Detriment (prohibition of many herbicides from drinking water supplies) or neutral (as a function of use restrictions).*
- 2. Protection of groundwater supply – Detriment (prohibition of some herbicides, notably 2,4 D, within the recharge zone of wells) or neutral (as a function of use restrictions).*
- 3. Flood control - Neutral (no significant interaction).*
- 4. Storm damage prevention – Neutral (no significant interaction).*
- 5. Prevention of pollution – Generally neutral (no significant interaction), but could be a detriment if plant die-off causes low oxygen in the lake.*
- 6. Protection of land containing shellfish – Generally neutral (no significant interaction), but reduced algae might reduce food resources for shellfish, and direct toxicity is possible under unusual circumstances.*
- 7. Protection of fisheries – Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover).*
- 8. Protection of wildlife habitat – Possible benefit (habitat enhancement) and possible detriment (food source alteration, loss of cover).*

Regarding the Detriments mentioned in Items (1) and (2):

- Recent information (personal communication with staff members of Massachusetts Department of Conservation and Recreation, Lakes and Ponds Division) on the use of herbicides in water supplies is that 2,4-D (2,4-dichlorophenoxyacetic acid) is the only herbicide among those approved for aquatic use in Massachusetts that the Department of Environmental Protection doesn't allow to be used near drinking wells. All other approved herbicides bind with sediment and break down to neutral compounds within inches of entry into the groundwater.
- The use of 2,4-D is not requested for use in Forge Pond / Lake Matawanakee.

Reference:

GEIR – Eutrophication and Aquatic Plant Management in Massachusetts: Final Generic Environmental Impact Report. Commonwealth of Massachusetts Executive Office of Environmental Affairs, for the Massachusetts Departments of Environmental Protection and Conservation and Recreation, 2004.  
<https://www.mass.gov/files/documents/2016/08/sd/eutrophication-and-aquatic-plant-management-in-massachusetts-final-generic-environmental-impact-report-mattson.pdf>

## **Payment for Legal Notice**

At the applicant's expense, the Conservation Commission shall publish a legal notice in a newspaper of local circulation announcing the public hearing. The Notice will be published at least five (5) working days prior to the meeting and will include the date, time and location of the public hearing. The newspaper will bill the applicant directly. This bill must be paid before the legal notice will be published.

Please provide information on who will pay the newspaper (owner, applicant and/or representative) with the application.

Name David Barr

Company (if applicable) Littleton Clean Lakes Committee / Friends of Forge Pond

Mailing Address 49 Matawanakee Trail, Littleton MA 01460

E-mail barrdt@gmail.com

Phone 978-201-9524

## AFFIDAVIT OF SERVICE

*Under Massachusetts Wetlands Protection Act and the Littleton Wetlands Protection ByLaw (Chapter 171), this form must be completed and submitted with the Notice of Intent, Abbreviated Notice of Resource Area Delineation or Request for Determination of Applicability.*

I, David Barr *(name of applicant or representative)* certify under the pains and penalties of perjury that on April 9, 2025 *(date)* I gave notification to abutters in compliance with the second paragraph of the Massachusetts General Laws Chapter 131, Section 40, DEP requirements for Abutter Notification and with the Littleton Wetlands ByLaw 171-2.D in connection with the following matter:

A *(choose one of below)*

Abbreviated Notice of Resource Area Delineation

Request for Determination of Applicability

Notice of Intent / Abbreviated Notice of Intent

Request for Amended Order of Conditions (MADEP File # 204-0872)

has been filed under the Massachusetts Wetlands Protection Act and Littleton Wetlands Protection ByLaw by Littleton Clean Lakes Committee and Friends of Forge Pond *(name of applicant)* with the Littleton Conservation Commission on April 9, 2025 *(date)* for the property located at Lake Matawanakee / Forge Pond *(address of land where work is proposed)*.

The list of abutters with their addresses and a copy of the Notification Abutter form as sent to the abutters is attached to this Affidavit of Service.

David T Barr

Name

April 9, 2025

Date

## NOTIFICATION TO ABUTTERS

Pick one:

**Notice of Intent/Abbreviated NOI**

**Abbreviated Notice of Resource Area Delineation**

**Request for Determination of Applicability**

**Request to Amend an Order of Conditions (MADEP File # 204-0872)**

### Modification for Virtual Meetings

*Under MA Wetlands Protection Act and Littleton Wetlands Protection ByLaw (Chapter 171), this form must be completed and mailed, certified mail return receipt requested, to all abutters at their mailing addresses shown on the most recent Town Assessor's records as well as the owner (if not applicant).*

In accordance with the MA Wetlands Protection Act and Littleton Wetlands Protection ByLaw Chapter 171-2D, you are hereby notified of a public hearing on the matter described below:

- A. The applicant has filed a permit application with the Littleton Conservation Commission for work in an area subject to protection under the Massachusetts Wetlands Protection Act and Littleton Wetlands Protection ByLaw.
- B. The name of the applicant is Littleton Clean Lakes Committee and Friends of Forge Pond
- C. The address of the land where the activity is proposed is Lake Matawanakee / Forge Pond
- D. The work proposed is Seeking an amendment to the Order of Conditions for the lake management of Lake Matawanakee / Forge Pond (DEP no. 204-0872, NHESP no. 05-18722) to include the use of herbicides, algaecides, and suction harvesting.
- E. Copies of the filing may be examined at the Conservation Commission office at 37 Shattuck Street Monday through Thursday; 9:00 – 1:00 (please call first to ensure the Conservation Agent is available and not out on site visits). The office phone number is 978-540-2428. X
- F. Copies of the filing may be obtained electronically from (check one) the  applicant or  the applicant's representative by calling 978 - 201 - 9524 during the following times: 10 AM to 4 PM, Monday through Friday

G. The public hearing/meeting will be held on April 22, 2025. Information regarding the date and time of the public hearing/meeting may be obtained from the Littleton Conservation Commission (see contact info at the end of this notice).

H. Notice of the public hearing/meeting, including date and time will be published at least five business days in advance in a paper of local circulation. The agenda, noting times will be posted at Town Hall and at <https://ma-littleton.civicplus.com/AgendaCenter/Search/?term=&IDs=13,&startDate=&endDate=&dateRange=&dateSelector=> at least 48 hours in advance of the meeting. It is currently anticipated that this meeting will be held entirely remotely, pursuant to “An Act Relative to Extending Certain State of Emergency Accommodations” (July 16, 2022) and the extension of that Act through March 21, 2025. If the meeting is held remotely, instructions for remote viewing of, and participation in, the meeting will be included in the agenda and may also be obtained from the Littleton Conservation Commission.

You may contact the Littleton Conservation Commission staff ([Conservation@littletonma.org](mailto:Conservation@littletonma.org); 978-540-2428), or the Massachusetts Department of Environmental Protection/ Central Region (508-792-7650) at 8 New Bond Street, Worcester, MA 01606 for information about this application



**TOWN OF LITTLETON  
BOARD OF ASSESSORS**

P.O. BOX 1305  
LITTLETON, MA 01460  
(978) 540-2410  
FAX: (978) 952-2321

Date: \_\_\_\_\_

Re: Certified List of Abutters Conservation Commission

Applicant: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

**Subject Parcel Location:** \_\_\_\_\_

**Subject Parcel No.:** \_\_\_\_\_

**Subject Owner Name:** \_\_\_\_\_

M.G.L. Chapter 131: Section 40 ..... "Any person filing a notice of intention with a conservation commission shall at the same time give written notification thereof, by delivery in hand or certified mail, return receipt requested, to all abutters within one hundred feet of the property line of the land where the activity is proposed, but not limited to, owners of land directly opposite said proposed activity on any public or private street or way, and in another municipality or across a body of water. When a notice of intent proposes activities on land under water bodies and waterways or on a tract of land greater than 50 acres, written notification shall be given to all abutters within 100 feet of the proposed project site. For the purposes of this action, "project site" shall mean lands where the following activities are proposed to take place: dredging, excavating, filling, grading, the erection, reconstruction or expansion of a building or structure, the driving of pilings, the construction or improvement of roads or other ways and the installation of drainage, sewerage and water systems, and "land under water bodies and waterways" shall mean the bottom of, or land under, the surface of the ocean or an estuary, creek, river stream, pond or lake. When a notice of intent proposes activity on a linear shaped project site longer than 1,000 feet in length, notification shall be given to all abutters within 1,000 feet of the proposed project site. If the linear project site takes place wholly within an easement through another person's land, notice shall also be given to the landowner. Said notification shall be at the applicant's expense, and shall state where copies of the notice of intention may be examined and obtained and where information regarding the date, time and place of the public hearing may be obtained. Proof of such notification, with a copy of the notice mailed or delivered, shall be filed with the conservation commission." .....

**I hereby certify the attached list of abutter (s) as stated in the M.G.L. Chapter 131, Section 40.**

Number of Abutter(s) \_\_\_\_\_ including the subject parcels + \_\_\_\_\_ Applicant Requesting Abutter's

**List. Certified by:**

Name: \_\_\_\_\_

Title: \_\_\_\_\_

OFF GREAT RD	R19 9 0	105 MATAWANAKEE TL	U47 20 0	81 MATAWANAKEE TL	U47 31 0
	LUC: 717		LUC: 101		LUC: 101
MATHESON IRVING R		CHROBAK CHRISTOPHER P.		MULLINS SEAN M	
MATHESON JR FRANK W		105 MATAWANAKEE TL		MULLINS PAMELA	
PO BOX 697		LITTLETON, MA 01460		81 MATAWANAKEE TL	
LITTLETON, MA 01460				LITTLETON, MA 01460	
GREAT RD	R24 1 0	103 MATAWANAKEE TL	U47 21 0	77 MATAWANAKEE TL	U47 32 0
	LUC: 717		LUC: 101		LUC: 101
MATHESON IRVING R		ROSS MARK L		HAYS TIMOTHY P	
MATHESON JR FRANK W		ROSS KIMBERLY L		HAYS PAMELA M	
PO BOX 697		103 MATAWANAKEE TRAIL		77 MATAWANAKEE TRAIL	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
26 GILSON RD	R24 5 0	MATAWANAKEE TL	U47 23 0	73 MATAWANAKEE TL	U47 33 0
	LUC: 101		LUC: 132		LUC: 101
ALBUQUERQUE HILARY		FIELD MICHAEL S		BENNETT MICHAEL T + CAROL A	
ALBUQUERQUE SAMANTHA		FIELD JANET C		ROCHE JOHN W	
26 GILSON ROAD		95 MATAWANAKEE TRAIL		73 MATAWANAKEE TRAIL	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
OFF INDIAN RUN TL	U47 11 0	97 MATAWANAKEE TL	U47 23 1	71 MATAWANAKEE TL	U47 35 0
	LUC: 132		LUC: 132		LUC: 101
HORNE W J LLC		ROSS MARK		JESENSKY ANTHONY	
21 BERKLEY RD		HEALY KIM		71 MATAWANAKEE TL	
HULL, MA 02045-3129		103 MATAWANAKEE TRAIL		LITTLETON, MA 01460	
LITTLETON, MA 01460		LITTLETON, MA 01460			
5 INDIAN RUN TL	U47 12 0	95 MATAWANAKEE TL	U47 24 0	69 MATAWANAKEE TL	U47 36 0
	LUC: 101		LUC: 101		LUC: 101
JACKSON JR DAVID A		M & J MATAWANAKEE TRUST		MCNAMARA JOHN+KAREN DUGGAN TRS	
JACKSON STACEY A		TRUSTEE FIELD MICHAEL S		MCNAMARA INVESTMENT TRUST	
42 NASHOBIA TRAIL		95 MATAWANAKEE TL		69 MATAWANAKEE TL	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
3 INDIAN RUN TL	U47 13 0	93 MATAWANAKEE TL	U47 25 0	67 MATAWANAKEE TL	U47 37 0
	LUC: 101		LUC: 101		LUC: 101
MCLAUGHLIN FRANCIS E		FRANCIS DONNA M		HRONIK MARY E	
SMITH NANCY M		93 MATAWANAKEE TL		67 MATAWANAKEE TL	
3 INDIAN RUN TL		LITTLETON, MA 01460		LITTLETON, MA 01460	
LITTLETON, MA 01460					
1 INDIAN RUN TL	U47 15 0	91 MATAWANAKEE TL	U47 26 0	63 MATAWANAKEE TL	U47 38 0
	LUC: 101		LUC: 101		LUC: 101
ZUNIGA MONICA ANDREA		EASTMAN KEVIN M		ELLINGBOE KARIN TRUSTEE OF	
1 INDIAN RUN TL		91 MATAWANAKEE TL		63 MATAWANAKEE TRAIL RLTY TR	
LITTLETON, MA 01460		LITTLETON, MA 01460		63 MATAWANAKEE TL	
LITTLETON, MA 01460				LITTLETON, MA 01460	
111 MATAWANAKEE TL	U47 16 0	87 MATAWANAKEE TL	U47 28 0	59 MATAWANAKEE TL	U47 39 0
	LUC: 101		LUC: 104		LUC: 109
LUND MARIE T		FIELD FREDERICK D JR+ BARBARA		HADDEN FAMILY 1996 REALTY TRST	
DUBIEL DEREK D		TRS OF THE FIELD FAMILY TRUST		HADDEN STEPHEN C+REBECCA S-TRS	
111 MATAWANAKEE TL		87 MATAWANAKEE TRAIL		59 MATAWANAKEE TL	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
109 MATAWANAKEE TL	U47 18 0	85 MATAWANAKEE TL	U47 29 0	57 MATAWANAKEE TL	U47 41 0
	LUC: 101		LUC: 101		LUC: 101
MERRILL III ERNEST OSCAR		GILPATRICK RICHARD J		RICHARD & LINDA HUFNAGEL LIV T	
MERRILL LAURIE ANN		GILPATRICK NOREEN B		HUFNAGEL RICHARD T&LINDA M TRS	
109 MATAWANAKEE TL		85 MATAWANAKEE TL		57 MATAWANAKEE TRL	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
107 MATAWANAKEE TL	U47 19 0	83 MATAWANAKEE TL	U47 30 0	55 MATAWANAKEE TL	U47 42 0
	LUC: 132		LUC: 101		LUC: 101
SCOTT PETER TRUSTEE OF THE		OLDEN DENNIS E		JOHNSON KRIS WILLIAM/PATRICIA	
JAWS REALTY TRUST		OLDEN ELAINE H		TRS/KRIS+PATRICIA JOHNSON LVNG	
5 SCOTT RD		83 MATAWANAKEE TL		55 MATAWANAKEE TL	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	

MATAWANAKEE TL	U47 43 0	20 DEER RUN RD	U48 1 0	5 CHIPMUNK LN	U48 19 0
	LUC: 130		LUC: 101		LUC: 101
MCCARTHY CHRISTOPHER W TRUSTEE		PORTANOVA EUGENE		BERKOWITZ THOMAS C	
DION REALTY TRUST		PORTANOVA ROSEMARY		5 CHIPMUNK LANE	
PO BOX 249		219 HUNNEWELL ST		LITTLETON, MA 01460	
SEABROOK, NH 03874		NEEDHAM, MA 02494			
51 MATAWANAKEE TL	U47 44 0	10 ROBINWOOD RD	U48 10 0	18 DEER RUN RD	U48 2 0
	LUC: 101		LUC: 101		LUC: 101
CULHANE JOHN P		CORCORAN DONALD F		MILLARD INVESTMENT TRUST	
CULHANE BARBARA J		CORCORAN SHIRLEY E		MILLARD JANE L & JOSHUA C-TRS	
51 MATAWANAKEE TRAIL		19 ELLIOTT ST		18 DEER RUN RD	
LITTLETON, MA 01460		MELROSE, MA 02176		LITTLETON, MA 01460	
49 MATAWANAKEE TL	U47 45 0	12 ROBINWOOD RD	U48 11 0	3 CHIPMUNK LN	U48 20 0
	LUC: 101		LUC: 101		LUC: 101
BARR FAMILY LIVING TRUST		STEPHEN M MOORE 2023 TRUST		SONAWANE NITIN	
TRUSTEE BARR DAVID T		JOYANNE C MOORE 2023 TRUST		LAWANDE SHILPA	
49 MATAWANAKEE TL		12 ROBINWOOD RD		137 CHILTON ST	
LITTLETON, MA 01460		LITTLETON, MA 01460		BELMONT, MA 02478-3209	
45 MATAWANAKEE TL	U47 47 0	DEER RUN RD	U48 12 0	1 CHIPMUNK LN	U48 21 0
	LUC: 101		LUC: 106		LUC: 101
HOFFMAN KATHY		WOODLANDS COMMUNITY ASSOCIATIO		LIVINGSTON MICHAEL	
DRISCOLL MARK		ACTON TRUST 1		LIVINGSTON SUZANNE	
916 RACE BROOK RD		P.O. BOX 718		1 CHIPMUNK LN	
ORANGE, CT 06477		LITTLETON, MA 01460		LITTLETON, MA 01460	
43 MATAWANAKEE TL	U47 48 0	14 ROBINWOOD RD	U48 13 0	24 GREEN NEEDLES RD	U48 23 0
	LUC: 101		LUC: 101		LUC: 101
THREE BROWNS LLC		MAURO ROBERT L JR		KENNETH R. OUELLETTE SUPPLEMEN	
3 KINNEY AVE		MAURO ROBYN		GRAVEL, BONNIE, TRUSTEE	
BURLINGTON, MA 01803		14 ROBINWOOD ROAD		71B Island Drive	
		LITTLETON, MA 01460		Laconia, NH 03246	
41 MATAWANAKEE TL	U47 49 0	16 ROBINWOOD RD	U48 14 0	22 DEER RUN RD	U48 3 0
	LUC: 101		LUC: 101		LUC: 101
KANNIARD LAURA		QUINN FRANCIS X AND WANDA A TR		DORAN PATRICK	
41 MATAWANAKEE TL		THE QUINN FAMILY TRUST		DORAN NICOLE	
LITTLETON, MA 01460		5588 CATHERS CREEK DR		22 DEER RUN ROAD	
		POWDER SPRINGS, GA 30127		LITTLETON, MA 01460	
MATAWANAKEE TL	U47 50 0	15 WINGED COVE RD	U48 15 0	24 DEER RUN RD	U48 4 0
	LUC: 132		LUC: 101		LUC: 101
LAKE MATAWANAKEE ASSOCIATION		SKAUBITIS GEORGE H		HARTZEL ROBERT M	
C/O ANTHONY JESENSKY		SKAUBITIS CHRISTINE		GOODWILL DONNA M	
71 MATAWANAKEE TR		15 WINGED COVE ROAD		24 DEER RUN ROAD	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
37 MATAWANAKEE TL	U47 51 0	13 WINGED COVE RD	U48 16 0	26 DEER RUN RD	U48 5 0
	LUC: 101		LUC: 101		LUC: 101
FOLEY PATRICIA A		MANN KYLE		GILPATRICK DANA E	
37 MATAWANAKEE TL		FIELD MELISSA		BREITENWISCHER JANNA	
LITTLETON, MA 01460		13 WINGED COVE RD		26 DEER RUN RD	
		LITTLETON, MA 01460		LITTLETON, MA 01460	
35 MATAWANAKEE TL	U47 52 0	11 CHIPMUNK LN	U48 17 0	18 ROBINWOOD RD	U48 52 A
	LUC: 101		LUC: 101		LUC: 101
HYAM NANCY +TRAINOR MICHAEL TR		PETERSEN CAROL J TRUSTEE		ROBERTS SIMON	
JANICE A TRAINOR IRRVCB RES TR		CHIPMUNK LANE REALTY TRUST		ROBERTS EMMA	
35 MATAWANAKEE TRAIL		11 CHIPMUNK LN		18 ROBINWOOD ROAD	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
31 MATAWANAKEE TL	U47 54 0	9 CHIPMUNK LN	U48 18 0	28 DEER RUN RD	U48 6 0
	LUC: 101		LUC: 101		LUC: 101
BUSH CHARLES M		ROSS MARK E		MCDONOUGH EDEN R SALTO	
BUSH PAULA B		WAUGH MOLLY O		MCDONOUGH ROBERT F	
31 MATAWANAKEE TRAIL		9 CHIPMUNK LANE		28 DEER RUN RD	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	

7 ROBINWOOD RD	U48 8 0	7 MATAWANAKEE TL	U49 23 0	11 SCOTT RD	U49 28 0
	LUC: 101		LUC: 101		LUC: 101
SULLIVAN JANET F		SULLIVAN PATRICE M		EMILE J LEGAULT FAMILY TRUST	
SULLIVAN KATHRYN A		SULLIVAN JOHN K		TRUSTEE LEGAULT EMILE J	
7 ROBINWOOD RD		7 MATAWANAKEE TRAIL		11 SCOTT RD	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
8 ROBINWOOD RD	U48 9 0	5 MATAWANAKEE TL	U49 24 0	FORGE POND	U49 29 0
	LUC: 101		LUC: 101		LUC: 717
EDMOND GILPATRICK INVEST TRST		WILSON DAVID A+ELIZABETH C TRS		MATHESON IRVING R	
JEANINE GILPATRICK INVEST TRST		OF WILSON FAMILY TRUST		MATHESON JR FRANK W	
8 ROBINWOOD ROAD		5 MATAWANAKEE TL		PO BOX 697	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
29 MATAWANAKEE TL	U49 15 0	MATAWANAKEE TL	U49 25 0	2 BLOOD RD	U49 31 0
	LUC: 101		LUC: 132		LUC: 101
SWANA TRACEY LEE		WILSON DAVID A		MATHESON IRVING R	
SWANA DAVID J		5 MATAWANAKEE TL		PO BOX 697	
29 MATAWANAKEE TL		LITTLETON, MA 01460		LITTLETON, MA 01460	
LITTLETON, MA 01460					
27 MATAWANAKEE TL	U49 17 0	2 SCOTT RD	U49 26 2	1 BLOOD RD	U49 32 0
	LUC: 101		LUC: 101		LUC: 101
AUGER JR RICHARD J		PETERSON WILLIAM R AND		ROOP WILLIAM J	
27 MATAWANAKEE TR		PETERSON KRISTINE K		ROOP KAREN ANN	
LITTLETON, MA 01460		2 SCOTT ROAD		1 BLOOD ROAD	
		LITTLETON, MA 01460		LITTLETON, MA 01460	
25 MATAWANAKEE TL	U49 18 0	4 SCOTT RD	U49 26 4	6 BLOOD RD	U49 33 0
	LUC: 101		LUC: 101		LUC: 017
CARLSON KRIS A		CALIENDO ROBERT M TRUSTEE OF		MATHESON IRVING R	
CARLSON DEBRA J		BCAL TRUST		PO BOX 697	
25 MATAWANAKEE TRAIL		4 SCOTT RD		LITTLETON, MA 01460	
LITTLETON, MA 01460		LITTLETON, MA 01460			
21 MATAWANAKEE TL	U49 20 0	5 SCOTT RD	U49 26 5	8 BLOOD RD	U49 34 0
	LUC: 101		LUC: 101		LUC: 101
MCDONOUGH HUGH R		SCOTT PETER		SCOTT JOHN	
MCDONOUGH STEPHANIE A		5 SCOTT RD		SCOTT REBECCA	
21 MATAWANAKEE TL		LITTLETON, MA 01460		8 BLOOD ROAD	
LITTLETON, MA 01460				LITTLETON, MA 01460	
19 MATAWANAKEE TL	U49 21 0	6 SCOTT RD	U49 26 6	10 BLOOD RD	U49 35 0
	LUC: 101		LUC: 101		LUC: 017
O'BRIEN KRISTIN LYNN		WHEELER DONALD W		MATHESON IRVING R	
33 BALDWIN HILL RD		WHEELER NANCY R		PO BOX 697	
LITTLETON, MA 01460		6 SCOTT RD		LITTLETON, MA 01460	
		LITTLETON, MA 01460			
17 MATAWANAKEE TL	U49 21 A	7 SCOTT RD	U49 26 7	12 BLOOD RD	U49 36 0
	LUC: 101		LUC: 101		LUC: 101
VASQUEZE JOSE ANTONIO		SANTAU VLAD VALENTIU		MEMS REALTY TRUST	
VASQUEZ AUDRA		SANTAU IOANA		MATTHEW FIELD - TRUSTEE	
17 MATAWANAKEE TL		7 SCOTT RD		12 BLOOD ROAD	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	
15 MATAWANAKEE TL	U49 22 0	8 SCOTT RD	U49 26 8	16 A DEER RUN RD	U49 37 0
	LUC: 101		LUC: 101		LUC: 101
SHEPHERD THOMAS T		KALDESTAD OYVIND D		PORTANOVA KEITH	
MCKEEVER LESLIE B		KALDESTAD ASE T		PORTANOVA JASON	
15 MATAWANAKEE TL		8 SCOTT ROAD		219 HUNNEWELL ST	
LITTLETON, MA 01460		LITTLETON, MA 01460-0366		NEEDHAM, MA 02494	
11 MATAWANAKEE TL	U49 22 A	9 SCOTT RD	U49 27 0	15 BLOOD RD	U49 38 0
	LUC: 101		LUC: 101		LUC: 101
DAVIS FAMILY 2003 TRUST		BUGDEN CHRISTOPHER		MATHESON IRVING R	
DAVIS T F JR & C A		PASCALE BRENDA L		MATHESON JR FRANK W	
11 MATAWANAKEE TL		9 SCOTT RD		PO BOX 697	
LITTLETON, MA 01460		LITTLETON, MA 01460		LITTLETON, MA 01460	